

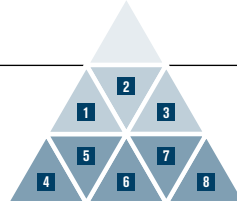
SUSTAINABILITY REPORT 2017



NISSAN MOTOR CORPORATION



CONTENTS



■ Sustainability Strategies

..... 02	..... 16
..... 03	..... 46
..... 04	..... 57
..... 10	..... 65
..... 14	..... 73
..... 111	..... 80
..... 140	..... 99
	..... 104



On the Cover

Intelligent Vehicle Towing

VIEWING THIS REPORT



This Sustainability Report is an interactive PDF. You can easily access the information you need by clicking on the navigation tabs and buttons.

● Section Tabs



Click the tabs to jump to the top page of each section.

● Navigation Buttons

- ◀ Go back one page
- ▽ Return to previously viewed page
- ▶ Go forward one page

● Link Buttons

- 📄 Jump to linked page
- 🌐 Jump to information on the web
- 📊 Jump to information in CSR Data

● Our Related Websites

- **Editorial Policy**
Nissan publishes an annual Sustainability Report as a way of sharing information on its sustainability-related activities with stakeholders. This year's report reviews the results achieved in fiscal 2016, focusing on Nissan's overall CSR management and strategy as well as its progress in each of the eight sustainability strategies.
 - **Scope of the Report**
Period Covered: The report covers fiscal 2016 (April 2016 to March 2017); content that describes efforts outside this period is indicated in the respective sections. Organization: Nissan Motor Co., Ltd., foreign subsidiaries and affiliated companies in the Nissan Group.
 - **Referenced Reporting Guideline**
GRI Sustainability Reporting Guidelines (see website for complete GRI guideline table). Specific GRI indicators are listed for each sustainability strategy and in the CSR Data section.
- ▶▶ website
- **Date of Previous Report**
Sustainability Report 2016, issued June 30, 2016.
 - **Reporting Cycle**
Annually since 2004

- **Third-Party Assurance**
Click the link at right to view the third-party assurance. ▶▶ page_140
- **Forward-Looking Statements**
This Sustainability Report contains forward-looking statements on Nissan's future plans and targets and related operating investment, product planning and production targets. There can be no assurance that these targets and plans will be achieved. Achieving them will depend on many factors, including not only Nissan's activities and development but also the dynamics of the automobile industry worldwide, the global economy and changes in the global environment.
- **Mistakes and Typographical Errors**
All errors discovered following publication of the report will be corrected and displayed on our website.
- **For Further Information**
Nissan Motor Co., Ltd.
CSR Department
Phone: +81(0)45-523-5548 Fax: +81(0)45-523-5771
Email: NISSAN_SR@mail.nissan.co.jp
- **Sustainability Report 2017**
Publication Date: June 30, 2017

* In 2006 we published our last print edition of the Sustainability Report. Out of consideration for the environment, we now publish the report exclusively online. It can be downloaded from our website as PDF files.

INTRODUCTION

Corporate Vision

Nissan: Enriching People's Lives

Corporate Mission

Nissan provides unique and innovative automotive products and services that deliver superior measurable values to all stakeholders in alliance with Renault.



Guided by its corporate vision of Enriching People's Lives, Nissan aims to contribute to the sustainable development of society through its full range of global business activities in addition to providing value through its products and services. As a leading global automaker, Nissan is committed to all stakeholders—including customers, shareholders, employees and the communities where the company does business—to deliver engaging, valuable and sustainable mobility for all. Nissan's pioneering efforts to promote electric vehicles, with their low environmental impact during operation, along with efforts to make mobility more affordable for people in emerging countries and the development of Autonomous Drive technologies that contribute to the realization of a society with virtually no traffic accidents, are part of the value-creating initiatives rooted in this vision.

This approach to corporate social responsibility is called "Blue Citizenship." Through Blue Citizenship, Nissan aims to be recognized by its stakeholders as a company that lives up to the expectations of society.

To share the company's CSR-related thinking and activities to as broad an audience as possible, each year Nissan publishes a Sustainability Report. By sharing this information, the company increases the level of transparency of its actions while creating opportunities to improve its activities by incorporating feedback from stakeholders, thereby contributing to the development of a sustainable society.



CEO MESSAGE



Hiroto Saikawa

President and Chief Executive Officer

As one of the leaders in the automotive industry, it is essential that Nissan contributes to a new era of sustainable mobility.

Under our corporate vision of “Enriching People’s Lives,” we aim to address immediate threats facing communities, such as global warming, air pollution, road congestion, and traffic accidents, by providing innovative cars and services.

In 2016, Nissan took further steps in its continuous effort to promote innovation and progress. On the environmental front, we reached a milestone of 250,000 sales for the Nissan LEAF, as well as launching the Note e-POWER in Japan, equipped with a new, cutting-edge electric powertrain. To advance our involvement in improving safety, we launched our first autonomous drive capability, called ProPILOT, on the Serena minivan in

Japan. Through the Renault-Nissan Alliance, we have plans to launch a total of 10 models worldwide with autonomous drive capability by 2020.

As a socially responsible company, Nissan will continue to abide by the principles of the United Nations Global Compact, which we pledged to support in 2004. We are furthering our commitment to sustainable performance across our business as well. Senior Vice President Hitoshi Kawaguchi was appointed in 2016 as Nissan’s first Chief Sustainability Officer (CSO). In this position, he will enhance our current efforts and lead our organization in bringing solutions to sustainability issues with a long-term and global view.

Our continuous sustainability efforts have allowed us to reach new levels of recognition. For the first time, Nissan was included in the World Index of the Dow Jones Sustainability Indices, one of the most prominent ratings for measuring a company’s sustainability performance. Nissan was the only Japanese auto company to receive this recognition in 2016, and it tells us we are heading in the right direction.

While the world is going through rapid environmental and societal transformations, Nissan will strengthen its resolve to bring innovation to the world and offer solutions to sustainability issues. Fiscal 2017 will present us with new opportunities to advance Nissan’s sustainability performance as we introduce a new midterm plan. As a global company operating in more than 160 countries and regions, Nissan will continue to position itself as a car company that will unleash the benefits of the new era of mobility to people all over the world.

Hiroto Saikawa

President and Chief Executive Officer
Nissan Motor Co., Ltd.

NISSAN'S CSR STRATEGIES

**Building Tomorrow's Sustainable Mobility Society
A Message from the Chief Sustainability Officer**



Hitoshi Kawaguchi
Senior Vice President, Chief Sustainability Officer
Nissan Motor Co., Ltd.

To become one of the most sustainable companies in the world, we believe it is essential to act with compassion in addition to competence. Nissan has clearly defined long-term goals to guide its contributions to finding solutions to sustainability issues. We will pay heed to the voices of society and will continue to meet society's expectations while advancing our environmental and safety activities globally.

Our Goals: Zero Emissions and Zero Fatalities

Our lives have changed greatly as a result of the wide availability of automobiles. Countless people today enjoy the freedom and convenience that comes with automotive mobility, as well as the pleasure of driving. At the same time, the global rise in economic standards and a continuously growing population are expected to bring the total number of automobiles in use worldwide to some 2.4 billion by 2050, and we are facing pressing issues including increased emissions of greenhouse gases and rising numbers of injuries and fatalities from traffic accidents. It is our mission as an automaker to proactively seek solutions to various vehicle-related issues, providing high value to society.

Nissan is pursuing the ultimate goals of achieving zero emissions, through vehicles without tailpipe emissions, and decreasing fatalities as a result of traffic accidents involving Nissan vehicles to virtually zero. It is my role to ensure that these goals are shared far and wide, both within Nissan and outside the company, as core philosophies informing our sustainability efforts.

In order to realize these "two zeros," how should vehicles use energy, and how should they travel on the road? And how will our cars become more connected and integrated into society going forward? Under the concept of Nissan Intelligent Mobility, we will aim to realize a safe and sustainable mobility society while at the same time providing an even more enjoyable, comfortable experience with vehicles to our customers.

According to International Transport Forum (ITF) (2017), *ITF Transport Outlook 2017*, OECD Publishing, Paris.

Supporting a Sustainable Mobility Society with Advanced Safety Technologies

Nissan strives to create automobiles that embody the “pleasure and satisfaction of driving.” At the same time, the company places top priority on a high level of real-world safety. In a driving environment where more than 90% of accidents are said to be the result of human error, Nissan is focused on the “zero fatalities” goal. To realize this goal through reducing traffic accidents, we have built on our original Safety Shield concept, ^{*1} in which the vehicle helps to protect people, advancing its safety technologies and making them available on an ever-growing range of models.

In August 2016, Nissan launched the new Serena in Japan, equipping it with ProPILOT, ^{*2} helping to enable autonomous driving in a single highway lane. The world's first minivan to feature such technology, ^{*3} the new Serena proved popular with customers, winning the 2016–17 Japan Car of the Year Innovation Award. The Serena also won the 2017 Automotive Researchers' & Journalists' Conference of Japan (RJC) Car of the Year Award, while ProPILOT won the RJC Technology of the Year Award.

Nissan has a clear roadmap in place for its development of Autonomous Drive technologies. The year 2018 will see the launch of autonomous driving capability on multiple highway lanes, and by 2020 we plan to introduce autonomous driving on local roads.



Serena with ProPILOT.

Offering Driving Pleasure Through Clean Electric Powertrains

We employ clean, highly efficient electric powertrains to provide unprecedented acceleration and quiet handling, giving our customers a high level of safety alongside an exciting driving experience.

The zero-emission Nissan LEAF, ^{*1} which emits no CO₂ or other exhaust gases during operation, provides smooth, powerful acceleration, stable handling and an exceptionally quiet ride. Since it first went on the market, the Nissan LEAF has reduced overall CO₂ emissions worldwide by an estimated 529,149 tons. ^{*2}

The Note e-POWER, meanwhile, features Nissan's new e-POWER powertrain, which combines a gasoline engine with an electric motor. ^{*3} This enables the powerful, highly responsive acceleration and excellent quietness of a motor-powered vehicle along with excellent fuel efficiency and a pleasant driving experience for the customer. This Note model received high praise from customers, taking the top spot in the Japan sales ranking for the compact segment ^{*4} in the second half of fiscal 2016 (October 2016–March 2017).



Note e-POWER.

▶▶ [page_49](#)

^{*1} Click here for more information on Nissan's Safety Shield concept.

▶▶ [page 51](#)

^{*2} Click here for more information on ProPILOT.

^{*3} The Serena is the world's first 8-passenger minivan in the 1.5–2 liter class to be equipped with autonomous controls for steering and maintaining distance between vehicles at speeds up to 60 km/h (as of June 2016, according to Nissan research).

▶▶ [page_26](#)

^{*1} Click here for more information on Nissan's zero-emission vehicles.

^{*2} Total distance traveled in each market (km) ÷ fuel efficiency in each market (km/L) × CO₂ conversion coefficient (L/kg) ÷ 1,000 (kg/ton). Calculated as of the end of February 2017 based on actually collected data, not on all Nissan LEAF models sold.

▶▶ [page_33](#)

^{*3} Click here for more information on the e-POWER powertrain.

^{*4} The compact segment includes small and ordinary passenger vehicles with engine displacement under 1,600 cc.

Expanding Future Possibilities by Connecting Cars to Society

As society becomes ever more connected with information technology, cars will be more tightly integrated with our daily lives. They will be able to provide even more convenience as they are connected to information networks, roads, electric grids and other social infrastructure, allowing the reduction of traffic congestion and more efficient energy management as a result. Through Nissan Intelligent Mobility, the company aims to provide customers with cars that can serve as partners in their lives, integrating the vehicles with society as a whole to help craft a better future.

To swiftly respond to a rapidly changing society, we are working in close cooperation with a number of external stakeholders. For instance, the Renault-Nissan Alliance has entered a relationship with Microsoft Corp. to develop next-generation connected-car technology in order to improve customers' driving experience. ^{x1} Going forward, we will work together to develop connected and mobility services.

With the aim of harmoniously blending Autonomous Drive vehicles with society in the future, we are also working to develop the Seamless Autonomous Mobility (SAM) system ^{x2} which help cars to safely navigate through unforeseen situations, such as accidents, road construction or other obstacles.

▶ [website](#)

^{x1} Click here for more information on the partnership with Microsoft.

▶ [page_56](#)

^{x2} Click here for more information on SAM.



BLUE CITIZENSHIP: NISSAN'S CSR

Nissan's CSR Vision

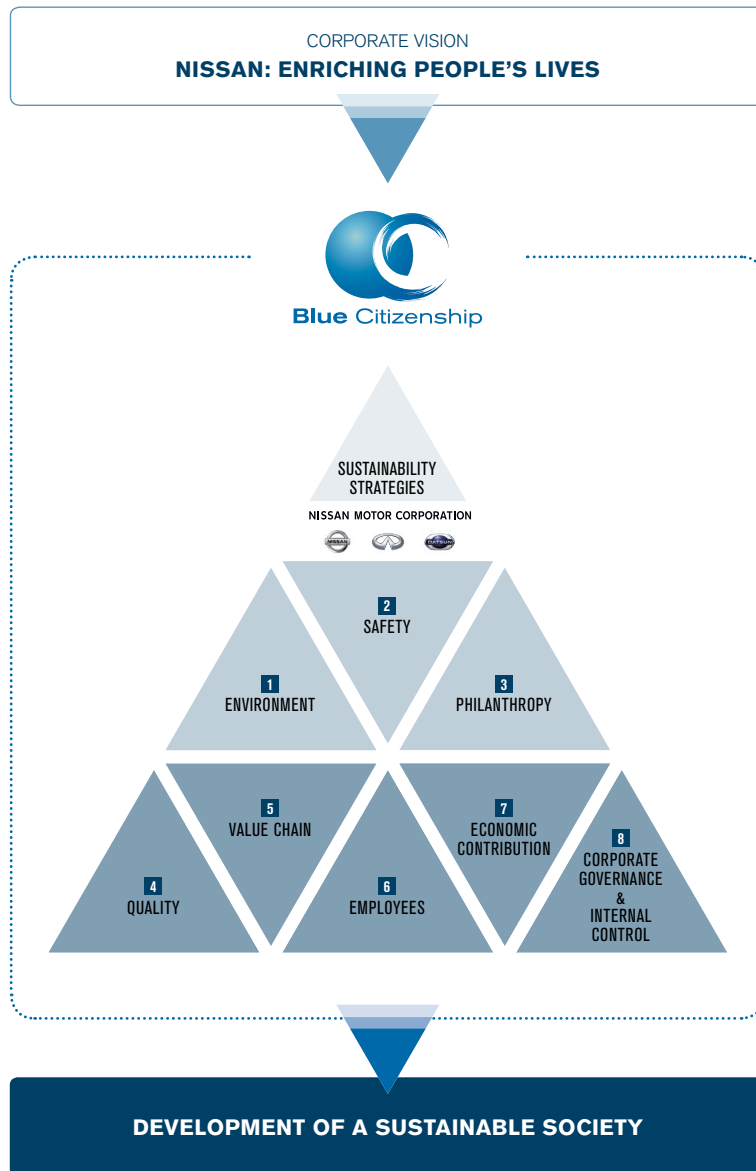
Guided by the corporate vision of Enriching People's Lives, Nissan seeks to contribute to the sustainable development of society through all global activities. The company's mission is to provide unique and innovative automotive products and services that deliver superior values to all stakeholders in alliance with Renault.

As a leading global automaker, Nissan also seeks to contribute solutions to humanity. The company is committed to all stakeholders—including customers, shareholders, employees and the communities where it does business—in delivering engaging, valuable and sustainable mobility for all. Through its business activities, Nissan aims not only to create economic value but also to actively contribute to the sustainable development of society.

Corporate Vision	Nissan: Enriching People's Lives
Corporate Mission	Nissan provides unique and innovative automotive products and services that deliver superior measurable values to all stakeholders in alliance with Renault
CSR Vision	To be one of the leading sustainable companies in the industry

Nissan's Eight Sustainability Strategies

Nissan has defined eight sustainability strategies providing the foundation of its approach to CSR. As a leading automaker, it is uniquely positioned to pursue actions under the three strategies of Environment, Safety and Philanthropy. While helping to find solutions to sustainability issues in the automotive sector and contribute to the realization of a truly sustainable mobility society, Nissan aims to be an engine for CSR activities across the entire corporate sector. To remain trusted and needed by society, Nissan must also pursue the other five strategies—Quality, Value Chain, Employees, Economic Contribution and Corporate Governance & Internal Control. By steadily advancing these eight strategies and by being transparent on progress and challenges faced, Nissan is able to fulfill its responsibilities to society and build trust.



- 1 ENVIRONMENT**
Nissan aims to lead a social transformation aimed at bringing about a sustainable mobility society by reducing vehicles' environmental impact throughout their lifecycle and expanding the lineup of effective green products and technologies.
- 2 SAFETY**
Nissan develops innovative technology and plays an active role in safety promotion, making the automobile society safer for all.
- 3 PHILANTHROPY**
Nissan carries out social contribution activities as a corporate citizen, focusing on the environment, education and humanitarian support.
- 4 QUALITY**
Nissan provides top-level quality in its products and services around the world.
- 5 VALUE CHAIN**
Nissan promotes ethical, environmentally sound actions in all stages of the supply chain.
- 6 EMPLOYEES**
Nissan aims to form an attractive organization where diverse human resources can achieve personal growth through experience in global business.
- 7 ECONOMIC CONTRIBUTION**
Nissan aims for sustainable, profitable growth, contributing to economic development for all of society.
- 8 CORPORATE GOVERNANCE & INTERNAL CONTROL**
Nissan aims to conduct fair, impartial and efficient business activities, having a high degree of transparency and consistency by adhering to the applicable laws and corporate rules.

Materiality Assessment

Nissan's strategy to realize its CSR vision comes from the highest levels of the company. Top management regularly discusses key societal themes to prioritize the issues that Nissan, across all Group companies, must address as a global corporation and automobile manufacturer. This process provides the basis for the development of a Materiality Matrix. It is built on an assessment of sustainability issues relevant to the business and analysis of the company's underlying opportunities and challenges.

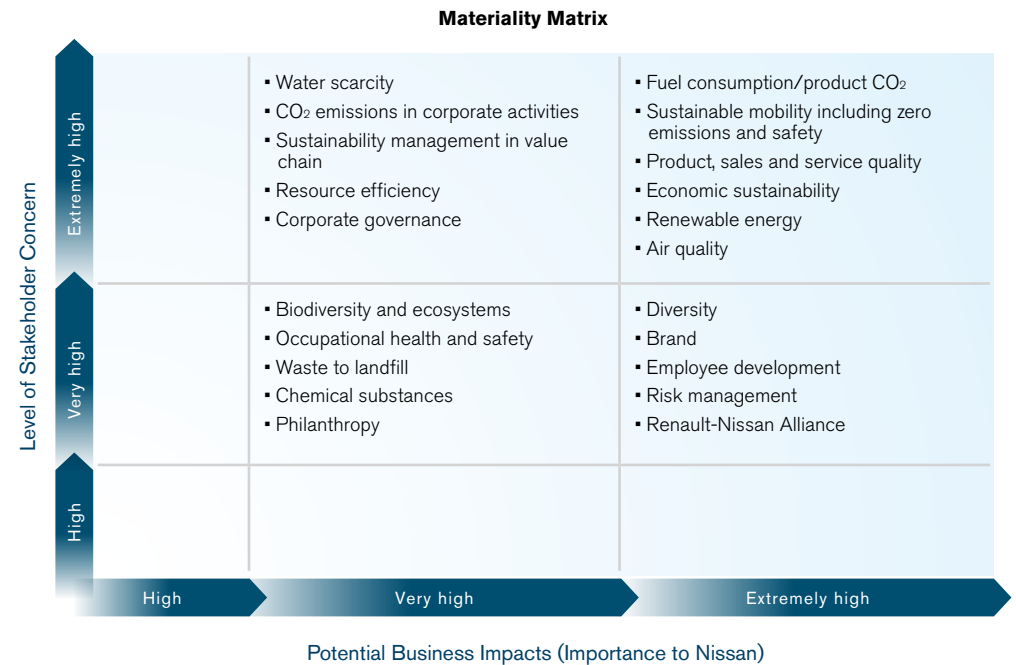
Nissan updates the materiality assessment taking into consideration the latest trends including stakeholder concerns and interests and technology developments. The analysis follows a three-step process:

- Consider relevant sustainability issues based on CSR guidelines and trends. Also consider global current events inside and outside the automobile industry and issues identified in the matrix created in fiscal 2015 (see the diagram on the right).
- Analyze and categorize the selected issues into a draft matrix from the perspectives of the potential business impacts and level of stakeholder concern.
- Conduct interviews with both internal and external stakeholders. The feedback from the interviews is reflected in the materiality assessment. The results are reviewed by top management.

Nissan is incorporating the results of this material assessment into the development of future corporate strategies.

▶ [page_04](#)

Click here for more information on how Nissan is building tomorrow's sustainable mobility society.



NISSAN'S CSR MANAGEMENT

COMPANY ORGANIZATION FOR CSR

The Executive Committee, Nissan's top decision-making body, is responsible for setting goals and confirming progress across the eight sustainability strategies and for managing CSR activities in a comprehensive way throughout the company. In fiscal 2016, in order to improve sustainability performance and accelerate the speed at which sustainability issues are solved, Nissan established a Global Sustainability Steering Committee led by the company's newly appointed Chief Sustainability Officer. This committee discusses the challenges in each of the eight sustainability strategies and reports and submits proposals to the Executive Committee as necessary. It is scheduled to meet twice a year.

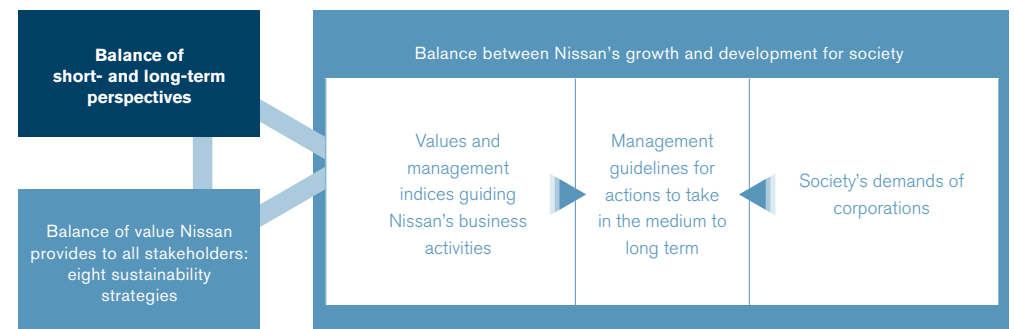
Nissan's CSR Decision-Making Process



NISSAN'S CSR SCORECARD

Nissan makes year-round use of the CSR scorecard as a core tool for monitoring and reviewing its progress. The vertical axis of the scorecard lists the eight sustainability strategies to check balances among stakeholders. The horizontal axis represents the points of intersection between the direction of Nissan's growth and that of society's development. The aim is to balance short- and long-term perspectives, achieving equilibrium between the two axes. Each year Nissan publishes the scorecard in this Sustainability Report. In fiscal 2016, the company reviewed the scorecard in order to optimize it further.

Nissan's CSR Scorecard



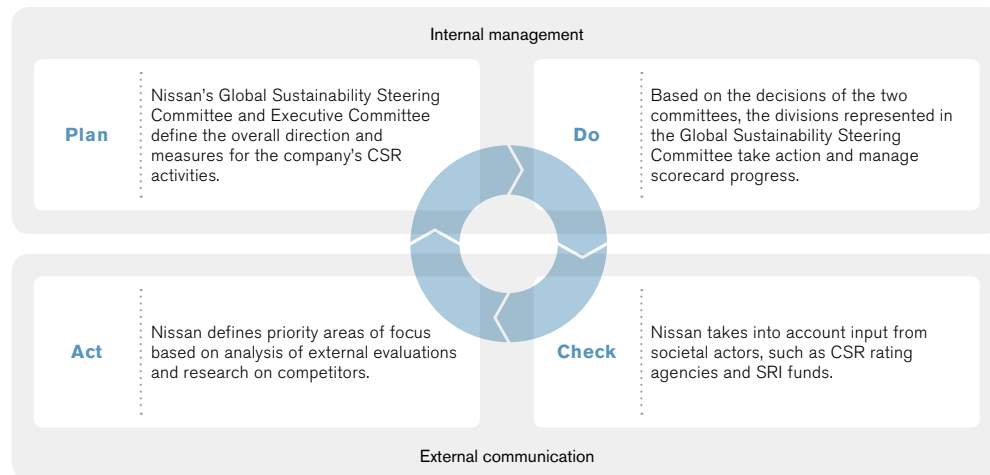
Click below for the latest scorecard's sections on Nissan's eight strategies.



PDCA CYCLE TO PROMOTE CSR

The PDCA (plan, do, check, act) cycle is a fundamental part of Nissan's CSR activities. Following Global Sustainability Steering Committee and Executive Committee decisions on the overall direction for these activities, the company manages progress using the CSR scorecard. In its actions the company incorporates the views of stakeholders throughout society, as well as analyzing external trends, reflecting these in future plans. In fiscal 2016, Nissan focused on the input of CSR actors and external trends, verified its materiality assessment within the company and continued the process of applying these findings to management strategies.

PDCA Cycle



COMMUNICATING CSR ACTIVITIES INTERNALLY

In addition to sharing information with the public via Sustainability Reports and through online resources, Nissan has long been committed to communication inside the company. Ongoing enhancements to this internal communication prompt individual employees to consider their connection to CSR and translate this into concrete actions.

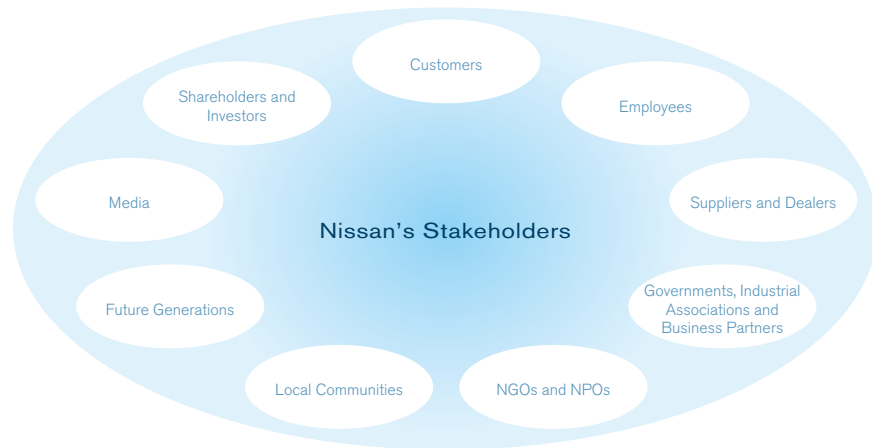
The company includes CSR-related sessions in training for new employees and newly promoted managers with a website titled "Blue Citizenship: Nissan's CSR," part of WIN (Workforce Integration @ Nissan), and the employee intranet system, used to report on Nissan's activities and share a range of general information on CSR.

DIALOGUE WITH STAKEHOLDERS

Nissan defines its stakeholders as those individuals and organizations that affect or are affected by the company's business. Nissan's management approach aims to align corporate activities with societal needs. The company focuses on gathering feedback from stakeholders and building relationships of trust, reflecting this input in its operations. Nissan pays close attention to societal views, works to identify opportunities and risks in their early stages and provides a variety of opportunities for dialogue with stakeholders. This interaction takes place at Global Headquarters and at other business facilities in Japan and overseas. Structures are in place to ensure that feedback is shared within the company.

For specific examples of Nissan's dialogue with stakeholders, see the pages introducing the company's eight sustainability strategies.

Nissan's Stakeholders and Engagement Opportunities



Stakeholders	Stakeholder Engagement
Customers	Customer service interaction, contact through dealers, websites, showrooms, motor shows, events, safety driving forum, customer surveys, media (TV, magazines, social media), owners' meetings, vehicle maintenance, mailing service
Employees	Direct contact (including whistleblowing system), intranet, internal events, interviews, surveys
Suppliers and Dealers	Suppliers conference, dealer conventions, business meetings, direct contact, briefings, corporate guidelines, websites, dedicated portal site
Shareholders and Investors	Direct contact with IR team, shareholders meetings, financial results briefings, IR events, IR meetings, website, Annual Report, mailing service
Governments, Industrial Associations and Business Partners	Direct contact, joint research, studies, automotive and non-automotive organizations (Japan Automobile Manufacturers Association, WBCSD, etc.), roundtables, working groups, conferences, events, assistance via foundations
NGOs and NPOs	Direct contact, philanthropic activities, partnerships, donations, disaster relief activities, events, assistance via foundations
Local Communities	Direct contact to local business facilities, local events, plant visits, conferences, sponsoring, traffic safety awareness campaigns, assistance via foundations
Future Generations	Direct contact, philanthropic programs, plant visits, endowed courses, events, assistance via foundations, websites
Media	Contact with PR team, press conferences, PR events, press releases, interviews, mailing service, websites

RESPECTING HUMAN RIGHTS

Nissan conducts its business while respecting the human rights of its stakeholders. The U.N. Global Compact and national laws are guiding principles for the company, which has developed multiple guidelines and other measures to ensure that human rights are managed throughout business operations. Nissan will strengthen its human rights initiatives by continuing dialogue with stakeholders including customers, employees, business partners and local communities.

In 2015, the company revised the *Renault-Nissan CSR Guidelines for Suppliers* to clarify its response to the issue of conflict minerals and its procurement policy based on Japanese ordinances aimed at eliminating the use of antisocial elements. The new guidelines were drawn up and distributed to suppliers.

PARTICIPATION IN THE U.N. GLOBAL COMPACT

Nissan actively supports a number of international guidelines and agreements, respecting international policies and standards as it conducts its business operations.

Since January 2004, Nissan has participated in the United Nations Global Compact, a corporate responsibility initiative built around 10 universal principles regarding human rights, labor, the environment and anti-corruption. The U.N. Global Compact was originally proposed by U.N. Secretary-General Kofi Annan in an address to the World Economic Forum (Davos forum) in 1999. Businesses may pledge to support its principles of their own free will.

Nissan's CSR management aims to enhance the full range of the company's activities based on these 10 principles.



Click below for more details about Nissan's guidelines.

► website

Click here to download the *Renault-Nissan CSR Guidelines for Suppliers*.



Click below for more information on examples of human rights initiatives.

► website

Click here for more information on the U.N. Global Compact.

EXTERNAL ASSESSMENT

Today companies are assessed on their environmental and social performance as well as their financial performance. An increasing number of investors use these assessments to guide their socially responsible investment (SRI) decisions. To meet these investor needs, Nissan takes a focused approach to CSR activities and proactively discloses information about its business operations. The company's CSR performance has received high praise from external assessors.

▶ website

Click here for more information on the Dow Jones Sustainability Indices.



In Collaboration with RobecoSAM

Dow Jones Sustainability Indices (DJSI)

The Dow Jones Sustainability Indices (DJSI) are a family of SRI indices developed by S&P Dow Jones Indices LLC (U.S.) and RobecoSAM AG (Switzerland). In 2016, Nissan was selected as a member of the DJSI World Index for the first time, as well as the DJSI Asia Pacific Index, of which the company has been a member since its establishment in 2009.

▶ website

Click here for more information on the RobecoSAM Sustainability Yearbook 2017.



RobecoSAM Sustainability Yearbook 2017

RobecoSAM AG (Switzerland) announces its Sustainability Yearbook every January. In 2017, Nissan was recognized as Bronze Class in the Automobiles category.

▶ website

Click here for more information on the FTSE4Good Index Series.



FTSE4Good

FTSE4Good Index Series

Nissan continues to be a constituent of the FTSE4Good Index, an ESG Equity Index Series of FTSE, after its 2016 review.



Oekom Research Corporate Rating Report

Oekom Research AG is a German sustainability rating agency that assesses the environmental and social performance of countries and corporations. In 2015, Nissan was awarded Prime Status, deemed suitable for sustainable investors.



CDP Climate Change Program

In the CDP Climate Change Report, announced in October 2016, Nissan was chosen for the "A" list.



Clarivate Analytics 2016 Top 100 Global Innovators

For the fourth consecutive year, Nissan was selected as one of the Top 100 Global Innovators by Clarivate Analytics. In deciding this award, Clarivate Analytics uses its proprietary database of patent information to analyze not just recipients' advanced and innovative technologies but also their development of solutions with broad application in the real world. The award recognizes the most innovative companies and organizations in all industries around the world.



Morningstar SRI

Nissan has been selected for inclusion in the 2017 MS-SRI (Morningstar Socially Responsible Investment Index), a Japanese SRI index managed by financial information services firm Morningstar Japan K.K.



TSE Selection as "Nadeshiko Brand"

The Tokyo Stock Exchange, Inc. selects listed companies as "Nadeshiko Brands" to recognize their active support of women in the workplace. This is the fifth straight year for Nissan to be named a Nadeshiko Brand, a designation jointly granted by the TSE and Japan's Ministry of Economy, Trade and Industry.

Nikkei Environmental Management Survey

Nissan ranked second in the manufacturing sector and first among automakers in the 20th Nikkei Environmental Management Survey (results announced January 2017).



Development Bank of Japan Environmental Ratings

As well as being recognized by the Development Bank of Japan as a "company with excellent advanced environmental initiatives," the bank's highest environmental rating, Nissan's outstanding evaluation results also entitled it to a Special Prize reserved for model corporations.

▶ page_91

Click here for more information on awards for diversity.

RENAULT-NISSAN ALLIANCE

Nissan has greatly increased its global footprint and achieved dramatic economies of scale through the Renault-Nissan Alliance, a unique and highly scalable strategic partnership founded in 1999.

In 2016, the Alliance sold 9.96 million vehicles.* The Alliance's brands accounted for about one in nine cars sold worldwide, ranking it among the top four car groups globally. Its vehicles are marketed under the following nine brands: Nissan, Infiniti, Datsun, Venucia, Renault, Renault Samsung, Mitsubishi, Dacia and Lada (AVTOVAZ).

* Including sales by Mitsubishi Motors and Russia's AVTOVAZ



The Alliance's Vision

The Renault-Nissan Alliance is the auto industry's most productive and longest-lasting cross-cultural collaboration. This unique partnership, celebrating its 18th anniversary in 2017, is a pragmatic, flexible business tool that can expand to accommodate new projects and partners worldwide.

The Alliance has strategic collaborations with numerous automakers, including Germany's Daimler AG and Dongfeng Motor Company Ltd., a joint venture in China. The Alliance also has a majority stake in AVTOVAZ, Russia's largest automaker, through a joint venture with the state corporation Rostec Corp.

The Alliance is based on the rationale that substantial cross-shareholding investments compel each company to act in the financial interest of the other, while preserving each company's distinct brand identity and corporate culture. Renault has a 43.4% stake in Nissan, while Nissan holds a 15.0% stake in Renault.

In 2014, Renault and Nissan converged four key functions—Engineering, Manufacturing Engineering & Supply-Chain Management, Purchasing and Human Resources—to enhance performance and accelerate synergies. Each unit is headed by one dedicated Alliance Executive Vice President. Thanks to the convergence, the Alliance expects to generate €5.5 billion in synergies in 2018, up from more than €4.3 billion in 2015.

Alliance Objectives

The Alliance pursues a strategy of profitable growth with three objectives:

To be among the top three automakers in terms of:

- 1 Technology innovation
- 2 Revenue and operating profit
- 3 Quality and customer satisfaction

► [website](#)

Click here for more information on the Renault-Nissan Alliance.

Technology Leadership

The Renault-Nissan Alliance's technology leadership is built on three key strategic pillars: zero-emission, connected vehicles and autonomous drive vehicles.

The Alliance is the leader in zero-emission mobility with more than 430,000 electric vehicles sold globally since its first EV, the Nissan LEAF, went on sale in December 2010 followed by the Renault ZOE. Nissan LEAF remains the world's best-selling EV and Renault ZOE the leading EV in Europe.

In 2016, the Alliance hired technology executive Ogi Redzic to lead the global car group's connected car initiative as Alliance Senior Vice President, Connected Vehicles and Mobility Services. With this new common entity, the Alliance aims to provide the latest technology in mass-market vehicles at affordable prices. The Alliance is accelerating the expansion of its connected and mobility services by acquiring the talent to help build in-house software development capabilities and by partnering with best-in-class technology companies.

In 2016, the Alliance announced plans to launch more than 10 models with Autonomous Drive technologies through 2020, following a step-by-step approach.

The World Business Council for Sustainable Development

The Renault-Nissan Alliance became a member of the World Business Council for Sustainable Development (WBCSD), following Nissan's solo participation for more than 10 years. The WBCSD is an international association of forward-thinking companies that galvanizes the global business community to create a sustainable future for business, society and the environment.

Partnership with Mitsubishi Motors Corp.

On October 20, 2016, Nissan acquired 34% of Mitsubishi Motors' equity stake and became its largest shareholder. The Alliance of Renault, Nissan and Mitsubishi Motors creates a new force in the global auto industry.

Nissan will pursue growth potentials with Mitsubishi Motors, specifically through synergies in such areas as joint purchasing, deeper localization, joint plant utilization, common vehicle platforms, technology sharing and an expansion of our combined presence in both mature and emerging markets. Through these activities, the Alliance aims to achieve the production capabilities and innovative technologies to produce cars that fulfill the needs of customers in all segments.

ENVIRONMENT

The increasing global population and the rapid growth of the world economy have complex and diverse connections with the global environment. They can also negatively affect the environment in numerous ways. It is essential to protect the world's irreplaceable natural capital—biodiversity and the air, water and soil that sustain it—for future generations. To balance economic growth with environmental preservation, the automotive industry is tackling a range of sustainability issues. These include climate change and energy measures, preservation of air quality and other natural capital, efficient use of mineral resources, management of chemical substances, resource scarcity and health issues. Companies in the industry are also reforming their business structures to move away from dependence on fossil fuels.

As a global automaker, Nissan takes active steps to identify the direct and indirect environmental effects of its activities, as well as those of its business partners throughout the value chain. The company pursues needed technologies and processes to help minimize the impact of its products on people and communities throughout their lifecycle, while also engaging in communication with society. The company provides customers with innovative products and promotes effective use of energy and resources by increasing sourcing diversity, such as with renewable energy and recycled materials. In this way, Nissan is aiming to achieve its environmental philosophy of “a Symbiosis of People, Vehicles and Nature.”

NISSAN'S ACTIONS

Improvement in corporate average fuel efficiency (fiscal 2016 average in Japan, U.S., Europe and China compared to fiscal 2005):

35%

ENVIRONMENT

SCORECARD

FY2016 TARGET ACHIEVEMENT RATE: ✓✓ ACHIEVED ✓ MOSTLY ACHIEVED × NOT ACHIEVED

Nissan makes year-round use of the CSR scorecard as a fundamental tool to manage, review and validate its progress in each of the sustainability strategies defined for its CSR activities. The table below shows some of the values behind Nissan's ongoing activities and the indices used in the scorecard to gauge the company's performance.

Nissan Priorities	Nissan Objectives and Long-Term Vision	Indicators of Progress	FY2016 Results	Assessment	
Zero-emission vehicle penetration	Achieve 90% reduction in CO ₂ emissions from new vehicles by 2050 (vs. 2000).	Introduce four EVs including Nissan LEAF.	Number of models introduced	Introduced Nissan LEAF, e-NV200, Venucia e30, Choimobi by FY2016	×
		Prepare to bring fuel-cell electric vehicles (FCEVs) to market.	Results of initiatives	Development underway	×
		Take global leadership in supplying batteries for electric-drive vehicles.	Results of initiatives	Undertook continuous production of batteries for EVs sold and achieved number-two battery production volume	✓
		Help create zero-emission society utilizing EVs and their derivative technologies with partners.	Results of initiatives	End of the Yokohama Smart City Project, which achieved 25% CO ₂ emission reductions through solar power, Vehicle to Home and EVs	✓✓
		Provide energy storage solution with used EV batteries through "4R" business.	Results of initiatives	Completed necessary preparation for the actual start of sales in JPN with reuse battery in FY17. Reman* business opportunity was found in FY16Q3. Start of Sales is expected in FY17. * Reman : Replacing/refreshing LEAF batteries utilizing remanufactured used packs	✓✓
Fuel-efficient vehicle expansion	Improve CAFE* by 35% from FY2005 (Japan, U.S., Europe, China). * Corporate average fuel economy; meet or exceed regulatory requirements	CAFE	Improved by 36.5%	✓✓	
		Introduce top fuel-efficiency models in various classes.	Model introductions	Note e-POWER (Japan) Maxima and Tiida (China)	✓✓
		Introduce front-wheel-drive hybrid vehicles (HEVs) in C class and above; expand rear-wheel-drive HEV offerings.	Model introductions	Serena S-Hybrid (Japan)	✓✓
		Bring plug-in hybrid vehicles (PHEVs) to market.	Model introductions	Development underway	×
		Introduce next-generation CVT globally; expand CVT sales to 20 million cumulative units from 1992.	Number of CVT-equipped vehicle sales	Annual total: 3.03 million Cumulative total: 25 million	✓✓
		Develop lightweight technologies with structure optimization, new materials and new manufacturing processes.	Results of initiatives	Achieved 2 kg weight reduction through lighter exterior components in Serena (Japan) by using foamed resin on the body side molding. Applied 1.2 gigapascal (GPa) Ultra High Tensile Strength Steel with High Formability to the Murano, Infiniti Q50 and Infiniti Q60 in North America in 2016	✓✓
		Contribute to CO ₂ reduction with ITS technologies.	Results of initiatives	Further expansion of traffic information service to major cities in China	✓✓

ENVIRONMENT

Nissan Priorities	Nissan Objectives and Long-Term Vision	Indicators of Progress	FY2016 Results	Assessment	
Corporate carbon footprint minimization	Achieve 80% reduction by 2050 (t-CO ₂ /vehicle, vs. 2005).	Reduce CO ₂ emissions of global corporate activities by 20% (t-CO ₂ /vehicle, vs. FY2005).	CO ₂ emission reduction rate	Reduced by 22.3%	✓✓
		Reduce by 27% in all manufacturing sites (t-CO ₂ /vehicle, vs. FY2005).	CO ₂ emission reduction rate	Reduced by 27.0%	✓✓
		Reduce by 6% in logistics (Japan, North America, Europe, China, t-CO ₂ /vehicle, vs. FY2005).	CO ₂ emission reduction rate	Reduced by 8.6%	✓✓
		Reduce by 1%/year in offices (Japan, North America, Europe, China, t-CO ₂ /floor area, vs. FY2010).	CO ₂ emission reduction rate	Increased by 5.8%, mostly due to a revision in the national grid CO ₂ coefficient in Japan	×
		Reduce by 1%/year in dealers (Japan, t-CO ₂ /floor area, vs. FY2010).	CO ₂ emission reduction rate	Increased by 35.8%, mostly due to a revision in the national grid CO ₂ coefficient in Japan	×
Natural resource use minimization	Increase recycled material usage ratio per vehicle by 70% (vs. 2010).	Increase recycled material usage ratio per new vehicle for which production begins in FY2016 by 25% in Japan, U.S. and Europe.	Recycled material usage ratio	Achieved rate of over 25%	✓✓
		Expand closed-loop recycling scheme with business partners.	Results of initiatives	Promoted activities	✓✓
		Improve end-of-life vehicle (ELV) recovery rate: - Achieve top-level ELV recovery rate (Japan). - Promote proper treatment and resource recovery globally.	Recovery rate	99.7% (Japan) Improvement of automotive shredder residue (ASR) recycling rate toward achievement of zero ASR landfill	✓✓
		Reduce scarce resource usage.	Results of initiatives	Expanded adoption of developed magnets with lower rare earth usage; introduced in newly launched Note e-POWER, achieving 70% reduction in magnets (vs. FY2010)	✓✓
		Reduce waste 2%/year in Japan and 1%/year worldwide.	Waste reduction rate	Reduced by 8.9% (Japan) Reduced by 3.0% globally	✓✓
		Promote management and reduction of water usage at all production sites.	Results of initiatives	Promoted activities	✓✓
Environmental management promotion	Promote comprehensive and effective initiatives for supporting management decisions and achievement of Nissan Green Program goals.	Enhance and promote environmental management throughout supply chain (consolidated companies, sales companies, suppliers).	Results of initiatives	Conducted 13 THaNKS* activities in FY2016 * THaNKS: Trusty and Harmonious Nissan Kaizen activity with Suppliers	✓✓
		Promote reduction, substitution and management of environment-impacting substances.	Results of initiatives	Continued enhancing management of environment-impacting substances	✓✓
		Reduce environmental impact of products with lifecycle assessments (LCAs).	Results of initiatives	Continued reducing environmental impact of products	✓✓



▶▶ GRI G4 Indicators
 ▶▶ G4-EN18/G4-EN19/
 G4-EN27/G4-EN28/
 G4-EN33

▶▶ [page_116](#)

[Click here for detailed information on our environmental data.](#)

ENVIRONMENT-RELATED ACTIVITIES

Environmental Philosophy: A Symbiosis of People, Vehicles and Nature

As a global automaker, Nissan takes active steps to identify the direct and indirect impacts of its business on the environment to help minimize them. The goal is to reduce the environmental impact and resource consumption of Nissan's corporate operations and its vehicles throughout their lifecycle to a level that can be absorbed naturally by the Earth. Toward this end, the company endeavors to leave as small an ecological footprint as possible.

Nissan aims to be a "Sincere Eco-Innovator." The company shows that it is sincere by taking a proactive stance toward addressing environmental challenges, reducing its real-world environmental impact and providing its customers with innovative products, technologies and services as contributions to a sustainable mobility society. It is actively working to contribute to the protection of the global environment through sustainable mobility to achieve "a Symbiosis of People, Vehicles and Nature."

Environmental Action Plan: Nissan Green Program 2016

In fiscal 2011, Nissan launched its six-year environmental action plan, Nissan Green Program 2016 (NGP2016). NGP2016 was based on thorough assessments focusing on factors with critical impact. These assessments included input from energy and resource specialists around the world. NGP2016 also took into account survey results in Japan that help gauge employees' understanding and opinions on environmental issues, Nissan's activities and the company's business priorities.

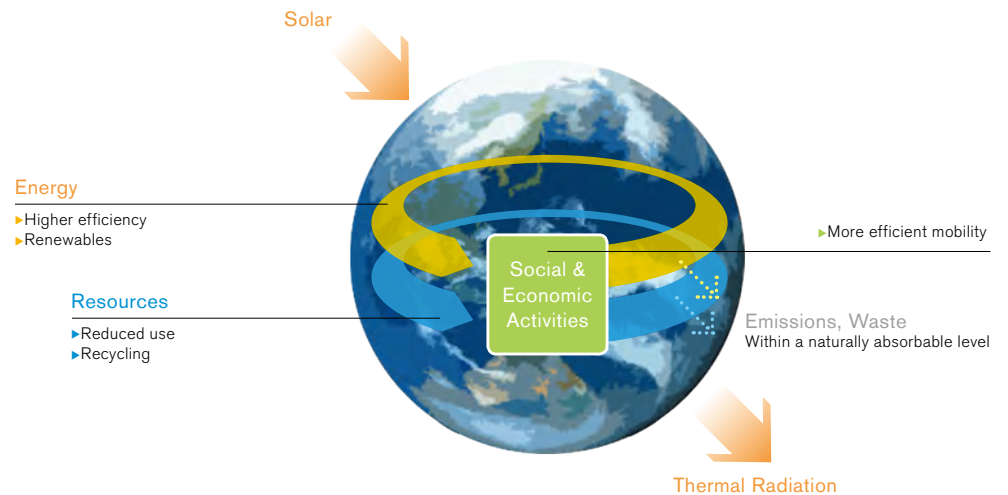
NGP2016 focused on reducing the environmental impact of Nissan's corporate activities and pursuing harmony between resource consumption and ecology. Under this plan, the company aimed to promote diversity and resource circulation by means of efficient use and recycling of both energy and resources, expanding the application of green technologies that were developed under NGP2010, its previous environmental action plan. NGP2016 featured four specific key actions—zero-emission vehicle penetration, fuel-efficient vehicle expansion, corporate carbon footprint minimization and natural resource use minimization—involving activities in

development, manufacturing, sales, service and all other departments.

Thanks to Nissan Green Program activities, the company forecasts that CO₂ emissions from its new vehicles and corporate activities will peak in the 2020s and then subside, even taking into account plans to increase sales globally. The volume of new natural resource use will be maintained at the 2010 level.

►► [website](#)
Click here for more information on Nissan Green Program 2016.

Promoting Energy and Resource Diversity, Efficiency and Recycling



Based on *Beyond Growth: The Economics of Sustainable Development*, by Herman E. Daly.

Three Major Issues

Nissan's ultimate goal is to limit the environmental impact and resource consumption of its corporate activities and its vehicles during their entire lifecycle to a level at which the planet can naturally absorb them. Toward this goal, the company pursues activities in three key areas: reducing CO₂ emissions, promoting resource recycling and preserving air, water, soil and biodiversity.

1. Reducing CO₂ Emissions

The business structures of the automobile industry are changing greatly in the face of demand to reduce CO₂ emissions and to move away from dependence on fossil fuels. As a global automaker, Nissan takes into account CO₂ emissions through the whole value chain, including suppliers, from the procurement of raw materials to the transportation and operation of vehicles. Understanding the importance of balancing efforts in this area with its business activities, the company is striving to reduce emissions through such initiatives as developing new technologies and using renewable energy.

2. Resource Recycling

Nissan manufactures and markets its vehicles all around the world, utilizing resources in a variety of forms. With the basic approach of treating resources as limited, believing that they should be used as efficiently as possible and minimizing environmental impact, the company is working to make effective use of resources at every stage of its vehicles' lifecycles so as to sustainably offer the world the rich benefits of mobility.

3. Air, Water, Soil, Biodiversity

Humankind depends upon balanced ecosystems encompassing air, water, soil and living creatures. To help maintain our irreplaceable world in a healthy state for future generations, Nissan is working to minimize its impact on ecosystems through its corporate activities and the lifecycle of its vehicles, making this approach a new part of its values as it continues to develop and champion environmentally friendly technologies.

COMPANY ORGANIZATIONS FOR THE ENVIRONMENT

To achieve the goals of Nissan Green Program 2016 (NGP2016), Nissan has created a global framework for environmental management and is setting targets and implementing closely coordinated action plans across all areas of its activity, from product and vehicle development, manufacturing, distribution, marketing and sales to other divisions.

To carry out its global environmental management, Nissan has established an organizational approach linking its various functions and regions. The Global Environmental Management Committee (G-EMC), which includes a board member as co-chair, meets twice annually. It determines with corporate officers chosen based on issues to be discussed the overall policies and content of reports put before the Board of Directors. The Corporate Strategy and Business Development Division was launched to determine which proposals will be forwarded to the G-EMC and to assign specific actions to each division. This department is also responsible for the efficient management and operation of environmental programs based on the PDCA (plan, do, check, act) cycle.

In addition, Nissan has established committees to implement environmental management and activities at a deeper level in each of its regions. For example, the European Environmental Management Committee was set up in 2012, followed by the Japanese Environmental Management Committee, the North American Environmental Management Committee, and the Chinese Environmental Management Committee in 2013. These groups report to regional management committees and cooperate with the Corporate Strategy and Business Development Division while reporting to the G-EMC.

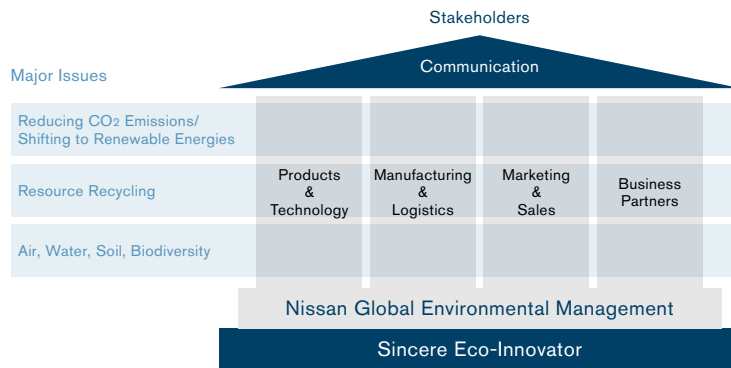
Nissan's strategy is built on the concept of listening to the views of society and identifying potential risks and opportunities. The company takes into account opinions from leading experts and organizations and examines assessments from rating organizations, using this information to analyze its goals and activities and enhance its environmental measures.

Nissan made progress on each of the 4 key action points of NGP2016: "Zero-emission vehicle penetration," "Fuel-efficient vehicle expansion," "Corporate carbon footprint minimization" and "Natural resource use minimization," completing the six-year plan in FY2016. ▶

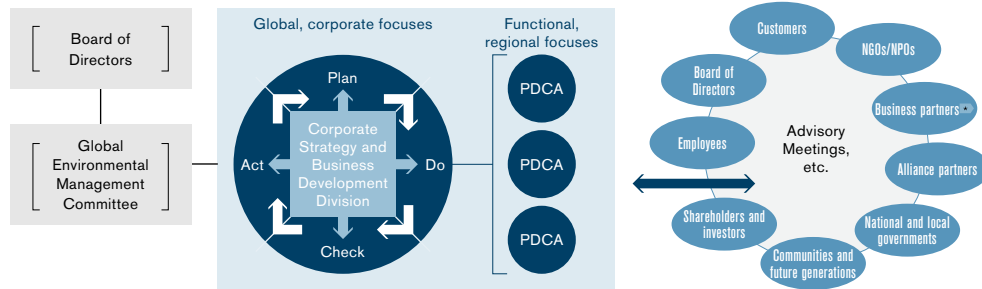
▶ page_139

▶ Click here for detailed information on our environmental data.

Nissan's Framework for Global Environmental Management



Environmental Management Organization



Suppliers, distributors, dealers and other third-party entities.

REALIZING THE ENVIRONMENTAL PHILOSOPHY

Stakeholder Engagement

Nissan analyzes its use of resources and energy, the impact on the environment and how it can reduce that impact throughout the value chain. Through these analyses, the company identifies stakeholders at each stage, from the extraction of resources needed to make vehicles to manufacturing, shipping, using and disposing of end-of-life vehicles. Through a broad range of approaches, Nissan gains an understanding of stakeholder views and the diverse needs of society.

As one example, members of Nissan's Board of Directors hold meetings with the participation of researchers and experts who lead the environmental field in the academic and industrial worlds, as well as leading businesspeople from various sectors. They discuss the direction and appropriateness of Nissan's business strategies; this input is considered in those strategies going forward.

Customers, shareholders, investors, Alliance partners, business partners, NGOs/NPOs, local communities, national and local governments, future generations, employees and members of Nissan's Board of Directors.

Materiality Assessment

The automotive industry is subject to environmental regulations and standards around the world, covering areas like CO₂ and other exhaust emissions, energy, fuel efficiency, noise, material resources, water, chemical substances, waste and recycling.

As regulations become more stringent each year, consumer needs and interests concerning environmental performance are also changing.

To meet these demands, Nissan uses materiality assessments to analyze potential opportunities and risks. The company identifies those priority issues viewed by both Nissan and stakeholders as important, sets necessary policies and targets for tackling them effectively and works them into its environmental strategy.

page_09

For the results of the company's materiality assessments, see the Materiality Matrix.

Enhancing Environmental Management Based on ISO 14001

As of January 2011, the Nissan Global Headquarters and all other main Nissan facilities in Japan, including those for R&D, production and logistics, along with all product development processes, have acquired ISO 14001 certification for environmental management systems. The company has appointed an environmental management officer to oversee Nissan's environmental activities. Through steady application of the PDCA (plan, do, check, act) cycle, the company is improving its environmental performance. The coordinated goals set by the environmental management officer for the entire company are cascaded down to the employees working in all facilities through local offices.

Nissan's ISO secretariat oversees companywide efforts, while the local offices in Japan are responsible for activities at each facility and division and for coordinating the proposals from employees. The secretariat and local offices engage in discussions at least once a month to confirm the progress made toward established goals, to share best practices, to improve management systems, to develop plans for the next fiscal year and to communicate requests from local facilities and divisions. The items discussed are reported to the environmental management officer twice a year (once during the management review conference) so that the company can decide on needed improvements.

To confirm management is functioning properly, Nissan annually undergoes audits by third-party organizations and carries out its own internal audits of its environmental systems and environmental performance to strengthen the company's measures, based on the PDCA cycle. Nissan has finished adapting its systems in line with the version of ISO 14001 updated in fiscal 2015.

The company has also earned ISO 14001 certification at its main production plants outside Japan. Nissan's policy is to extend environmental management systems to all regions of new expansion, applying these same criteria.

Product Development Policy

Nissan has introduced an environmental component to the traditional quality, cost and time (QCT). With this QCT-E approach, Nissan has crafted a global approach to environmental management, thereby setting targets for environmental performance in all areas of its business.

Under NGP2016, the company's environmental action plan, Nissan annually invests 70% of its research and advanced engineering budget in environmental technologies. The company is also promoting its Common Module Family concept, sharing platforms and module components with its Alliance partner Renault. Savings from reduced costs are invested in new solutions, including cutting-edge environmental technologies.

Raising Employee Awareness

Nissan's environmental activities are enabled by the knowledge, awareness and competency of its employees. Based on ISO 14001 activities, the company conducts employee education rooted in NGP2016 regarding reduction of CO₂ emissions, energy and water consumption and waste. In addition, education regarding environmental accident prevention, including management of hazardous materials, is provided every year to all employees, including those from affiliated companies working in Nissan production facilities. At production plants, ongoing improvements of employee competency to reduce environmental impact are promoted through not only education and training programs but also the quantitative evaluation of each employee. The content of these training programs is updated once a year.

In Japan, Nissan implements its own curriculum for educating new employees during orientation as well as midranking and management personnel during seminars to deepen their understanding of NGP2016 and environmental issues surrounding the auto industry. The company also holds "town hall" meetings that bring together executives and employees. Employees can stay up to date on Nissan's latest environmental initiatives through features in the intranet, internal newsletters, and in-house video broadcasts. In addition, all employees receive an Environmental Policy Card with a pledge to pursue personal environmental activities, which they carry at all times.

Overseas, Nissan shares information and provides education to employees through the intranet, videos, events and various other communication approaches suited to each region.

Employee-Initiated Activities and Evaluation System

In fiscal 2008, Nissan added the “environment” factor to the range of *kaizen* activities carried out by quality-control (QC) circles. This creates a mechanism that encourages employees to think proactively and propose ideas to improve environmental aspects of Nissan’s business. Managers encourage employees’ active participation by communicating how these QC circle activities are linked to achievement of the goals in the company’s midterm business plan. The ideas proposed by employees go to managers and QC circle secretariats for assessment of their potential contribution to environmental improvement, among other factors, after which Nissan may implement those with the highest potential.

The knowledge and skills of the frontline employees on CO₂ emission reduction, energy management, water conservation and waste and landfill reduction have been compiled in a best-practices manual and shared among global facilities. A system to reduce cooling-tower water use was born from this activity. Nissan also holds contests in some facilities during officially designated months in Japan to keep employees motivated to participate in environmental activities. These include the Energy Use Reduction Idea Contest in February (energy-efficiency month), the Water Usage Reduction Idea Contest in June (environment month) and the Waste Reduction Idea Contest in October (3R promotion month).

Nissan uses various methods to reward employees for their contributions to environmental improvement activities. One is inclusion of these activities in the “commitment and target” annual performance goals used at some Japanese and overseas locations. This system assesses employees’ achievement of goals, reflecting this in performance-related elements of bonuses. Employees are also recognized for environmental improvement through Nissan Prizes presented by the CEO or other executives, awards given by plant heads and “THANKS CARD” recognition from managers for excellent work or achievements.

Working with Consolidated Production Companies

Nissan encourages its consolidated production companies in a variety of markets to acquire ISO 14001 certification and to undertake other environmental initiatives based on their respective policies. Meetings with major consolidated production companies in Japan are held to exchange views on cooperation toward the goals outlined in NGP2016. The meetings lead to a deeper shared understanding of the details of NGP2016 and the initiatives undertaken by each company.

Working with Dealerships

Nissan’s dealerships in Japan have introduced an original approach to environmental management based on ISO 14001 certification called the Nissan Green Shop certification system. This system is managed through internal audits conducted by the dealerships every six months, in addition to regular annual reviews and certification renewal audits carried out every three years by Nissan Motor Co., Ltd. As of the end of March 2017, the system has certified 2,700 outlets of 157 dealers, including parts dealers.

Working with Suppliers

The purchasing divisions of Nissan and Renault ensure full understanding of CSR and compliance with regulations in the supply chain through *The Renault-Nissan Purchasing Way* and the *Renault-Nissan CSR Guidelines for Suppliers*. In the environmental aspect, they carry out supply-chain management in line with the Nissan Green Purchasing Guidelines.

Based on NGP2016, Nissan holds regular annual environmental briefing sessions for suppliers when it fully shares targets, action plans and understanding of what constitutes environmental impact. Since fiscal 2012, it has conducted surveys to gather information from suppliers on their environmental performance in areas including CO₂ emission levels, water use and waste. In fiscal 2014, Nissan further expanded its activities by adopting the supply-chain program run by CDP, an international nonprofit organization that manages a global system for disclosure of companies’ environmental impact and strategies. In fiscal 2016, it worked to improve the accuracy of performance data with the cooperation of CDP and other external specialists. Further, the company institutes mandatory questionnaires concerning handling of environment-impacting substances and environmental management when selecting each supplier.

▶▶ [page_76](#)

✦ [Click here for more information on supply-chain management.](#)

Communication and Assessment of Environment-Related Activities

Companies today are called upon to disclose a wide range of information about how they are managing risks and handling issues related to such environmental issues as climate change and natural resources. Nissan makes detailed disclosure of its environmental performance on its website for stakeholders, including investors, rating agencies and other specialists, in accordance with Global Reporting Initiative (GRI) guidelines. Among data disclosed are CO₂ emission and waste discharge levels, as well as the amount of energy, water, materials and other resources consumed. Nissan's communication efforts also include briefings to describe its environmental initiatives.

Nissan was selected from among more than 6,000 global corporations for inclusion on the Climate A List in the Global Climate Change Report 2016 issued by CDP, becoming the only Japanese automotive company chosen for the third consecutive year. This selection recognized Nissan's efforts based on the environmental philosophy of "a Symbiosis of People, Vehicles and Nature" not only to reduce CO₂ emissions from its corporate activities but also to reduce "well-to-wheel" CO₂ emissions from new vehicles by 90% by the year 2050 (compared with levels from 2000) under a long-term vision established a decade previously. Its transparent disclosure of environmental information was another factor in its selection.

Nissan was also named to the Climate A List for its comprehensive efforts toward building a zero-emission society. These include championing the Nissan LEAF and other zero-emission vehicles, developing the LEAF to Home system that lets Nissan LEAF owners use energy stored in the vehicles' batteries to power their homes, implementing renewable energy solutions making use of used batteries and cooperating with other companies and local authorities to establish widely available charging infrastructure.

CDP also assesses corporations' water-related initiatives. Nissan scored at a leadership level in this area, receiving high praise for its NGP2016 initiatives to reduce water usage and manage its supply chain.

Nissan was also selected as a global leader on the World Index of the Dow Jones Sustainability Index, an index managed by the U.S. firm Dow Jones & Company, Inc. and the Swiss socially responsible investment

research firm RobecoSAM AG. Nissan received particular recognition for its initiatives promoting zero-emission vehicles and fuel-efficient vehicle expansion and for its reduction of workplace CO₂ emissions. As a result, Nissan scored top marks in four out of six criteria, being rated one of the top companies in its industry for environmental activities.

For the second consecutive year, the company also finished second in the manufacturing sector and first in automobile manufacturing in the Nikkei Environmental Management Survey. The survey, conducted by Nikkei Inc. for the 20th time last year, examines and evaluates how Japanese corporations balance business concerns with environmental policies, assessing the performance of 1,733 companies in the manufacturing sector and 1,429 companies in nonmanufacturing industries, including retail, restaurants, power and gas and construction. Nissan achieved a total score of 490 points out of a maximum of 500 across five categories, receiving a perfect score in the product measures and environmental management promotion categories.

This result was the fruit of implementation of NGP2016—which extends to sales and service divisions as well as development, manufacturing and purchasing—and ongoing *kaizen* activities. The survey in particular praised increases in Nissan LEAF sales and activities to reduce end-of-life waste disposal.

Lifecycle Assessment to Reduce Environmental Impact

Nissan uses the lifecycle assessment (LCA) method to evaluate and comprehensively assess environmental impact in all stages of the vehicle lifecycle, from resource extraction to production, transport, customer use and vehicle disposal. LCAs are also carried out for new technologies as they are introduced with the goal of developing more environmentally friendly vehicles.

Company calculations show that over its lifecycle, the Nissan LEAF produces CO₂ emissions up to 40% lower than gasoline-powered vehicles of the same class. In 2010, this assessment was certified by the Japan Environmental Management Association for Industry. Nissan has continued to conduct LCAs in line with development of the vehicle.

These international guidelines, published by the NGO Global Reporting Initiative, promote actions by companies to define overall policy direction toward environmental, social and economic development and to disclose information on their overall plans and specific initiatives.

▶▶ [page_136](#)

▶ For details on the LCA for the Nissan LEAF, see the CSR data section in this report.

In December 2013, TÜV Rheinland in Germany also certified Nissan's LCA methodology. This certification is based on ISO 14040/14044 standards and guarantees the soundness of the environmental impact calculations in Nissan's product LCAs. Nissan bases LCAs for new vehicles on its certified methodology; the company's certification was renewed in fiscal 2016. The company continues to lower its vehicles' environmental impact by adopting new technologies and more efficient processes in manufacturing, aiming for further CO₂ emission reductions over the lifecycle of its new vehicles.

TÜV Rheinland certificate



REDUCING CO₂ EMISSIONS

The United Nations Framework Convention on Climate Change states that to stabilize the climate system it is necessary to keep average temperatures from rising more than 2 degrees Celsius on a global basis. Based on this assumption, Nissan has calculated that “well-to-wheel” CO₂ emissions for new vehicles will need to be reduced by 90% by 2050 compared with levels in 2000. The efficiency of internal combustion engines will need to improve in the short term to help achieve this. Over the long term, Nissan also aims

to increase the adoption of zero-emission vehicles—battery electric and fuel-cell electric (EVs and FCEVs)—and to promote the use of renewable energy to power these technologies.

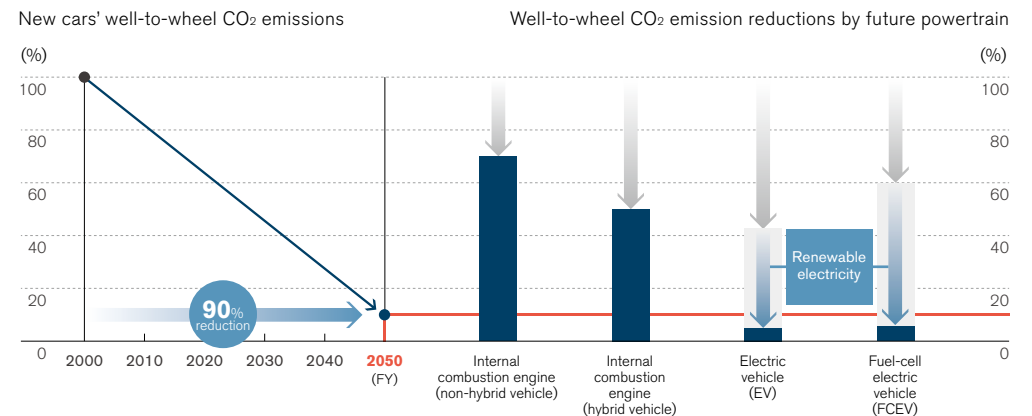
Nissan is advancing technological development on the basis of a zero-emission future scenario. Specifically, the company is concentrating its efforts on two pillars: zero emission, which involves widespread use of zero-emission vehicles in a holistic approach to promote a sustainable society; and PURE DRIVE, which reduces CO₂ emissions by developing fuel-efficient internal combustion engine technologies and introducing them to the market.

Nissan has also calculated that it needs to reduce CO₂ emissions from its corporate activities by 80% by 2050 compared with 2005 levels. Accordingly, it plans to continue its energy efficiency measures, leverage the energy storage ability of EV batteries and expand its use of renewable energy.

▶▶ page_34

▶ Click here for more information on PURE DRIVE.

Our CO₂ Reduction Scenario



▶ Created by Nissan on the basis of the Intergovernmental Panel on Climate Change Fourth Assessment Report.

ZERO-EMISSION VEHICLE PENETRATION

Electric vehicles (EVs) demonstrate that what is good for drivers and the planet is also good for business. Nissan, including its Alliance with Renault, is engaged in a comprehensive approach that involves boosting production and sales of EVs and other activities coordinated in a variety of partnerships for popularization of EVs.

Zero-Emission Leadership for the Alliance

Nissan's commitment to sustainable mobility addresses concerns over climate change and supports sustainable profits for Nissan while satisfying customers' demands for more environmentally friendly vehicles. Greater use of renewable energy, such as solar, wind and hydropower, in the future will continue to improve EVs' environmental contribution as electricity generation becomes cleaner. Increased use of batteries as energy storage devices will also expand the EV market as they can be reused after their initial use for transportation power.

In 2010, Nissan began sales of its mass-produced 100% electric vehicle, the Nissan LEAF. In 2014, Nissan expanded its leadership in zero-emission mobility into the LCV segment with the launch of the e-NV200, the company's second all-electric vehicle, in the European and Japanese markets. As of 2015, the new Nissan LEAF—powered by a 30-kWh lithium-ion battery that makes possible a driving range of 280 kilometers in JC08 mode—was on sale in Japan, North America and Europe.

Nissan LEAF Sales Exceed 260,000

The Nissan LEAF is powered by a lithium-ion battery pack and an electric motor, and it emits no CO₂ or other exhaust emissions during operation. The Nissan LEAF offers excellent, fun-to-drive performance, with smooth, strong acceleration and quiet delivery across a speed range comparable to that of other models, as well as great handling stability realized by well-balanced weight distribution. This all-new driving experience has earned the Nissan LEAF high marks from customers since its debut in 2010.

The Nissan LEAF has been introduced in 48 markets to date, with sales steadily increasing. Total cumulative sales worldwide exceeded 260,000 vehicles as of March 2017, maintaining the Nissan LEAF's position as the best-selling EV in the world. Across all EV models, including

the e-NV200 and the Venucia e30, cumulative global sales have cleared the 300,000 mark. While the low environmental impact of EVs is attractive, consumer awareness of other characteristics, such as the low charging and operation costs and superior acceleration and steering performance, is likely to have been a factor in the strong sales.



The Nissan LEAF.

The Nissan LEAF also has advanced features specially developed for customer convenience. Advanced IT systems allow the driver to control functions such as the vehicle air-conditioning system and EV charging remotely, via a smartphone or other device, and can help the driver find nearby charging stations and the most energy-efficient routes.

Nissan has worked with local governments, corporations and other entities to deploy charging infrastructure and encourage adoption of EVs. The company has also established a Global Data Center to collect EV performance data from different countries, which is used to analyze driving and charging patterns. Nissan aims to leverage its valuable experience gained in different markets to further improve customer convenience.

The company's calculations show that the Nissan LEAF and other EVs produce considerably less CO₂ emissions over their entire lifecycle, from the extraction of raw materials, manufacturing, shipping and use to end-of-life disposal, compared to gasoline-powered vehicles of the same class. ▶

By contributing to the shift to renewable energy, EVs play an essential role beyond transportation to help achieve a low-carbon society.

▶▶ [page_24](#)

▶ Click here for more information on the Nissan LEAF lifecycle assessment.

The e-NV200, a Practical, Sustainable City Delivery Vehicle

Based on the Nissan NV200, a multipurpose commercial van, the e-NV200 combines the interior roominess and versatility of the NV200 with the acceleration performance and refinement of an EV. It has been produced at Nissan's Barcelona Plant in Spain since June 2014 and, as of March 2017, is sold in 26 countries, including Japan and a number of European nations. The e-NV200 is also used by taxi services in Barcelona and Amsterdam and has been adopted in Japan by a wide range of customers from urban delivery businesses to local authorities.

Compared to commercial vehicles using internal combustion engines, the e-NV200 reduces operating costs and contributes to an enhanced environmental image thanks to the vehicle's zero exhaust emissions and reduced noise pollution. Additionally, the vehicle offers smooth, strong acceleration performance while being extremely quiet.

The inclusion of a hydraulic brake system makes the vehicle's regenerative braking more effective, enabling a driving range of 185 to 190 kilometers on a full charge (in JC08 mode). Two 100-volt power outlets that can draw a maximum of 1,500 watts of power from the battery are installed in the front-seat side and the cargo area (Japan model). They provide a convenient and safe electrical power source that comes in handy for offsite jobs, outdoor events and construction work, or in the case of an emergency.

The driver can also manually set the remaining battery level. By halting the power supply automatically with anything from 2 to 11 of 12 bars remaining on the battery gauge, the driver can ensure that the vehicle has enough energy left in the main battery pack for the ride home.

Construction companies that have adopted the e-NV200 as a power source for onsite work have given positive feedback. Because they now do not use fuel-powered generators, noise is reduced around the site, and efficiency is improved due to better communication.

With five-seat and seven-seat wagon versions available, the vehicles can also be used for carrying passengers.



As a mobile power source, the e-NV200 has potential for application in a range of business contexts.



The e-NV200 gives Japanese and European urban goods delivery and taxi businesses the opportunity for zero-emission operations.

e-NV200 Vehicles Put to Various Uses in Japanese Municipalities

The e-NV200 is extremely quiet and can be used as a mobile power source in the outdoors during emergencies. Starting from the end of fiscal 2015, Nissan is making some of these vehicles available free of charge on a three-year lease to Japanese municipalities that have identified applications making the best use of the vehicle's potential. Through this approach of building a track record of innovative EV uses, the company aims to collect examples of ways to put the e-NV200's strengths to work, sharing them nationwide and thereby helping to increase EVs' presence in the market. The examples can be categorized broadly into four types, depending on which EV benefit they focus on: their eco-friendliness, quiet operation, affordability or role as a mobile power source.

In Tochigi Prefecture, large-scale producers of flowers and other crops are taking advantage of the spacious cargo area for their deliveries. By using a small hydroelectric facility to produce electricity for use in vehicle charging, operating costs can be significantly reduced. The vehicle's battery pack can also be used in greenhouses and as an emergency backup power supply.

At the Nishi Ward municipal office in Yokohama, Kanagawa Prefecture, an e-NV200 is being used to transport food samples in a program to prevent food poisoning and infection. A refrigerator unit plugged into the cargo outlet makes it possible to transport the samples at a stable temperature. The vehicle is also used during outdoor hygiene education events at different locations.

The Child-Raising Division in Iwakura, Aichi Prefecture, uses an e-NV200 to take children from a small daycare center by the station to their different nurseries. Children and nurses can enjoy the journey as they can talk without being disturbed by the noise of the vehicle engine or smell of gasoline. The vehicle also acts as a power supply for acoustic equipment and microphones used at sports days and other events.

The New Energy Industries Division in the city of Osaka uses its e-NV200 in environmental surveys, including monitoring aircraft noise. As well as transporting all equipment, the vehicle acts as a power source at survey locations.

The e-NV200 also helps support local communities. For example, in the Aba District of Tsuyama, Okayama Prefecture, there are few gas stations and communities are isolated. The introduction of this vehicle has reduced running costs of a program that transports elderly residents who cannot drive by themselves for shopping and other activities. In Okinawa, meanwhile, an e-NV200 is used as a shuttle bus in the Okinawa Peace Memorial Park by the foundation operating the park. With no emissions or noise, the vehicle contributes to protecting the natural environment.

Fuel-Cell Electric Vehicles

Fuel-cell electric vehicles (FCEVs) are another type of zero-emission vehicle that do not produce CO₂ or other harmful emissions. Powered by electricity generated from hydrogen and oxygen, FCEVs emit only water during their operation. Nissan believes that in building a sustainable mobility society, both FCEVs and EVs are important from an energy diversity perspective.

In 2013, Daimler AG, Ford Motor Co. and Nissan, under the Alliance with Renault, signed an agreement for the joint development of a common fuel-cell system. Toyota Motor Corp., Honda Motor Co. and Nissan are participating in a Japanese government initiative to develop hydrogen station infrastructure in Japan. In addition to partially covering the operating costs of hydrogen stations, the three automakers are working to entice new infrastructure companies to enter the business by sharing information about their support for it.

Pursuing a Zero-Emission Society

The widespread use of zero-emission vehicles, which produce no CO₂ emissions during operation, is an effective way of achieving sustainable mobility. The auto industry must go beyond producing and selling zero-emission vehicles to help put the necessary infrastructure in place to ensure that the vehicles are economical to use. No company can achieve this on its own. The Renault-Nissan Alliance is promoting the development and production of zero-emission vehicles and the construction of infrastructure, forging numerous zero-emission partnerships with national and local

governments, electric power companies and other organizations.

Nissan is also taking part in a comprehensive range of initiatives focusing on zero-emission mobility, including the production of lithium-ion batteries, secondary use and recycling of batteries, construction of vehicle-charging infrastructure and standardization of charging methods with other manufacturers. Increased uptake of zero-emission vehicles will bring changes to people's lifestyles, laying the groundwork for a sustainable mobility society. Nissan provides more than just EVs themselves; it embraces the new values that they represent as well.

Building a Zero-Emission Society with EVs



CHAdeMO, an organization established to increase installations of the quick chargers that are indispensable for the further diffusion of electric vehicles and standardization of charging equipment, is made up of automakers, electric utilities, charger manufacturers, charging service providers and other supporting groups.

▶ Based on the time it takes to charge both 30 kWh and 24 kWh batteries to 80% of capacity from when the battery warning light comes on. Charging times can vary according to the type of quick charging unit and environmental temperature.

Providing Infrastructure to Support Zero-Emission Vehicles

Quick chargers, which can charge batteries from a minimum charge up to 80% capacity in around 30 minutes, ▶ are a key part of the infrastructure needed for the widespread adoption of EVs. Nissan launched its quick chargers in 2011, and in the following year, the company improved them to make chargers quieter and the connector easier to use, as well as enabling on-the-spot payment. Nissan produced them until November 2015, providing global hardware support for charging infrastructure.

Nissan is encouraging local governments, public and commercial facilities and others in Japan to install quick chargers. It is also continuing to increase the number of Japanese Nissan dealerships with quick chargers, which stood at 1,800 as of March 2017.

In May 2014, Nissan jointly established a new company, Nippon Charge Service (NCS), with other Japanese automotive manufacturers to promote installation of chargers for electric-powered vehicles (including EVs and plug-in hybrid vehicles). Under NCS management, the companies aim to provide a convenient charging network service letting drivers charge their vehicles anywhere with a single card.

Nissan has also started working with companies that support the spread of EVs by installing EV chargers at their workplaces to make it easier for employees to commute using the Nissan LEAF.

The company offers the Nissan Zero-Emission Support Program 2 to make it more convenient for customers across Japan to operate their EVs. A set monthly membership fee gives them unlimited access to almost all quick-charging points in Japan. This contributes to lowering running costs by reducing the cost of charging EVs at home.

In the United States, Nissan runs the “No Charge to Charge” program, which provides free access to selected charging stations for two years with the purchase or lease of a new Nissan LEAF. As of March 2017, the program is running in 51 cities where Nissan LEAF sales are high, including San Francisco, Los Angeles, Seattle and Portland, Oregon, and the company plans to expand to more cities in the future.

In Europe, too, Nissan is working with companies in the energy industry and others to install quick chargers compliant with the CHAdeMO protocol. It is also collaborating with BMW to encourage the spread of EVs and PHEVs by boosting the number of quick-charging stations that can be used by vehicles from both companies. In the United States, as of January 2017,

a total of 174 stations had been built in 33 states, and there are plans to complete another 50 during the 2017 calendar year.

As of the end of February 2017 there were 14,000 CHAdeMO-compliant quick chargers worldwide.

Expanding EV Usage in California

California has been actively promoting zero-emission vehicles and has successfully become the number-one EV selling state in the U.S. At the same time, drivers are only using EVs for short distance travel such as shopping or commuting. Entrusted by Japan's New Energy and Industrial Technology Development Organization (NEDO) and with the California government's cooperation, Nissan Motor Co., Ltd., and Kanematsu Corp., in partnership with U.S. charging infrastructure service provider EVgo, started a project in November 2016 by installing over 50 chargers in more than 20 locations along one of California's most important travel arteries while studying EV use and driving patterns through a smartphone app that provides a user-friendly charging experience. The data collection and analysis will continue until September 2020 and the results will be utilized for further EV market expansion.

Nissan EVs: Contributing to Realization of Smart Grids

Nissan EVs can provide electricity to households through the Power Control System. The LEAF to Home power supply system lets a Nissan EV share the electricity stored in its high-capacity lithium-ion batteries with an ordinary home once the car is connected to the home's electricity distribution panel via its quick-charging port. In this way EV batteries can provide additional value. The connector conforms to CHAdeMO, a fast-charging protocol used in global markets where Nissan EVs are sold, and ensures a high level of versatility, stability and reliability.

Integration of EVs into society will help energy distribution across the grid. Today, about 5,800 households in Japan are utilizing EVs to manage home energy use through a vehicle-to-home scheme, and using a similar vehicle-to-building approach, hundreds of EVs are powering buildings in the U.S., Japan and Europe.

On the Hawaiian island of Maui, about 600 Nissan LEAF owners volunteered to participate in the Japan-U.S. Island Grid Project, also called “JUMPSmart Maui.” This vehicle-to-grid initiative is exploring the potential of integrating a smart energy grid, renewable energy and EV technology in a single energy management system. Residents can access renewable energy from wind and solar sources for vehicle charging, reducing their operating cost. In return, they provide the electricity stored in their EVs to the grid as part of efforts to optimize electricity supply across the island.

Production of Lithium-Ion Batteries in Japan and Abroad

In Japan, NEC Corp. and Nissan’s joint-venture company, Automotive Energy Supply Corp., produces lithium-ion batteries for Nissan EVs at its Zama facility. The facility assembles modules consisting of multiple sheet cells packed into compact metal cases with attached terminals. These are put together in battery packs at Nissan’s Oppama Plant and then fitted into vehicles.

Nissan also manufactures the Nissan LEAF and EV batteries overseas. In the United States, the company has produced lithium-ion batteries at its Battery Plant and EVs at its Vehicle Assembly Plant in Smyrna, Tennessee, and also in the United Kingdom at its Sunderland Plant.

The Nissan New Mobility Concept

The Nissan New Mobility Concept is an ultracompact 100% electric vehicle that was developed in response to rising numbers of senior citizens and single-member households, along with increasing use of automobiles for short-distance trips by up to two people. Even smaller than a “kei” minicar, the driver has excellent visibility and a good feel for the dimensions of the vehicle, making it an ideal choice for residential neighborhoods and other areas with narrow streets and poor visibility, as well as regional cities and islands pursuing compact-city policies.

Since fiscal 2011, with cooperation from Japan’s Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Nissan has held driving trials together with corporations and local governments to conduct tests and

surveys. Following the MLIT’s January 2013 announcement of an authorization system for use of ultracompact vehicles on public roads, Nissan is currently testing vehicles in 22 areas. To date, the vehicles have mainly been used for tourist purposes as part of regional revitalization, but they are now being applied to a broader range of purposes in different locations. For example, in Tokyo’s Koto Ward, the municipal office is using them as official cars, while an electrical construction company with its head office in the ward’s Toyosu district uses them to transport people between business locations. In Okinawa Prefecture, meanwhile, a bank uses them as commercial vehicles. From October 2013 to September 2015, Nissan conducted “Choimobi Yokohama,” Japan’s first public test of a one-way car-sharing service, using the Nissan New Mobility Concept in Yokohama, Kanagawa Prefecture. Building on the insight gained from this test, the company launched a new “Choimobi Yokohama” initiative in March 2017. By providing the service for tourists visiting local destinations or area businesses making use of it in their daily activities, Nissan aims to establish this as a sustainable business model built around ultracompact mobility solutions.

Nissan fully leverages the knowledge and information acquired from all its nationwide projects, offering advice on new uses for EVs and ways to improve traffic flow and implementing smart mobility for the next generation.



The “Choimobi Yokohama” service using the Nissan New Mobility Concept.

Joint Venture to Promote Second-Life Use for Batteries

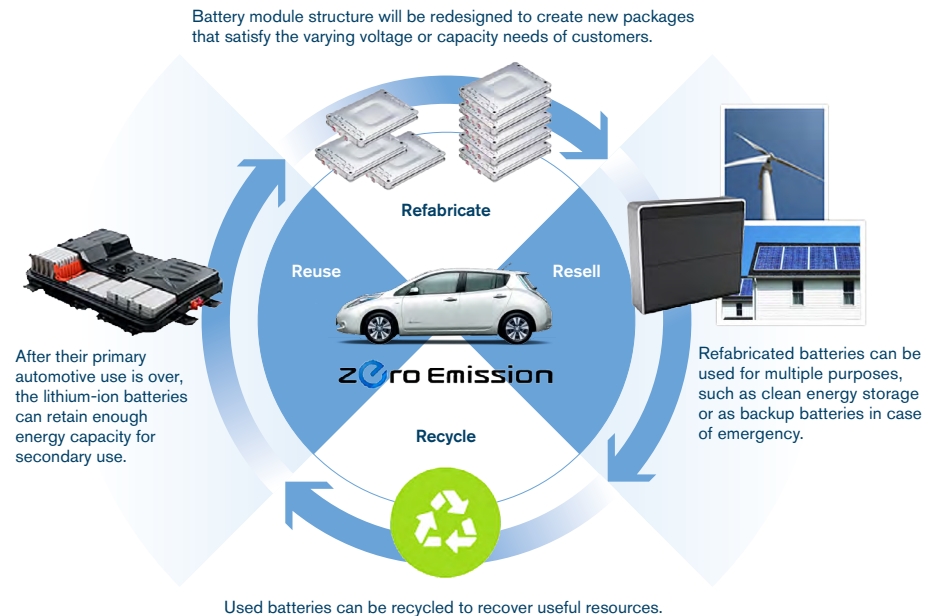
Lithium-ion batteries used in Nissan's EVs retain capacity well beyond the useful life of the vehicles themselves. The "4R" business model—which reuses, resells, refabricates and recycles lithium-ion batteries—allows their effective use for energy storage solutions in a range of applications, thus creating a much more efficient energy cycle of battery use.

As the EV market expands, Nissan sees a need to utilize reusable lithium-ion batteries more effectively. In 2010, it launched 4R Energy Corp., a joint venture with Sumitomo Corp. This company is developing and testing to use EV batteries as part of a stationary energy storage system. Japan is expected to see rising demand for such systems as part of energy storage and backup power systems that also feature solar panels on homes or business structures, and 4R Energy has already started sales of them for houses and apartment buildings.

4R Energy is actively developing a range of storage systems built with used Nissan LEAF lithium-ion batteries. In addition to conducting an ongoing experiment with a large-capacity storage system in Osaka's Konohana Ward since 2014, it expanded its activities in November 2015 by launching a power system stabilizer test in Satsumasendai, Kagoshima Prefecture. It has also started testing a small-capacity storage system at a commercial facility in Okinawa Prefecture, refining its performance assessment for used module units and selection standard technologies. In July 2015, the Nissan Advanced Technology Center adopted an energy management system built from 24 used Nissan LEAF batteries.

In addition to in Japan, Nissan is extensively involved with 4R activities in the United States.

4R Concept



Used EV Battery Sales for Households Launched in Europe

Nissan has launched “second life” initiatives to extend use of its EV lithium-ion batteries. In Europe, it has joined with multinational power management company Eaton Corp. to launch sales of xStorage Home, a residential home energy system. Because the system is built around used EV batteries, it can be offered at a lower price. However, customers can also opt to purchase an xStorage Home unit that uses new Nissan EV batteries. xStorage Home allows owners to store energy purchased from the power grid during the cheapest hours of the day, as well as solar power generated during the daytime. This can then be used in the home during peak times when energy prices increase. The xStorage Home unit also has the capability to provide energy back to the grid in countries where the conditions enable customers to do so. This provides another potential revenue stream as customers will be able to sell stored energy back to the grid when demand and costs are high. The systems, available in six configurations, are designed to meet diverse customer needs, with features including simple remote operation and monitoring via a dedicated smartphone app.

A business version—xStorage Building—makes it possible for corporations with high energy consumption to manage their usage and supply power for their own activities more sustainably and intelligently. In November 2016, Nissan and Eaton signed a 10-year contract with Amsterdam ArenA to provide used Nissan LEAF batteries for backup power uses. The globally renowned entertainment venue is the home stadium of soccer team Ajax Amsterdam and has hosted many famous concerts and sporting events over the years. With the introduction of xStorage Building, there will be no more concerns about power cuts at the 55,000-capacity facility.

PROMOTING ELECTRIFICATION

Borrowing from technology for the main parts of its EVs, Nissan is promoting electrification technologies that can be applied to infrastructure in a variety of markets.

100% Electric-Motor-Powered Drivetrain e-POWER Incorporated in Note

In November 2016, Nissan launched the new compact Note e-POWER including an innovative new drive system. This system, called e-POWER, is a 100% electric powertrain making use of EV technology in the Nissan LEAF. A gasoline engine is used to charge the batteries, which provide power to the electric motors that drive the wheels of the Note e-POWER. Thanks to this full-electric motor drive system, drivers can enjoy the powerful, responsive acceleration and excellent quietness in various settings and driving environments.

As with other gasoline-powered and hybrid cars, the Note e-POWER uses gasoline as its power source, removing the need to charge the battery. Driven completely by electric motors, it offers driving pleasure equivalent to that of an EV, making it a vehicle with an all-new electric powertrain completely different from the hybrid systems commonly included in compact cars to date.

As the gasoline engine does not directly drive the wheels, it can be run at its optimal speed at all times to generate electricity. In city driving, where this vehicle is expected to see frequent use, the Note e-POWER achieves top-class fuel efficiency compared with standard hybrid vehicle types.

New e-Bio Fuel-Cell Technology Announcement

In June 2016, Nissan announced that it is currently researching and developing an e-Bio Fuel-Cell system that runs on bio-ethanol electric power. The new system—a world first for automotive use—features a solid oxide fuel-cell (SOFC) power generator. SOFC technology can utilize the reaction of multiple fuels, including ethanol and natural gas, with oxygen to produce electricity with high efficiency.

Infrastructure to support e-Bio Fuel-Cell usage is relatively easy to roll out, and vehicles using this technology feature running costs as low as those for EVs, allowing smooth introduction to the market. Because it combines the efficient electricity generation of SOFC with the high energy density of liquid fuels, it can enable driving ranges on a par with gasoline-

As of time of sale, as measured by Japanese fuel-efficiency standards: Note e-POWER S, 37.2 km/L.

powered vehicles. Commercial users that require higher uptime for their vehicles should increasingly be able to take advantage of this solution thanks to the short refueling times it offers.

Progress in Plug-in Hybrid Vehicles

Plug-in hybrid electric vehicles (PHEVs) are hybrid cars that can be charged from an external source in addition to relying on electricity generated by their engines. Nissan is developing PHEVs using Alliance technologies with a view to launching them in the future.

FUEL-EFFICIENT VEHICLE EXPANSION

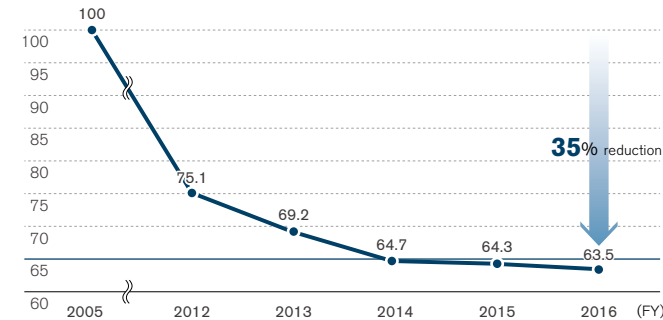
Demand for motor vehicles is expected to continue to rise. Mature markets are recovering from the global recession and emerging markets continue to expand. Nissan is pursuing the greatest possible improvements to the fuel efficiency of internal combustion engines and introducing more fuel-efficient vehicles to the market.

Improved Corporate Average Fuel Efficiency

Nissan strives to develop technologies to maximize the overall energy efficiency of internal combustion engines and improve transmission performance. It is also working to boost the efficiency of hybrid systems that gather and reuse kinetic energy captured from braking. Nissan's core technologies in this area are lithium-ion batteries, Intelligent Dual Clutch Control and Xtronic transmission (Continuously Variable Transmission: CVT) systems. Considering space within the vehicle, usage, price and other factors, the company selects the optimum fuel-efficiency technologies for particular vehicles and launches them in the market. The aim is to reduce fuel consumption and CO₂ emissions without sacrificing the pleasure and ease of driving.

Nissan targeted a 35% improvement in corporate average fuel efficiency by fiscal 2016 from the fiscal 2005 level (as measured in average fuel efficiency in the Japanese, U.S., European and Chinese markets). In fiscal 2014, the target was achieved ahead of schedule.

Corporate Average Fuel-Efficiency Improvement



Top-Level Efficiency Due to Improved Engines and CVT

Current internal combustion engine vehicles lose approximately 70% of their fuel's energy as waste heat. Nissan aims to minimize energy loss and increase fuel efficiency by improving combustion efficiency, as well as reducing intake and exhaust resistance and friction.

Nissan is expanding its range of fuel-efficient engines. The Qashqai's new 1.2-liter direct-injection turbo engine has boosted fuel efficiency by up to 11%. Technologies in the Juke's 1.6-liter direct-injection turbo engine have increased fuel efficiency by up to 10%. These include a low-pressure cooled exhaust gas recirculation system and mirror bore coating, formed by using high voltage to liquefy low-carbon steel and spray it onto the treated surfaces. The new-generation Serena's new 2.0-liter direct-injection engine features an optimized combustion chamber and reduced friction, while the Maxima's new 3.5-liter V6 engine, with around 60% of its components redesigned, has boosted fuel efficiency by up to 15%. The Infiniti Q60 has added efficiency without compromising power performance through its 3.0-liter V6 direct-injection turbo engine, which combines high output with fuel economy.

Nissan's Xtronic transmission (CVT) provides "stepless" gear shifting, enabling the optimal RPM level for the vehicle at any speed. This allows for a balance of smooth, powerful driving and fuel efficiency when accelerating. Nissan employs Xtronic transmission in a wide range of vehicles, from "kei" minicars to midsize cars in the 3.5-liter class. The new-generation midsize Xtronic transmission (for use in cars with 2.0- to

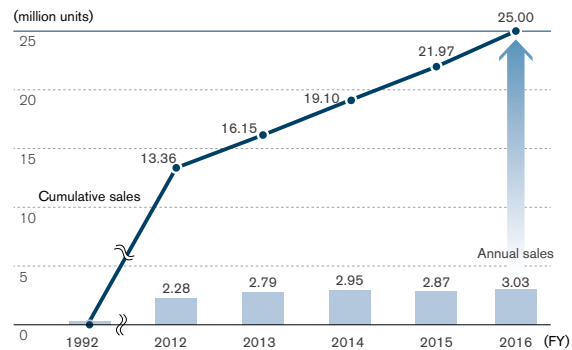
3.5-liter engines) has been installed in products worldwide since 2012. This system's maximum ratio coverage of 7.0, and friction reduction of around 40%, improve fuel efficiency by up to 10% (in-house measurement using U.S. standards). The new-generation small Xtronic transmission (for use in "kei" minicars and cars with engine capacities of up to 1.8 liters) has a maximum ratio coverage of 8.7 and reduces friction, improving both fuel efficiency and drivability.

In fiscal 2016, these technologies helped to give the Maxima and Tiida class-leading fuel efficiency at their respective launches in the Chinese market.

Nissan's goal was to ship 20 million Xtronic-equipped vehicles, with their fuel-efficiency benefits, by fiscal 2016 from their first launch in fiscal 1992, thereby helping to reduce global CO₂ emissions. Nissan sold 3.03 million Xtronic vehicles in fiscal 2016, bringing the cumulative total to 25.00 million, having already achieved our target of 20 million one year ahead of schedule.

As of time of sale, as measured by Chinese fuel-efficiency standards: Maxima, 7.8 L/100 km; Tiida, 5.3 L/100 km.

Number of Xtronic-Equipped Units Sold



A Broader Lineup of Hybrid Vehicles

Hybrid vehicles, which run on a combination of a gasoline-powered engine and an electric motor, offer improvement of fuel efficiency and considerable reductions in CO₂ emissions. Nissan has developed a unique hybrid system using a high-output lithium-ion battery together with a single motor for both drive and regeneration, as well as an Intelligent Dual Clutch Control system in which two clutches are linked in parallel, one to the motor and one directly to the engine and transmission. Vehicles using the system deliver both fuel efficiency and powerful responsiveness. Nissan introduced the system into rear-wheel-drive vehicles in 2010 and front-wheel-drive vehicles in 2013; as of the end of March 2017, it had been expanded to a total of 10 models.

The X-Trail Hybrid, launched in 2015, achieves high fuel efficiency through expanded EV driving range and optimization of system operation modes.

As of time of sale, as measured by Japanese fuel-efficiency standards: X-Trail, 20.6 km/L.

Development of the VC-Turbo

In August 2016, Nissan announced that it had completed development of the VC-Turbo, the world's first production-ready variable compression ratio engine, to be made available in Infiniti-branded luxury models. The engine swiftly selects the optimum compression ratio between 8:1 (for high performance) and 14:1 (for high efficiency), based on the driving conditions and driver input. The VC-Turbo is lighter and more compact than comparable non-turbocharged engines, while also delivering multiple benefits to customers including reduced fuel consumption and emissions, lower noise levels and reduced vibration.

Toward Lighter Vehicles

Vehicle weight reduction makes important contributions to improve fuel efficiency. Nissan is promoting vehicle weight reduction by optimizing vehicle body structure, developing better forming and joining techniques and substituting materials. For example, the company has made exterior components lighter. By using foamed resin on the body side molding of the Serena, launched in Japan in 2016, it has achieved a weight reduction of 2 kg while maintaining a smooth surface.

In the field of material substitution, Nissan has put its own 1.2 gigapascal (GPa) Ultra High Tensile Strength Steel with High Formability, the world's first such material to combine these levels of tensile strength and workability, to use in the Infiniti Q50 (marketed in Japan as the

Skyline) and the Murano in North America and, in 2016, in the Infiniti Q60. Ultra High Tensile Strength Steel reduces the amount of material used while allowing production on the same lines, making it possible to create lighter cars with thinner components while reducing total costs. The company plans to expand the usage rate of these materials to 25% of all production for new vehicles marketed from 2017 onward.

Reducing Congestion and Enhancing Environmental Performance with ITS

An automobile's fuel efficiency depends not just on the car's own capabilities but also on the driving environment and the way it is driven. Nissan is using Intelligent Transport Systems (ITS) and actively working to create infrastructure that will help to improve the traffic environment.

Under commission from Japan's New Energy and Industrial Technology Development Organization (NEDO), Nissan worked with the Beijing Municipal Commission of Transport beginning in 2010. In the Chinese capital, the company conducted tests of a dynamic route guidance system (DRGS) using IT terminals and eco-driving support to alleviate traffic congestion in the city.

In one experiment, around 12,000 resident drivers in Beijing's Wangjing district used Portable Navigation Devices with DRGS and eco-driving support. Results from the experiment, which lasted around one year, showed that DRGS cut travel time by 5.1% and increased fuel economy by 7.6%. Enabling drivers to avoid congested roads led to the dispersion of traffic flow, enhancing overall speed within the area. Furthermore, by helping users cultivate better driving habits, eco-driving support increased fuel economy by 6.8%.

A simulation conducted at the same time estimated that if 10% of all traffic in Beijing used DRGS, travel speed throughout the city would increase by approximately 10%, and both fuel consumption and CO₂ emissions would decrease by approximately 10%.

The Beijing Municipal Commission of Transport presented Nissan with an award for its major contributions toward easing congestion, saving energy and improving the environment in Beijing through this successful project. In an official publication, China's Ministry of Commerce also gave the company a Corporate Leadership Award. Nissan is further developing these activities and conducting research projects aimed at raising air quality using ITS and EVs in cooperation with the Chinese government and universities.

The company has learned that eco-driving support services, which encourage gentle braking and acceleration and maintenance of stable speed, lead to safer driving and consequently can reduce traffic congestions caused by traffic accidents while also helping to improve air quality. The study also proved that even in China, which relies heavily on coal power, EVs not only contribute to saving energy but also lead to reductions in PM 2.5 air pollution and CO₂ emissions on a well-to-wheel basis.

The company is working actively to improve urban environments and air quality.



CORPORATE CARBON FOOTPRINT MINIMIZATION

In a world that is often said to be carbon-constrained, reducing CO₂ emissions is a task to be tackled by all companies. Nissan is improving energy efficiency and promoting renewable energy adoption to reduce CO₂ emissions.

A 20% Emission Reduction in Corporate Activities

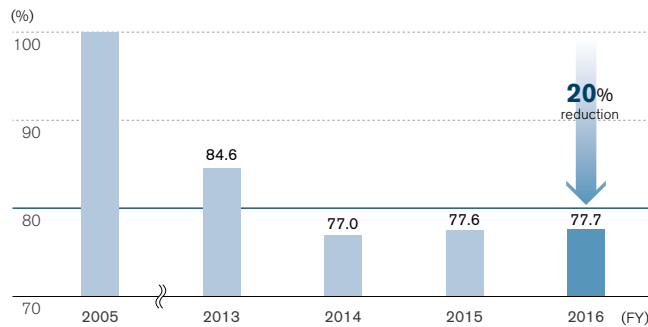
By fiscal 2016, Nissan aimed to reduce CO₂ emissions associated with its corporate activities by 20% globally from fiscal 2005 levels, as measured by the index of CO₂ emissions per vehicle (total emissions generated from Nissan global corporate activities divided by the total Nissan vehicle sales volume). In fiscal 2011, Nissan strengthened its management and

broadened the scope of measurable objectives to include logistics, offices and sales companies in addition to production sites. At the same time, the company expanded its emission-related initiatives, introducing high-efficiency equipment, energy-saving measures and the use of renewable energy. Nissan met its reduction target in fiscal 2014, and the result in fiscal 2016 was a 22.3% reduction from the fiscal 2005 t-CO₂/vehicle level.

To reach its CO₂ emission goals, Nissan set a target of raising the usage rate of renewable energy in its global business activities to 9% by fiscal 2016. In fact, it raised the rate to 9.2% by fiscal 2016. Nissan is taking three approaches to increasing the adoption of renewable energy, considering conditions where its production sites are located. These are power generation in company facilities, sourcing of energy with a higher proportion of renewables and leases of land, facilities and other Nissan assets to power producers. ▣

▣ Nissan leased approximately 350,000 square meters of unused land in Oita Prefecture for solar power generation in May 2013, and the roof of group company Nissan Kohki's Samukawa Plant for the same purpose in January 2014.

Falling Global Emissions from Corporate Activities



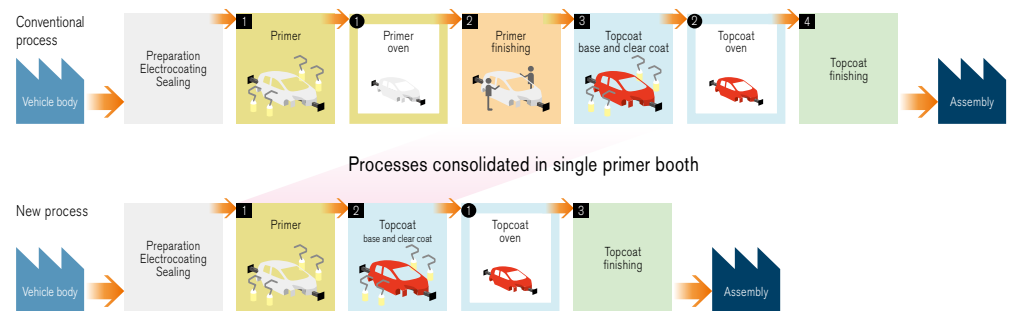
Energy Saving in Global Production

Most CO₂ emissions in the manufacturing process come from the consumption of energy generated by fossil fuels. Nissan engages in a variety of energy-saving activities in the manufacturing process in pursuit of the lowest energy consumption and CO₂ emissions of any automobile manufacturer.

In production technology, the company is introducing highly efficient equipment, improving manufacturing techniques and adopting energy-saving lighting. Another key approach is Nissan's three-wet paint process. Approximately 30% of all CO₂ emissions from plants come from the painting process. Shortening or eliminating baking stages within this process brings about a reduction in emissions.

The three-wet paint process adopted by Nissan removes the need to bake in between the primer layers and the topcoat layers. Instead, layers are applied successively before baking, achieving a reduction in CO₂ emissions of more than 30%, according to Nissan calculations. In 2013, the company introduced this process in Nissan Motor Kyushu (NMK), the Smyrna Plant in the United States, the second Aguascalientes Plant in Mexico (started operations November 2013) and the Resende Plant in Brazil (started operations February 2014). At NMK, the company was able to adopt the three-wet process with no shutdown of production lines and successfully shorten total production time.

Three-Wet Paint Process (Combined Primer and Topcoat Application)



•Oven process

Reduces CO₂ emissions by applying primer and topcoat (base coat and clear coat) layers in succession, combining two processes (① and ② in the upper diagram) into one (① in the lower diagram).

To reach the defined objectives for CO₂ emissions and the use of energy, Nissan solicits the necessary facility proposals from each global site, preferentially allocating investment based on the benefit in CO₂ reduction compared to project costs. By making value of carbon one key factor in internal evaluations, Nissan enables more efficient investment and greater competitiveness.

Nissan plants use finely controlled lighting and air conditioning for low-energy-use, low-energy-loss operations. The company is promoting CO₂ emission reduction activities and introducing cutting-edge energy-conservation technology from Japan in its plants worldwide. Meanwhile, Nissan plants in all countries learn and share best practices with each other.

In addition, Nissan Energy Saving Collaboration (NESCO) diagnoses energy loss at the plants and proposes new energy-saving countermeasures. These proposals could amount to a potential reduction in CO₂ emissions of some 72,000 tons in fiscal 2016, according to Nissan calculations. A NESCO team was established for Japan in 2003, and teams for Europe, Mexico and China in 2013. As a result of these activities, Nissan finished second in the manufacturing sector in the 20th Nikkei Environmental Management Survey. A NESCO team has also been launched to support energy-saving efforts at Alliance partner Renault.

With the recently updated cogeneration systems in its Yokohama Plant, Nissan works together to supply the nearby J-Oil Mills Inc. facility with steam flowing through pipes laid under public roads, thereby maximizing cogeneration efficiency. Using this method, in fiscal 2016 the company reduced CO₂ emissions by 7,259 tons per year. As a result of these activities, Nissan won a prize for excellence in the industrial division of the 2016 Cogeneration Awards presented by the Advanced Cogeneration and Energy Utilization Center Japan, as well as the 2017 Energy Conservation Center, Japan, Chairman's Award presented by the Energy Conservation Center, Japan.

In December 2014, the company began a "partial procurement scheme," sourcing the energy used at its plants and other major business locations through both major electric utilities and Japan's Power Producers

& Suppliers (PPS) system, which involves specified electricity market entrants. Previously each business location selected one major utility company or PPS provider to cover its electricity needs, an approach that allowed selection of a provider with a lower-carbon-generation footprint. Facilities like factories, with their high electrical demand, generally had to procure electricity from a utility company with proven capacity.

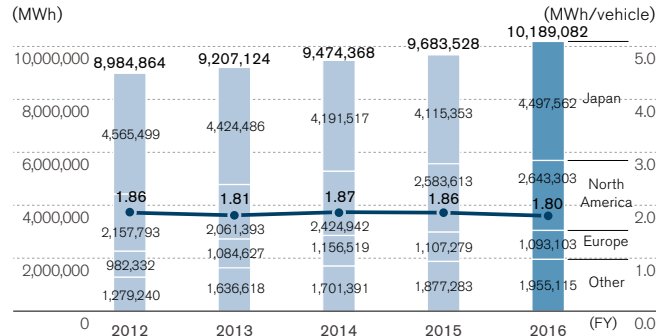
The new partial procurement scheme allows all facilities to secure the stable power supply they need while also reducing related CO₂ emissions and costs at the same time. To date the scheme has been implemented at Nissan facilities in Japan, including Global Headquarters, the Sagami-hara Parts Center and Honmoku Wharf, and at partner company locations.

Renewable energy in the form of 10 wind turbines supplies 6,500 kW of power at the Sunderland Plant in the United Kingdom. In 2016, it installed a 4.75 MWh solar farm; together these renewable sources account for 8% of the power used at the plant. Solar panels also produce approximately 200 kW at Nissan's plant in Spain. The first Aguascalientes Plant in Mexico uses energy generated from biomass gas and wind power, and has achieved a renewable energy usage rate of 50% since 2013. In addition, Nissan's Zama Operation Center in Japan is developing small-scale hydropower generators, capable of creating around 0.5 kW of power from a drop of 2.5 meters from drainage pipes, and testing their usage in production plants.

In Japan, Nissan is using tradable green certificates to increase the proportion of renewable energy in the power procured by the company. In fiscal 2016, it procured 39,700 MWh of electricity generated from renewable sources.

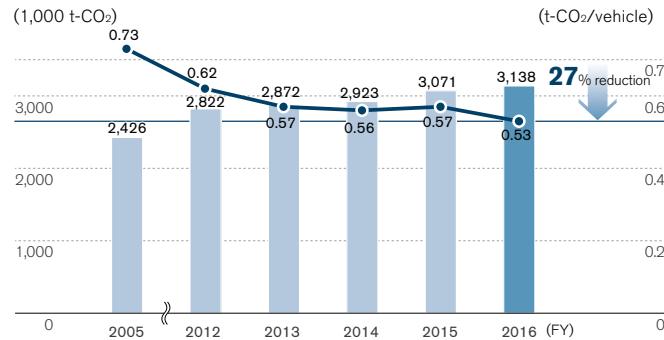
With these activities, Nissan set a target of reducing CO₂ emissions by 27% from the fiscal 2005 level by fiscal 2016 at all of its production sites, as measured by the index of CO₂ emissions per vehicle (total emissions generated from global Nissan vehicle manufacturing sites divided by the total Nissan vehicle production volume). In fiscal 2016, CO₂ emissions per global vehicle were approximately 0.53 tons, a reduction of 27.0% from the fiscal 2005 level.

Global Energy Consumption (MWh)



* Figures are for the Nissan Group worldwide, including consolidated companies.

Global CO₂ Emissions from Manufacturing Activities (1,000 t-CO₂)



* Figures are for the Nissan Group worldwide, including consolidated companies.

More Efficient Logistics and Modal Shifts

In 2000, Nissan began sending chartered trucks for pickup and delivery of parts, an uncommon method among automobile manufacturers in Japan at the time. This approach—adopted widely across the company, including at its overseas manufacturing sites—has increased global operational efficiency. Nissan works together with suppliers to optimize the frequency of deliveries and transport routes and to improve packaging specifications for better loading ratios so fewer trucks are required. The company is also actively expanding its modal shift from the use of trucks to rail for transport. Through a 2014 expansion of this approach to include cooperative transport of production parts with other OEMs, in addition to complete vehicles and service parts, the company is aiming for further efficiency in this area. The company also reduces transportation distance by sourcing necessary production components for plants from surrounding areas as much as possible.

Nissan engineers devise efficient packaging for the huge number of parts of different shapes and materials that go into automobiles. Through simultaneous-engineering logistics activities, Nissan works from the design stage to create parts and develop new vehicles with consideration for transportation efficiency, as well as to reduce the part shipments per vehicle. The aim is to decrease transport volumes.

In container transport, Nissan has long made use of 40-foot “high cube” containers and runs software-based simulations to reduce wasted container space. As a result of these activities, the container filling rate for parts rose from 89.6% in 2010 to 94.6% in 2016.

The company constantly reviews transport methods and is currently undertaking a modal shift to rail and maritime transport. Some 70% of completed vehicles in Japan are now transported by sea. Part shipments from the Kanto area around Tokyo to Nissan Motor Kyushu are nearly all conducted by rail and ship. The Japanese Ministry of Land, Infrastructure, Transport and Tourism (MLIT) has recognized Nissan as an outstanding enterprise for this modal shift to sea transport.

At Nissan sites outside Japan, transport methods are selected to best match the local geographical conditions. Transport of completed vehicles is increasingly shifting from truck to rail and ship, depending on the destination. In China, the company is increasing the proportion of completed vehicles that are transported domestically by ship or rail.

Since 2010, Nissan has also been promoting the use of energy-

▶▶ page_140

Global energy consumption and CO₂ emissions from manufacturing activities have received third-party certification. For details, refer to the environmental data at the end of this report.

» website

❶ Click here for more information on Nissan's energy-efficient car carriers.

❷ Total emissions generated from transportation to Nissan manufacturing sites and retail outlets in Japan, North America, Europe and China divided by the total number of vehicles transported.

❸ Global Headquarters, Sagami-hara Parts Center, Nissan Education Center, Customer Service Center and Honmoku Wharf (all in Kanagawa Prefecture).

❹ NESCO diagnoses energy loss at plants and proposes new measures to save energy.

efficient vessels for sea shipments of its vehicles. By 2016, the fleet had grown to include seven energy-efficient car carriers. ❶

While expanding its global logistics operations, Nissan is increasing efficiency and implementing a modal shift in transportation, targeting a 6% reduction in CO₂ emissions by fiscal 2016 from the fiscal 2005 level, as measured by the index of CO₂ emissions per vehicle. ❷ In fiscal 2016, CO₂ emissions per global vehicle were approximately 0.39 tons, exceeding the company's target with a decrease of 8.6%.

Our Efforts at Dealerships and Offices

Nissan is promoting CO₂ emission management at all business locations and dealerships in Japan, as well as at bases of operations in North America, Europe and China. It aims to reduce total emissions per floor area by 1% each year.

At business locations in Japan, Nissan is expanding ecological initiatives including digitization of pay slips. Nissan's retail outlets are also continually working to increase energy efficiency: many have adopted high-efficiency air conditioning, insulation films, ceiling fans and LED lighting. During renovation work, some outlets have installed lighting systems that make use of natural daylight and insulated roofs. In addition, through Nissan Trading, the company operates the Nissan Power Producers and Suppliers (PPS) scheme, sourcing clean energy for which CO₂ emissions and costs have been taken into account through Japan's PPS system. In 2016, approximately 26,113 MWh of clean energy was supplied to five Japanese business locations, ❸ including the company's Global Headquarters in Yokohama. Nissan is also broadening supply to dealerships from Nissan Trading and other PPS systems. These systems supply around 1,067 retail outlets in the Kanto, Chubu, Tohoku, Kansai and Kyushu areas with around 145,134 MWh of energy, equivalent to an annual reduction of some 11,057 tons in CO₂ emissions. Nissan Energy Saving Collaboration (NESCO) teams ❹ have also expanded the scope of their activities beyond production plants to contribute to reducing emissions in the Nissan Technical Center in Atsugi.

The company's efforts go beyond CO₂ management. Nissan is pursuing other environmentally friendly policies, such as improving its video and telephone conference facilities and using Microsoft's Office Live Meeting web conferencing service to bring participants in multiple locations together when they need to share documents. This reduces the number of business trips needed worldwide, improves workplace efficiency and reduces costs.



Solar panels on the roofs of some Kanagawa Nissan dealerships. Power from the panels is supplied to dealerships through the Nissan PPS system.

NATURAL RESOURCE USE MINIMIZATION

Nissan is making efforts to use resources more efficiently and to diversify its supplies with renewable resources and recycled materials. The company aims to address the risk of rising costs or depletion of mineral resources caused by growing demand for them and to reduce the environmental impact of their extraction.

Increasing Usage of Recycled Material to 25%

Economic development in emerging countries is rapidly increasing demand for mineral and fossil resources. Some forecast that all currently known mineral resources will have been extracted by 2050 if present trends continue. Some mining sites currently in operation and new exploration sites are located in areas where local ecosystems need to be preserved, and there is concern about the environmental effects of topsoil excavation, deforestation and wastewater.

To address these issues, Nissan is taking measures to minimize the volume of newly extracted natural resources. In addition to using resources more efficiently, the company is increasing the proportion of renewable resources and recycled materials and increasing diversification. The company's recycling efforts are based on the policy that once a natural resource is extracted, it should continue to be used, while maintaining quality, to minimize environmental impact. Nissan achieved a 25% increase

in the recycled material usage ratio per new vehicle for which production began in fiscal 2016 in Japan, the United States and Europe. In the long term, through promotion of activities, the company aims to maintain the total volume of new natural resource usage at the 2010 level.

Nissan's Closed-Loop Recycling System

Closed-loop recycling is a way of recycling waste generated during vehicle production and scrap from end-of-life parts into recycled material that has equal quality as new resources, using it as material in the same type of products. With this method, the same material can be used repeatedly, thus greatly reducing CO₂ emissions and the environmental impact over the product lifecycle. The company is focusing its efforts on closed-loop recycling of steel, aluminum and plastic. These materials, which account for a large proportion of vehicle content, have a major environmental impact when they are extracted and require a large amount of energy for production and disposal.

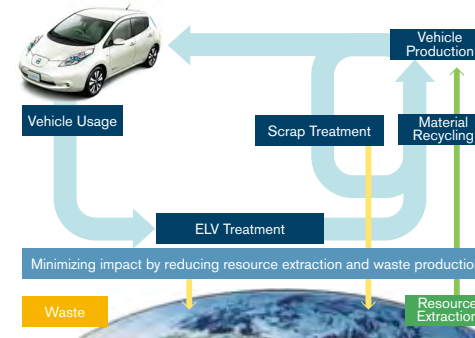
Nissan is working to reduce the steel and aluminum scrap left over in the manufacturing process. The company is also working globally with business partners to collect and reuse this scrap as material for new vehicles. To further reduce natural resource usage, it uses electric-furnace sheet steel made from steel scraps in the Rogue, the Murano and other vehicles produced in North America. End-of-life aluminum wheel rims are also collected for recycling in the form of new wheels or chassis components. In fiscal 2016, Nissan collected about 3,300 tons of wheel rims.

In Japan, Nissan is collecting plastic in the form of finished bumper scrap generated at its plants and turning it into recycled plastics in a finished bumper reprocessing line set up in the Oppama Plant. Recycled plastics have already been given new life as bumpers in the Nissan LEAF and many other new vehicles. This initiative has been expanded to Nissan's joint venture in China, Dongfeng Motor Co., and in 2014 to production of replacement bumpers.

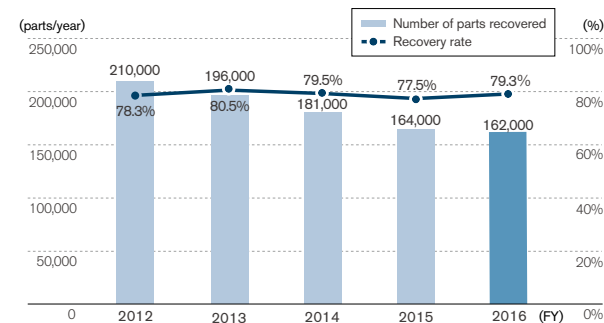
Exchanged bumpers collected from dealerships are being recycled as materials used under covers and for other components. An enhanced bumper return program allowed Nissan to collect and recycle about 162,000 pieces of bumpers in fiscal 2016, representing 79.3% of bumpers removed at Japanese dealerships.

Nissan's copper usage has also been rising due to the recent increased sales of hybrid vehicles and EVs. The company has begun using scrap left over from manufacturing as an additive during foundry processing.

Closed-Loop Recycling



Recovered Bumpers



Recyclability Rate and Recovery Rate

Nissan considers the three Rs—reduce, reuse and recycle—starting with the design stage for new vehicles. It takes into account the whole lifecycle when designing and developing vehicles, ensuring the ease of dismantling and recycling after they are scrapped. Since fiscal 2005, all new models launched in the Japanese and European markets have achieved a 95% or greater recyclability rate. ▶

▶ Calculated based on 1998 Japan Automobile Manufacturers Association definition and calculation guidelines (in Japan) and ISO 22628 (in Europe).

Nissan also carries out experimental studies to optimize processing and improve the recovery rate for end-of-life vehicles (ELVs). The studies first aimed to establish methods for processing waste oil, waste liquids, lead and other substances that impact the environment and now focus on reuse of valuable materials. Feedback from the studies has led to improvements in dismantling techniques and has aided the company's product design division in choosing suitable materials and designing vehicles that are easier to dismantle. Nissan calculates that the recovery rate for its ELVs in Japan has consistently been 95% or greater since fiscal 2006; the recovery rate for fiscal 2016 was 99.7%.

Reducing Scarce Resource Usage

Hybrid vehicles and electric vehicles (EVs) emit less CO₂ over the lifecycle of the product than gasoline-powered vehicles, but scarce resources called rare earths are a necessary component of their motors. Uneven distribution of rare earth elements and the forces of demand and supply give rise to concern about price changes, making it important to reduce their usage.

In 2012, Nissan developed a new electric motor that requires 40% less dysprosium (Dy) compared to conventional EV motors. This motor is currently used in the Nissan LEAF, and Nissan is successively installing it in its hybrid vehicles. The 2016 Note e-POWER achieves a 70% reduction in Dy in its motor magnets. The company is conducting technical research on further reductions and has the ultimate goal of achieving zero usage of Dy in other components as well.

Nissan aims to reduce and optimize the usage of the other rare earth elements neodymium (Nd), cerium (Ce) and lanthanum (La). As of fiscal 2016, the company had reduced annual use of the four rare earth elements Dy, Nd, Ce and La by more than 30% when compared to the fiscal 2011 levels.

Thorough Measures for Waste Materials

Nissan actively promotes measures based on the 3R approach in its production processes whenever possible, striving to minimize the waste generated and maximize recycling efficiency by thoroughly sorting waste. These efforts have paid off. Since fiscal 2010 the company in Japan has achieved a 100% recovery rate at all of its production sites, including five manufacturing plants, two operations centers and five affiliates. In Mexico, the first Aguascalientes Plant achieved this in 2011. Nissan is working to bring this rate to an industry-leading level in each global region.

Nissan has been making great efforts to reduce the number of wooden pallets and cardboard boxes used in import and export parts shipping. The company began replacing them with units made from steel more than 30 years ago, rolling out plastic substitutes more than 20 years ago. These are foldable and can be returned for reuse. Nissan has also been working with its Alliance partner Renault to expand use of globally standardized, returnable containers. Through design activities carried out concurrently with logistics operations, Nissan has recently considered ways to optimize the shape of parts from the development stage, thus helping to reduce the packaging materials required.

Through these efforts, Nissan plans to reduce the amount of waste from its production factories by 2% annually in Japan and by 1% annually worldwide compared to waste levels expected if no special steps had been taken from fiscal 2011 onward. ▶

Sales of Nissan Green Parts

Parts with the potential for recycling include those reclaimed from end-of-life vehicles, as well as those replaced during repairs. In Japan, Nissan collects and thoroughly checks the quality of these secondhand parts. Those that receive a passing grade are sold through its retail outlets as Nissan Green Parts. Nissan sells these parts in two categories: reusable parts, which are cleaned and tested for quality before sale, and rebuilt parts, which are disassembled and have components replaced as needed.

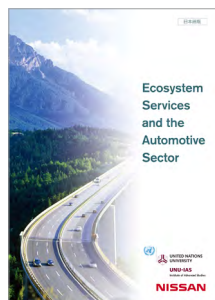
▶▶ [page_123](#)

▶ For details, refer to the environmental data at the end of this report.

PROTECTING THE AIR, WATER, SOIL AND BIODIVERSITY

The United Nations Millennium Ecosystem Assessment report issued in 2005 concluded that ecosystem services evaluated had degraded over the past 50 years. Many scientists believe that humans have changed the Earth's ecosystems more rapidly and extensively than in any comparable period in history. Humankind depends on a number of ecosystem services, including provision of food and fresh water, climate regulation and protection from natural disasters. The automotive industry must recognize both its impact on ecosystems and its dependence on these services. Companies today face the pressing need to balance environmental preservation and economic progress as they pursue their business activities.

Using methods identified in the Corporate Ecosystem Services Review, Nissan has evaluated its value chain from the extraction of material resources to vehicle production and operation. Based on the results, the company has identified its three priority areas as an automobile manufacturer: energy sourcing, mineral material sourcing and water usage. Nissan has followed up by positioning the business risks and opportunities and re-evaluating and further developing its traditional environmental initiatives. In 2010, Nissan published "Ecosystem Services and the Automotive Sector," a report collating the outcome of this work. Company calculations in June 2013 showed that more than 20 times as much water was used upstream in the supply chain than by Nissan itself.



*1 Developed by the World Resources Institute in cooperation with the World Business Council for Sustainable Development and Meridian Institute, based on the U.N. Millennium Ecosystem Assessment.

▶ website
*2 Click here for more information on "Ecosystem Services and the Automotive Sector."

Cleaner Exhaust Emissions

Nissan proactively sets strict environmental goals and targets as it pursues development of cleaner combustion technologies, catalysts for purifying emissions and other solutions. The ultimate goal is for automotive emissions to be as clean as the atmosphere. The company introduces vehicles that meet emission regulations in each country in a timely manner. Nissan aims to reduce the environmental impact of society as a whole by offering vehicles with highly efficient, cutting-edge emission-reduction technologies at reasonable prices. *1

Nissan's Sentra CA, released in the United States in January 2000, *2 was the first gasoline-powered vehicle in the world to receive Partial Zero Emissions Vehicle (PZEV) certification, *3 in compliance with the emission requirements of the California Air Resources Board.

The Bluebird Sylphy, released in Japan in August 2000, became the first vehicle to gain certification from the Ministry of Transport (now the Ministry of Land, Infrastructure, Transport and Tourism) as an Ultra-Low Emission Vehicle (U-LEV). *4 In addition, this model became Japan's first vehicle to receive Super Ultra-Low Emission Vehicle (SU-LEV) certification *5 in 2003.

Later, the X-Trail 20GT was the first vehicle in the world to meet Japan's 2009 Emission Regulations, among the most stringent in the world; it was launched in 2008, the year before the regulations came into effect. *6 The X-Trail 20GT carries a diesel filter that traps and eliminates particulate matter, NOx absorption and oxidation catalysts and an M9R clean diesel engine developed through the Renault-Nissan Alliance. The company has thus overcome the difficult challenges of making diesel vehicle exhaust cleaner, achieving both energy efficiency and reduced CO₂ emissions. An X-Trail 20GT with a 6-speed automatic transmission (including manual mode) was introduced in 2010.

Additionally, Nissan is working to improve air quality through the use of Intelligent Transport Systems (ITS) that tackle traffic congestion and other urban environmental issues. *7

▶ page_36
*7 Click here for more information on Nissan's ITS initiatives.

*6 The 2009 emission standards stipulate reductions of NOx by 47% and particulate matter by 64% from the levels required by the 2005 emission standards (applicable to vehicles weighing more than 1,265 kg). The regulations went into effect for new models in October 2009 and have been applied to existing models and imported cars since September 2010.

▶ page_140
*1 Click here for more information on how Nissan is meeting emission regulations in different countries. For more details, see the CSR data section in this report.

*2 This vehicle is no longer produced.

*3 PZEV vehicles must meet requirements in the areas of Super Ultra-Low Emission Vehicle tailpipe emission level and zero-evaporative emissions, be equipped with an onboard diagnostic system and have an extended warranty of 150,000 miles or 15 years.

*4 U-LEV: Ultra-Low Emission Vehicles produce 75% less nitrogen oxide (NOx) and nonmethane hydrocarbon (NMHC) than the 2000 emission standards level.

*5 SU-LEV: Super Ultra-Low Emission Vehicles produce 75% less emissions than the 2005 emission standards level.

Plant Emission Management

Nissan thoroughly implements systems and control standards at its production plants to reduce the amount of air pollutants emitted during operations. The company's own air pollution control targets are more stringent than those mandated by the countries in which it operates.

In Japan, Nissan has taken strict measures for emissions of NOx and SOx pollutants from its factories, reducing the amount of these emissions to one quarter of the levels emitted in the 1970s. Nissan has lowered NOx and SOx emissions by introducing low-NOx burners in the ovens and boilers that provide heat for painting lines and by switching from heavy oil and kerosene to fuels with low SOx emissions for these ovens and boilers.

A current challenge is the reduction of volatile organic compounds (VOCs), which readily evaporate and become gaseous in the atmosphere. These compounds account for approximately 90% of the chemicals released in Nissan's vehicle production processes. The company is working to increase the recovery of cleaning solvents and other chemicals and to reduce the amounts of these substances emitted from its plants ahead of implementation of new regulations in each country where it operates.

Nissan is also introducing water-based paint lines that limit VOC emissions to less than 20 grams per square meter of painted surface. The company has adopted these lines in the Nissan Motor Kyushu Plant as well as at two plants in Aguascalientes in Mexico, the Resende Plant in Brazil, the Smyrna Plant in the United States and the Huadu Plant in China. Nissan set a target for fiscal 2016 of a 15% reduction in VOC emissions by painted surface area from fiscal 2010 levels, successfully achieving a reduction of 25.4% by fiscal 2016.

Nissan's Tough Voluntary Standards

Stricter controls on environment-impacting substances are being implemented in countries around the world. Examples include the European ELV Directive, the European Union's Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Regulation, which went into force in June 2007, and Japan's Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, Etc. To help minimize the potential release of formaldehyde, toluene and other volatile organic compounds (VOCs) in vehicle cabins, the Japan Automobile Manufacturers Association has launched a voluntary program that calls for all new models launched in Japan from April 2007 to meet standards set by the Japanese Ministry of

Health, Labor and Welfare for concentration levels of 13 compounds in vehicle interiors.

Nissan is strengthening its management of environment-impacting substances, adhering to a planned schedule for their reduction and advancing the use of alternative substances. In 2005, the company drew up policies regarding the use of substances scientifically recognized as being hazardous or carrying high hazard risks, as well as those identified by NGOs as dangerous. In 2007, these policies, which restrict environment-impacting substances even more than the domestic laws of the countries where it operates, were rolled out globally.

Based on these policies, the company has developed the Nissan Engineering Standard (NES) for the "Restricted Use of Substances." The standards identify the chemical substances whose use is either prohibited or controlled. Nissan applies them in selecting all materials, components and parts used in its vehicles from initial development onward. For example, four heavy metal compounds (mercury, lead, cadmium and hexavalent chromium) and the polybrominated diphenyl ether (PBDE) flame retardant have been either prohibited or restricted in new type models (excluding OEM vehicles) launched globally since July 2007. To control VOC use in car interiors, Nissan has adopted the voluntary targets of the Japan Automobile Manufacturers Association as its own standards for global operations and is reviewing and reducing their use in materials and adhesives for seats, door trim, floor carpet and other parts.

Every year, Nissan revises the "Restricted Use of Substances" NES to reflect changes in international laws and regulations and to add new substances covered by its voluntary standards. In the 2016 revision, it unified standards with Renault and expanded activities carried out across the Alliance.

Together with suppliers, Nissan builds and maintains communication and management systems internally and within its supply chain. For example, the company discloses information and is registered with and submits REACH reports to the relevant authorities about the vehicles and parts produced in or imported to Europe from Japan and other countries (including some from the United States). The company also complies with Classification, Labeling and Packaging of Substances and Mixtures regulations.

Water-Use Management

As the global population grows, water use increases and water scarcity becomes a more serious problem. Climate change also has the potential to bring about reductions in glacial water resources and changes in precipitation patterns, further driving the need for water usage reduction.

Plants producing Nissan vehicles and parts are located all over the world, and they all use water as part of the production process. The company is making efforts to manage and reduce water usage at all of its production plants. It planned to achieve a 15% reduction from fiscal 2010 levels in water usage per vehicle produced by fiscal 2016, actually reducing water usage by 15.7%. To achieve its goal, Nissan built reservoirs for rainwater at the Chennai Plant in India and the second Aguascalientes Plant in Mexico and installed wastewater recycling equipment at the Chennai Plant, the Huadu Plant in China and the Oppama Plant in Japan. The company is implementing best practices globally to reduce water usage.

Nissan is also working to reduce water usage at its Global Headquarters by processing rainwater and wastewater from kitchens and other sources to use for flushing toilets and watering some plants.

Cleaner Effluent Through Wastewater Treatment

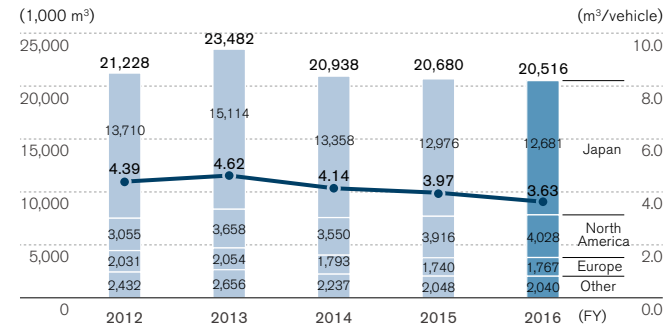
Nissan thoroughly processes wastewater at its various plants. Wastewater from the company's two plants in Aguascalientes, Mexico, is used to maintain greenery on the sites, with no offsite discharge.

Nissan is also strengthening water pollution measures in its Japanese plants. In preparation for unexpected occurrences, such as the discharge of oil, it has attached water quality sensors to the discharge ports of wastewater treatment facilities. Discharge of water outside the grounds is automatically suspended if water quality problems are detected.

▶▶ page_120

▶ For more details, see the CSR data section in this report.

Wastewater Release



SAFETY

Popularization of the automobile has transformed people's lives, offering them mobility, convenience and the pleasure of driving. In recent years, the automotive industry has made significant advances, with autonomous driving technologies and various safety and driver-support solutions showing particular progress. Today, as society undergoes major structural shifts, technological innovation in the automotive sector is counted on to help address a range of issues toward the realization of a society with less urban traffic congestion and more ways for older citizens to move about safely.

Nissan designs and engineers cars that embody the "pleasure and richness of driving," while prioritizing a high level of real-world safety. More than 90% of accidents are the result of human error. The company's goal is zero fatalities: reducing the number of deaths from traffic accidents involving Nissan vehicles to virtually zero. To this end, Nissan continues to work to improve passenger safety in Nissan vehicles, including the development and adoption of automated driver support technologies that can help the driver avoid collisions or mitigate their effects. It also includes a wide range of other activities, including promoting educational activities that raise safety awareness among drivers, pedestrians and others in the community and, beyond that, striving to construct a safer and more pleasant mobility society.

▶ [page_04](#)

▶ [Click here for more information on Nissan's goal of zero fatalities.](#)

NISSAN'S ACTIONS

Number of fatalities from accidents involving Nissan vehicles compared to 1995 level (Japan, 2015):

70%
reduction

SAFETY

SCORECARD

FY2016 TARGET ACHIEVEMENT RATE: ✓✓ ACHIEVED ✓ MOSTLY ACHIEVED ✗ NOT ACHIEVED

Nissan makes year-round use of the CSR scorecard as a fundamental tool to manage, review and validate its progress in each of the sustainability strategies defined for its CSR activities. The table below shows some of the values behind Nissan's ongoing activities and the indices used in the scorecard to gauge the company's performance.

Nissan Priorities	Nissan Objectives and Long-Term Vision	Indicators of Progress	2015 Results	Assessment
Innovative technology development and active promotion of safety toward a safer mobility society	Establishment of quantitative reduction targets for Nissan-related traffic fatalities, etc., real-world analysis of accidents to build safer cars and implementation of driver-education programs; as an ultimate goal, aim for virtually zero fatalities in accidents involving Nissan vehicles.	Reduction from 1995 levels in fatalities involving Nissan vehicles (figures available approx. two years later due to calculation based on publicly released data)	Average in major Nissan markets: 58% reduction Japan: 70% reduction U.S.: 45% reduction Europe (U.K.): 78% reduction (All as of the end of December 2015)	✓✓



- ▶▶ GRI G4 Indicators
- ▶▶ G4-PR1

NISSAN'S APPROACH TO SAFETY

Nissan takes a fundamental approach of pursuing “real-world safety” and aims to help create a society with virtually zero avoidable traffic accidents. There were 3,904 deaths resulting from traffic accidents in Japan in 2016, 213 fewer than in the previous year. For the first time since 1949, that figure has fallen below 4,000. The World Health Organization (WHO) reports that approximately 1.25 million people lose their lives each year in automobile accidents globally, warning that if urgent steps are not taken, accidents could become the fifth leading cause of death worldwide by 2030.

Nissan set a target of reducing the number of fatalities involving Nissan vehicles to half the 1995 level by 2015. In Japan, the United States and Europe (the United Kingdom), this target has been reached. Today, Nissan is engaged in activities aimed at halving this number once again in these markets by 2020. The ultimate goal is a world with virtually no fatalities resulting from traffic accidents.

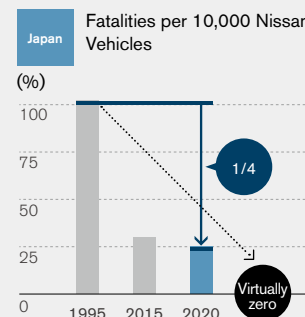
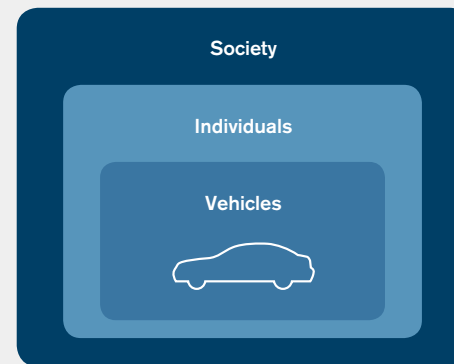
To reduce traffic accidents and achieve this zero-fatality goal, it will be necessary to develop and deploy effective safety technologies in as many vehicles as possible. Comprehensive efforts are needed that will encompass individuals and the driving environment as well. Nissan uses a triple-layered approach, taking measures in the areas of vehicles, individuals and society to contribute to the creation of a truly safe automobile society.

Nissan's ultimate goal:

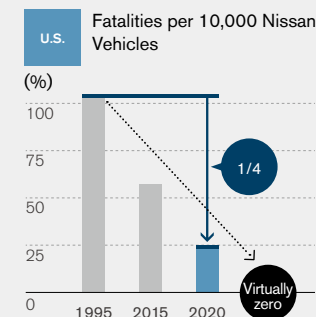
To reduce the number of fatalities involving Nissan vehicles to virtually zero.

Nissan's approach:

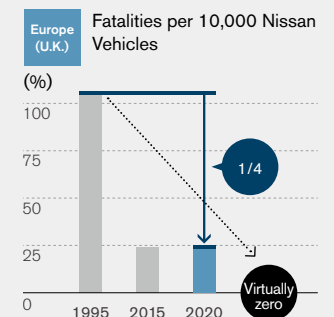
A triple-layered approach, taking measures in the areas of vehicles, individuals and society.



Source: Institute for Traffic Accident Research and Data Analysis



Source: Fatality Analysis Reporting System



Source: STATS19 data, U.K. Department for Transport

VEHICLES: DEVELOPING SAFETY TECHNOLOGIES

With its unique Safety Shield concept, Nissan is working to develop automotive technologies from the perspective that people are at the center of the driving experience. The company focuses on solutions that help minimize potentially dangerous conditions. It also provides technologies that aim to activate vehicle systems (for example, the brakes) when a collision is unavoidable, thereby helping to reduce injuries.

The Safety Shield Concept

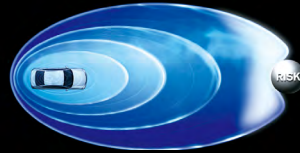
Nissan bases its efforts to help create safer automobiles on its original Safety Shield concept. This defines the conditions surrounding a vehicle in terms of six phases, from "risk has not yet appeared" through "post-crash," and guides development of technologies to help address each phase.

High Marks in Fiscal 2016 for Nissan Safety Technology

- In January 2015, Nissan expanded Intelligent Emergency Braking to more models. By the end of fiscal 2015, the technology was available on nearly all vehicle categories sold in Japan, including electric vehicles and commercial vehicles, and it was standard on all major models. In North America, it is available on key models including the Sentra, Altima and Rogue; in Europe it appears on the Juke, X-Trail, Qashqai and other key models, as well as on the Micra, a new model released in March 2017.
- In the United States, the U.S. National Highway Traffic Safety Administration's New Car Assessment Program (US-NCAP) awarded a five-star overall safety rating, its highest, to the 2017 Infiniti QX60 and the 2017 Nissan Altima, Maxima and Pathfinder. The Insurance Institute for Highway Safety (IIHS) recognized the 2017 Nissan Altima, Maxima and Rogue with its 2017 Top Safety Pick Plus (TSP+) designation (when equipped with Forward Emergency Braking and LED low-beam headlights).
- In Europe, the European New Car Assessment Program (Euro NCAP) awarded a five-star top rating to the Infiniti Q30.

➤ Currently called Automatic Emergency Braking in the United States.

<p>Risk has not yet appeared</p> <ul style="list-style-type: none"> ■ Intelligent Distance Control ■ Navigation-enabled Intelligent Cruise Control with full-speed range following capability ■ Adaptive Front-Lighting System (AFS) ■ Intelligent Around View Monitor 	Helps the driver to maintain comfortable driving
<p>Risk has appeared</p> <ul style="list-style-type: none"> ■ Intelligent Forward Collision Warning ■ Lane Departure Warning ■ Intelligent Lane Intervention ■ Blind Spot Warning ■ Intelligent Blind Spot Intervention ■ Intelligent Back-up Intervention 	Helps the driver to recover from dangerous conditions to safe driving
<p>Crash may occur</p> <ul style="list-style-type: none"> ■ Intelligent Emergency Braking ■ Anti-lock Braking System (ABS) ■ Vehicle Dynamic Control (VDC) 	
<p>Crash is unavoidable</p> <ul style="list-style-type: none"> ■ Front Pre-Crash Seatbelts 	
<p>Crash</p> <ul style="list-style-type: none"> ■ Zone Body construction ■ SRS Airbag Systems ■ Pop-up Engine Hood 	Helps minimize injuries when a collision is unavoidable
<p>Post-crash</p> <ul style="list-style-type: none"> ■ Automated Airbag-Linked Hazard Lamps 	



Aiming for Virtually “Collision-Free Cars”

Risks are present in every driving condition. Nissan supports safer driving through the development of preventive safety technologies that help detect risks in advance, providing a warning to the driver and, in emergency situations, intervening to help prevent accidents. Guided by Nissan’s Safety Shield philosophy, engineers consider potential risks around the vehicle and have designed a variety of systems to help the driver avoid collisions at the vehicle’s rear and side, as well as in the front.

Nissan has set a goal of providing worldwide optimal mobility and committed as an automobile manufacturer to the application and popularization of its safety technologies.

All-Around Drive-Support System in the Infiniti Q50

Intelligent Emergency Braking

When the Intelligent Emergency Braking system judges that deceleration is needed, it helps alert the driver by using both a visual notice and sound, and then generates a force that pushes the accelerator pedal up and smoothly applies partial braking to assist the driver in slowing the vehicle down.

When the system judges that collision is likely, it automatically applies harder braking to help avoid or at least mitigate a collision.

Intelligent Forward Collision Warning

This system helps warn the driver of risks that may be obscured from the driver’s view. It can sense the relative velocity and distance not only of a vehicle directly ahead but also of the vehicle two positions ahead. When the system calculates a need to decelerate, it provides audible and visual alerts to the driver.



Intelligent Blind Spot Intervention

The Intelligent Blind Spot Intervention system helps alert a driver who is attempting to change lanes of the presence of a detected vehicle in his/her blind-spot area. It also helps assist the driver in returning the vehicle toward the center of the lane.



Intelligent Lane Intervention

A camera installed in the roof console recognizes the vehicle’s position relative to the lane markings. When the system detects that the vehicle is drifting out of its lane, the Lane Departure Warning system helps alert the driver with a visual warning and an audible signal. The Lane Departure Prevention system senses unintended lane drift and automatically helps the driver return to the center of the lane by swiftly redirecting light steering input toward the intended lane.

Intelligent Back-up Intervention

Radar and sonar sensors on the side and back of the vehicle work to detect potential collisions with a crossing vehicle while backing up. This helps to alert the driver with visible indicators located on the side mirrors and audible and visible alarms on the instrument panel. Should the driver continue moving in reverse, the brakes will automatically engage to help the driver avoid a collision.



Intelligent Around View Monitor

The Intelligent Around View Monitor provides a virtual 360-degree view of the parking environment as seen from above the vehicle and provides visual and audible warnings for moving objects within the display image.

From Preventive Safety to Autonomous Drive

Nissan is enhancing its preventive safety technologies to support the four basic steps in avoiding accidents: sensing, cognition, judgment and action. The company is now developing autonomous driving technologies as one next step in its approach to driving safety. The company believes that autonomous driving could help to reduce traffic accidents—more than 90% of which have human error as a contributing factor—and could prove effective in contributing to the realization of a society with virtually no traffic accidents.

Autonomous Drive vehicles equipped with millimeter-wave radar, laser scanners and cameras continually monitor their surroundings in every direction. If they come close to other vehicles or other objects, artificial intelligence selects the appropriate action based on the information stored in its knowledge database. The goal is an autonomous driving vehicle that can correctly assess the situation, make decisions and drive safely even in

complex traffic environments, such as crossroads with no traffic lights or when passing parked vehicles.

In a society facing issues including aging populations and urban congestion, autonomous driving technologies may one day be able to help reduce traffic accidents, thus providing peace of mind to drivers and increasing mobility for the rapidly growing number of senior citizens. Nissan believes that autonomous driving technologies are a major breakthrough offering new mobility value. The company is proactively developing these technologies and working to bring them to market. In August 2016, the ProPILOT technology enabled autonomous driving in a single highway lane in the new Serena. ProPILOT allows steering, acceleration and braking to be operated in full automatic mode, easing the burden on drivers in heavy traffic and during long drives. ProPILOT was installed on 54% of the new Serena models sold from August 2016, when the vehicle launched, through March 2017, for a total of some 39,000 vehicles.

This will be followed by Autonomous Drive technologies for multiple-lane highway driving. This functionality will allow the vehicle to merge and change lanes autonomously and it is expected to be available in 2018. In 2020, Nissan expects to make autonomous city driving available.



A Nissan Autonomous Drive test vehicle.

INDIVIDUALS: NISSAN'S TRAFFIC SAFETY ACTIVITIES

To help create a better mobility society, it is important for as many people as possible to share an understanding of road safety, including drivers and passengers in vehicles as well as pedestrians outside them. Nissan takes part in educational activities to boost this safety awareness, including measures to improve drivers' skills and a range of other safety promotions.

Japan

Traffic accidents are statistically more likely to occur during the dusk hours from 4:00 to 6:00 p.m. As part of the Hello Safety Campaign, Nissan began urging drivers to turn on their headlights earlier in the evening in the Omoiyari Light Promotion, launched in 2010.



In fiscal 2016, Nissan further enhanced its activities. With the aim of increasing the number of supporters and evangelists of the Omoiyari Light Promotion, the company worked to publicize these activities and to publicize them as widely as possible throughout Japan, targeting those concerned about the issues facing society as well as those with an interest in regional activism.

1 Takumi Adachi's Journey of Omoiyari Discovery: To raise awareness of the Omoiyari Light Promotion and its objectives across the entire country, Omoiyari Light Promotion secretariat member Takumi Adachi toured all 47 of Japan's prefectures in a Nissan LEAF. Starting in Yokohama, Adachi moved through Kanagawa Prefecture to Yamanashi and Shizuoka Prefectures as he began his clockwise route around the country, in all covering a total of 10,900 kilometers (one quarter of the circumference of the world). Meeting with people involved in regional revitalization and volunteer activities face to face, Adachi highlighted the

importance of *omoiyari* (thoughtful kindness) in society. Also appearing in local media, Adachi met with a total of 1,124 people, most of whom agreed to offer their support to the Omoiyari Light Promotion.



2 Lounge Switch: To develop human resources to support and evangelize the Omoiyari Light Promotion, Nissan launched a workshop series to teach participants how to come up with ideas, put them into action and promote them. Workshops featuring a diverse range of instructors took place seven times from June 2016 to February 2017, growing the number of supporters of the Omoiyari Light Promotion.



- 3 Yugata (Evening) Café: A networking event held in spring and autumn. The autumn meeting was held on November 10, designated “Good Lighting Day” in Japan. At this meeting, ongoing supporters of the Omoiyari Light Promotion, new faces from Takumi Adachi’s Journey of Omoiyari Discovery and participants from the Lounge Switch workshops came together for spirited and cheerful discussion of the promotion.

As a result of these activities, corporations, nonprofit organizations, car lovers and other stakeholders have gained greater understanding of the safety practice and are putting it to use more frequently. Nissan’s Omoiyari Light Promotion is gradually gaining broad acceptance among the public.

United States

Nissan North America (NNA) has voluntarily provided parents and caregivers with peace of mind by offering valuable tools and resources to help determine which child safety seats fit properly in Nissan and Infiniti vehicles through its Snug Kids program since 2002 in the United States. Snug Kids, the automotive industry’s first-ever child safety seat fit initiative, provides consumers with guidance on how to achieve a secure fit when installing a rear- or forward-facing child seat or booster.

Since 2012, NNA has sponsored ThinkFast, an interactive awareness program that educates students about the importance of safe driving practices. The program is set up like a game show with an entertaining host to keep participants engaged. In 2016, a total of 105 programs were carried out at middle schools and high schools across Tennessee, Michigan, Mississippi, Texas, Arizona and California.

NNA also sponsors a Child Passenger Safety Technician course and an event offering training in seat-check methods in Tennessee, Michigan and Mississippi to educate adults on how to restrain children properly when traveling in vehicles.



Students take part in the ThinkFast program sponsored by NNA.

China

Traffic safety has become an increasingly important issue in China, which is seeing a rapid increase in the number of cars on its roads.

To communicate safe driving concepts to customers and help them to develop safe driving habits, Dongfeng Nissan Passenger Vehicle (DFL-PV) held Safe Driving Experience Camp 360°, a safety-themed event. The company is also engaged in various activities, including lectures and skills training for drivers and the general public, as well as training in first-aid techniques, so that people will be prepared when they are needed in an emergency. These events have been held in more than 400 cities throughout China, with more than 5.7 million participants learning the importance of safe driving.



A scene at Safe Driving Experience Camp 360°.

In August 2016, Nissan (China) Investment Co. (NCIC) co-hosted the 10th China Road Safety Forum with the China Automotive Technology & Research Center (CATARC), extending a collaboration in place since 2007. More than 200 experts and representatives from the Ministry of Transport of China, the State Administration of Work Safety, automakers, suppliers, and domestic and foreign universities and institutes participated in the forum.

▶ Aqdar: Under the leadership of UAE Deputy Prime Minister and Minister of the Interior Sheikh Saif Bin Zayed Al Nahyan, this organization runs a range of programs for the benefit of students.

Middle East

In the United Arab Emirates (UAE), mobile-phone-related accidents among young drivers are on the rise. Nissan Middle East (NMEF) has launched the Aqdar ▶ Drive Safely program to reinforce the importance of a traffic mindset for UAE university students and empower them to become agents of change in their communities. The program theme for 2017 is the use of mobile phones while driving, and participating students are required to submit a road safety campaign, mobile phone application or sculpture conveying the danger of using a phone while driving. The top three winners in each category will receive cash rewards and the opportunity to implement their projects with the support of NMEF.



South America

In October 2016 in Honduras, Nissan Trading (NITCO), a wholly owned subsidiary of Nissan Motor Co., Ltd., in cooperation with local Nissan distributor Grupo Q, hosted a two-day road safety event for international aid and development organizations including the World Food Programme, United Nations Development Programme, Save the Children, Red Cross and World Vision. The training was focused on off-road driving safety. The first day was a session for participants to learn the basic theory of 4x4 vehicles. The second day was a practical session held at an off-road course, where participants drove several different types of Nissan NP300 Frontier, learning in particular how to select the appropriate gear depending on the road surface and conditions.



Nissan Safety Driving Forum in Emerging Markets

Nissan conducts its Nissan Safety Driving Forum in emerging markets as part of efforts to promote safe driving behavior. The aim is to enhance road safety awareness among the general driving population.

Held in countries like China, India and Russia, the forum travels to multiple cities, teaching participants the importance of road safety through programs using simulators and safety technology exhibitions.



A participant using a driving simulator.

- ▶▶ website
- ▶ Click here for more information on Nissan's partnership with the FIA.

Partnership with the FIA for Traffic Safety

In 2014, Nissan and the Fédération Internationale de l'Automobile (FIA) formed a partnership to make world roads safer through the FIA Action for Road Safety ▶ campaign. Nissan is an official supporter of the FIA's innovative awareness-raising campaign, launched to bolster the United Nations Decade of Action for Road Safety.

As part of this partnership, Nissan supports and promotes awareness campaigns worldwide—in particular, the FIA Golden Rules for Safer Motoring ▶ —with the aim of helping to reduce the number of deaths from the many traffic accidents that occur each year. By signing the FIA Online Pledge, ▶ campaign supporters publicly commit to driving safely.

Through the Nissan Safety Driving Forum and other outreach efforts, Nissan works to educate drivers about the FIA Golden Rules and the FIA Online Pledge. At the NISMO Festival—a fan appreciation event hosted by Nissan Motorsports International—Nissan promotes its safety activities by placing campaign logo decals on the many vehicles that are displayed or driven in the festival and stresses the importance of safe driving to festival visitors by having race drivers pledge to drive safely on the course. Additionally, following quiz-style educational events held on stage at the 2015 festival, a dedicated booth was opened at the 2016 festival to promote and collect signatures for the FIA Online Pledge.



At the NISMO Festival.



SOCIETY: WORKING TOGETHER WITH SOCIETY

Nissan believes it is possible to help create an even safer mobility society by using information from the traffic environment surrounding vehicles on the road. Together with a wide range of governmental agencies, universities and companies, the company is participating in various projects intended to promote the achievement of a safer, more pleasant mobility society.

Helping Reduce Wrong-Way Accidents

Recently, Japan has seen an increase in the number of incidents involving vehicles traveling in the wrong direction on expressways. Working together with West Nippon Expressway Co., Nissan has developed a navigation program that uses GPS to notify drivers of vehicles driving the wrong way on an expressway. The system detects wrong-way vehicles based on GPS coordinates, maps, vehicle speeds and other data. The driver of a vehicle going the wrong way receives audible and visual warnings. The system appeared in the Nissan Fuga Hybrid released in October 2010 and is now available on a wide range of models as an option.

Putting Autonomous Drive Technology to Work in a Driverless Towing System

Nissan works to improve production efficiency. The Intelligent Vehicle Towing system uses a modified Nissan LEAF to autonomously tow trollies carrying finished vehicles. Trial operations of the system began in 2015. The driverless system can carry a maximum of three vehicles at once. The data and know-how obtained through this project will help to enable broader adoption of Autonomous Drive technology, allowing Nissan to provide new solutions to our customers and to society.



The Intelligent Vehicle Towing system.

Applying NASA Technology to Develop AI for Autonomous Vehicles

To realize fully autonomous city driving, Nissan is developing the Seamless Autonomous Mobility system, or SAM. SAM can help cars to safely navigate unforeseen situations, such as accidents, road construction or other obstacles. When decision-making is difficult for autonomous vehicles, supervisors draw up an ideal route to match the challenging situation and send it to the vehicles remotely for execution.

Testing Driverless Vehicles for Commercial Mobility Services

Nissan and the Japanese Internet company DeNA Co. are preparing to begin tests aimed at developing driverless vehicles for commercial services. The first phase of testing will begin in 2017 in designated zones in Japan, with a focus on technology development. By 2020, Nissan and DeNA plan to expand the scope of their tests to include the commercial usage of driverless technology for mobility services in the Tokyo metropolitan area.

PHILANTHROPY

The world faces many issues, ranging from climate change and energy security to overpopulation and poverty. In September 2015, the United Nations Sustainable Development Summit convened at the U.N. Headquarters with the participation of more than 150 countries. The resolution they adopted, "Transforming Our World: the 2030 Agenda for Sustainable Development," includes goals forming "a plan of action for people, planet and prosperity." Cooperation on a global scale is required to build a sustainable society, and companies are expected to develop and apply necessary technologies and solutions to tackle the world's issues.

In addition to delivering innovative, exciting vehicles and outstanding services to customers worldwide, Nissan believes it is important to play an active role as a community member, applying its core capabilities to contributing further to society.

When a company provides a range of resources to communities, supporting their development and proactively tackling issues, it is, in part, fulfilling its social responsibility as a good corporate citizen. Such actions also benefit the company's own operations, fostering a better business environment and creating new markets that can grow sustainably.

Nissan works with a variety of stakeholders, including governmental bodies and nonprofit and nongovernmental organizations, to maximize the success of their initiatives. In line with Nissan's corporate philanthropic policies, regional offices and affiliates work on initiatives that address issues relevant to their operations and the communities in which they operate.

NISSAN'S ACTIONS

NISSAN'S THREE AREAS OF FOCUS

**Global social contributions
(including donations, monetary
contributions for social causes and
cost of philanthropic activities):**

¥1.6 billion

PHILANTHROPY

SCORECARD

FY2016 TARGET ACHIEVEMENT RATE: ✓✓ ACHIEVED ✓ MOSTLY ACHIEVED ✗ NOT ACHIEVED

Nissan makes year-round use of the CSR scorecard as a fundamental tool to manage, review and validate its progress in each of the sustainability strategies defined for its CSR activities. The table below shows some of the values behind Nissan's ongoing activities and the indices used in the scorecard to gauge the company's performance.

Nissan Priorities	Nissan Objectives and Long-Term Vision	Indicators of Progress	FY2016 Results	Assessment
Environment	Implement environmental education programs to enhance future generations' understanding of environmental issues. Increase program scale in Japan while expanding global activities.	Ongoing program expansion and increase of regional coverage	<ul style="list-style-type: none"> Expanded frequency and regional coverage of program events in Japan Conducted education programs in China, U.K. and Spain 	✓✓
Education	Position education as investment in future generations while implementing education programs focused on children and young people. Make use of Nissan's strengths and resources as an automaker.		<ul style="list-style-type: none"> Conducted original education programs in China and U.K. Established initiatives in Brazil and Australia to promote social-contribution activities and began operations 	✓✓
Humanitarian support	Improve company frameworks and processes to enable swift, effective responses in afflicted regions when major natural disasters strike.	Accurate understanding of local needs and provision of timely support	<ul style="list-style-type: none"> Provided supplies and monetary and human assistance to victims of the Kumamoto earthquakes; befitting an automaker, loaned 100 EVs for relief work free of charge Donated two vehicles to support relief efforts following forest fire in Chile 	✓



▶▶ GRI G4 Indicators
▶▶ G4-EC1

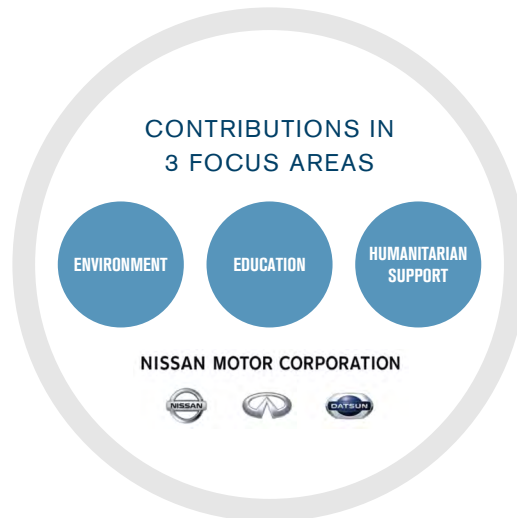
NISSAN'S APPROACH TO PHILANTHROPY

Nissan's social-contribution activities focus mainly on the areas of the environment, education and humanitarian support. The company not only provides financial assistance but also pursues activities that are "distinctly Nissan," making full use of its automotive heritage, expertise, products and facilities.

Nissan emphasizes communicating and working with specialized nonprofit and nongovernmental organizations that have great expertise in their fields to ensure that its social contributions are effective.

Nissan's local companies support employee involvement in social-contribution activities.

Contributions to Communities Where Nissan Conducts Business



COMPANY ORGANIZATION FOR PHILANTHROPY

The CSR Department at Nissan's Global Headquarters in Japan is responsible for developing Nissan's corporate philanthropic policies, which are discussed and approved by the Global Sustainability Steering Committee and shared throughout Nissan's global operations. These corporate policies provide the basis on which initiatives are implemented across the company worldwide.

ENVIRONMENT

Nissan's environmental philosophy is "a Symbiosis of People, Vehicles and Nature." Nissan actively engages in efforts to reduce the environmental burden on the planet and prioritizes the environment in its philanthropic activities. Central to its approach are educational programs that cultivate a deeper understanding of environmental issues, cooperation with environmental-protection organizations and the promotion of research toward reaching a low-carbon society.

School-Visit Programs (Japan, U.K. and China)

Since 2007, Nissan has put its automobile manufacturing knowledge and technologies to work by conducting school-visit programs. The programs target older elementary school students and are delivered by Nissan employees.

One educational program is the Nissan Waku-Waku Eco School, which helps participants to deepen their understanding of global environmental issues. Participants also learn about Nissan's environmental efforts and experience the latest in environmental technology, including car kit experiments and test rides in the Nissan LEAF electric vehicle. As well as teaching participants about environmental issues, the program encourages them to consider their own daily activities.

► website
 Click here for more information on the Nissan Waku-Waku Eco School.

This program has been so well received that Nissan has increased the number of Eco School classes in Japan. In fiscal 2016, about 10,000 pupils from 88 schools, mainly in Kanagawa Prefecture, attended the program (including visitors to program exhibitions). Since the launch of the Nissan Waku-Waku Eco School, a total of 51,000 children have participated as of the end of March 2017. Employees from many divisions have participated in a company scheme certifying them as teachers in the program. In fiscal 2016, a total of 361 employees volunteered to support the classes.

Outside Japan, Nissan Motor Manufacturing (UK) in Sunderland runs an eco-school program with additional content and activities for children from local primary schools. In fiscal 2016, 553 students attended 25 sessions. In China, Nissan (China) Investment Co. has held classes, and other regional companies began classes in 2016. Nissan has also started offering online lessons, which had more than 10,000 participants in fiscal 2016.

Partnership with World Wide Fund for Nature (Japan and South Africa)

As part of its environmental activities, Nissan has entered a partnership with the international environmental protection body World Wide Fund for Nature (WWF). In Japan, since fiscal 2015 the company has provided one e-NV200 each to WWF Japan partners Tokushima Regional Energy and the Shikoku Institute of Natural History at no cost. Nissan also supported WWF Japan's environmental awareness event, Earth Hour, held in Yokohama in March 2017 by contributing the use of two Nissan LEAFs charged with renewable energy to support the zero-emission management of the event. Elsewhere, Nissan South Africa also donated an SUV to support WWF South Africa activities to preserve headwater areas.



Earth Hour 2017 in Yokohama.

EDUCATION

Nissan believes that supporting young people is an investment in the future. To help realize a meritocratic society in which a better future is possible for anyone, the company has established several educational initiatives that utilize its knowledge and technology base, in addition to providing elementary school education opportunities in emerging countries.

Youth Literacy Efforts (Japan, Portugal, U.S. and Indonesia)

Nissan has organized the Nissan Children's Storybook and Picture Book Grand Prix ¹⁾ each year since 1984. Through March 2017, more than 220,000 copies of published winning works have been donated to public libraries across Japan and kindergarten classrooms near Nissan offices.

In Tennessee, the site of the company's North American headquarters, Nissan has supported for more than 10 years the Governor's Books from Birth Foundation's Dolly Parton Imagination Library, ²⁾ an initiative that aims to foster a love of reading among preschool children. In 2016, the company donated 44,500 age-appropriate, high-quality books for children up to age five in four Tennessee counties. In Mississippi, where its Canton Plant is located, Nissan's contribution provides Imagination Library books to 35,000 preschoolers each year.

In 2015, Nissan launched its Datsun Rising Hope program in Indonesia. In fiscal 2016, the program collected and donated more than 10,000 books and donated them to Indonesian libraries.



Performers at a Datsun Rising Hope event.

▶▶ website

 *1) Click here for more information on the Nissan Children's Storybook and Picture Book Grand Prix.

▶▶ website

 *2) Click here for more information on Nissan's support for the Dolly Parton Imagination Library.

Outreach to Pupils to Talk About *Monozukuri* (Japan, China, U.K. and Other Countries)

Through engaging and fun activities, Nissan works to instill in younger generations the importance of *monozukuri*, Japan's tradition of careful craftsmanship.

In Japan, the message of *monozukuri* is shared through school-visit programs, the Nissan Monozukuri Caravan and the Nissan Design Waku-Waku Studio, which take Nissan employees to visit elementary schools. ¹¹ Some 21,000 children participate in the programs every year. In China, Nissan (China) Investment Co. and other regional companies hold classes. The Nissan Monozukuri Caravan also operates in the United Kingdom: At the Sunderland Plant, the program runs five days per week during school terms, welcoming more than 4,500 primary pupils per year. The Nissan Technical Center in Cranfield also engaged 300 pupils through its 12 Monozukuri Caravan sessions in fiscal 2016.

The Nissan Skills Foundation ¹² was established in 2014. As of March 2017, it has engaged more than 20,000 students from schools across the region through various activities to inspire the engineers and manufacturers of the future. Through the F1 in Schools global competition, it supports local teams with equipment, resources and knowledge. At the 2016 world finals, five of the U.K. finalist teams had been supported by Nissan. A core program under the Foundation is Industrial Cadets, a nationally recognized program aimed for pupils aged 13–14 to engage with manufacturing and engineering professionals. More than 400 students have been through the program. The Foundation also fosters diversity through the Girls in Monozukuri, Manufacturing and Engineering (GIMME) and GIMME Booster programs. These introduce young girls to available career options and help improve their chances of getting through the recruiting process.

In addition, the company donates vehicles and engines to universities and vocational schools to be used for instructional purposes in many countries. Access to real-world vehicles helps students build their skills and practical knowledge.

► website

¹¹ Click here for more information on the Nissan Monozukuri Caravan and the Nissan Design Waku-Waku Studio.

► website

¹² Click here for more information on the Nissan Skills Foundation.



A Nissan Skills Foundation program.

Education Support for Children in Need (China, South Africa and Brazil)

Since 2010, Nissan (China) Investment Co. (NCIC) has operated the Nissan Caring for Migrant Children program in China. To further enhance this program, in 2013 NCIC launched the Dream Classroom program, which helps elementary and middle school pupils in economically disadvantaged districts. The program has gradually expanded its area of operation and the scope of its classes to include such topics as the environment, *monozukuri*, design and the basics of automotive engineering. Other regional companies in China began holding these classes in 2016. Further educational endeavors include a Dongfeng Infiniti Motor program supporting children with autism and educational programs prepared by Dongfeng Nissan Passenger Vehicle Co.

For nine years, Nissan South Africa has provided support to the Mobile Eye Clinic. In fiscal 2016 this support helped to screen 6,839 schoolchildren, providing 154 pairs of glasses and introducing medical facilities for 6,174 children who needed treatment. This child eye health project helps to greatly enhance the educational environment for children in South Africa.

Nissan Do Brasil Automoveis supported the Rio de Janeiro 2016 Olympic and Paralympic Games as a local sponsor. Activities included the launch of an initiative to help deprived parts of the city.

Developing the Next Generation of Scientists and Engineers (U.S.)

In the United States, Nissan North America (NNA) is making direct investments in the workforce of tomorrow through support of science, technology, engineering and mathematics (STEM) initiatives and technical education training programs. Nissan provides financial support to develop STEM programs for students in elementary, middle and high schools and to support STEM programs in colleges.

In Tennessee, where Nissan has two major assembly plants, Nissan and its employees support the Music City BEST (Boosting Engineering Science and Technology) Robotics Competition in Nashville. Student teams design and build working robots from standard kits of simple building materials and then compete to perform specific tasks in three minutes. In fiscal 2016, a total of 479 students from 16 schools took part, and 37 Nissan employees volunteered as team mentors or competition judges. In this project-based STEM program the students solved real-world science and engineering problems, helping them develop technological literacy skills that may shape their long-term education and career direction.

NNA also supported the running of the Lipscomb University/Nissan BisonBot Robotic Summer Camps 2016 at Lipscomb University in Tennessee. A total of 148 students, aged 5 to 16, took part in the camps, studying age-appropriate robotics technologies.



The BEST Robotics Competition in Nashville, Tennessee.

Nissan Global Foundation (Japan)

The Nissan Global Foundation pursues the vision of helping to achieve a society whose members can look to the future with hope while fostering human resources. Working toward this goal, the Foundation conducts training programs.

A key part of this outreach is a concerted effort to enhance science education. Support recipients include elementary and junior high schools, as well as research groups that are implementing educational programs to foster logical and scientific thinking skills among children. The Foundation, which funds teaching materials that provide two years of practical use, presents the Science Education Awards to schools with the best performance in the program, targeting greater depth of study and fresh interest in science at all the schools it supports.

The Foundation also runs the Exciting Science Navigation program, which offers one-day hands-on activities to stimulate intellectual curiosity in science among elementary and junior high school teachers. In addition to conducting tours of innovative research facilities, the Foundation prepares a teaching program on how to communicate the excitement of these events to students. Program activities take place three times a year at the Institute of Physical and Chemical Research (Riken), the University of Tokyo's Institute of Industrial Science and the Waseda University Center for Advanced Biomedical Sciences.

Another important Foundation activity is the Global Resilient Leadership Program, a course for training strong leaders who can instigate change in an unpredictable environment. Top business school professors from Japan, the United States and Europe explicate case studies of change at Nissan and other global corporations. Nissan Chairman Carlos Ghosn and Vice Chairman Toshiyuki Shiga speak about their experiences and the essence of leadership.

As of March 2017, the seminars had been conducted five times with the participation of 150 executive candidates from a range of industries, including finance, logistics, manufacturing and information. These participants are now applying their acquired leadership knowledge back at their organizations.

Nissan Institute of Japanese Studies, Oxford (U.K.)

Founded at the University of Oxford, the Nissan Institute of Japanese Studies is a well-known European center for research on modern Japan that contributes to the promotion of mutual understanding between Japan and Europe.

► website

Click here for more information on the Nissan Global Foundation.

► website

Click here for more information on the Nissan Institute.

HUMANITARIAN SUPPORT

Nissan has provided assistance around the world to people who have been affected by large-scale natural disasters. The company's humanitarian efforts include initiatives in North America and Asia through a global partnership with Habitat for Humanity.

Partnership with Habitat for Humanity

Nissan North America (NNA) started collaborating with Habitat for Humanity in the wake of Hurricanes Katrina and Rita, which struck the American Gulf Coast in 2005. Habitat for Humanity, an international aid organization that gives people hope by helping them build or improve their homes, has a vision of "a world where everyone has a decent place to live." The nonprofit tackles poverty and the associated problems of low-quality housing in developing countries by working to construct homes and support self-reliance in 80 countries.

Since 2006, NNA has donated some \$13 million and 93 vehicles and has logged more than 86,000 work hours from employee volunteers.

Nissan expanded the partnership in 2012, broadening operations beyond North America to various Asian countries, with Nissan's regional companies conducting construction and hygiene improvement and building disaster-resistant communities. In fiscal 2016, Habitat activities were conducted in the Philippines, Myanmar and Indonesia.



Framing a house with NNA volunteers.

Addressing the 3/11 Disaster (Japan)

Employee Volunteer Activities in Fukushima Prefecture

In response to the Great East Japan Earthquake of March 11, 2011, Nissan has provided various kinds of support, from immediately after the disaster through reconstruction activities, seeing robust employee participation. In fiscal 2016, Nissan employees implemented support activities in Hirono in the district of Futaba, Fukushima Prefecture, for a second year. Together with the Iwaki OtentoSun Enterprise Cooperative, based in Iwaki, Fukushima, 45 employees from several Nissan facilities took part in two volunteer tours. They interacted with local residents while constructing green coastal areas to mitigate the effect of tsunamis, assembling solar panels by hand and harvesting organic cotton.



Volunteers with a solar panel in Hirono, Fukushima Prefecture.

Bringing Smiles to Children in Tohoku

The Nissan President Fund, launched by then President and CEO Carlos Ghosn in 2011, fosters programs to support children in areas affected by the Great East Japan Earthquake. NPOs with a range of specialties have visited local children's centers in Iwate, Miyagi and Fukushima Prefectures and conducted a range of programs. The fund also provides students with hands-on learning experiences and fun excursions during school breaks.

Addressing Other Natural Disasters

Earthquake Relief Activities in Kumamoto Prefecture (Japan)

Beginning on April 14, 2016, a series of powerful earthquakes hit Kumamoto Prefecture. Nissan and Nissan Motor Kyushu (NMK) made a donation of supplies including food and water at the initial stage. In addition to making financial contributions, the company matched donations by employees. Nissan also loaned a total of around 100 vehicles, including

► website
 Click here for more information on Nissan's partnership with Habitat for Humanity.

► website
 Click here for more information on the Nissan President Fund.

such electric vehicles as the Nissan LEAF and e-NV200, free of charge to affected local authorities and support organizations and assisted with recovery efforts. NMK employees took part in support activities in the stricken area, distributing supplies, helping at evacuation shelters and removing debris. A total of 160 employees participated in the 15 activities.



NMK employees assisting with recovery at an earthquake-affected area in Kumamoto Prefecture.

Vehicle Donation for Forest Fire Relief Activities (Chile)

To assist with relief activities after a huge forest fire, in February 2017, Nissan Chile donated two NV350 vehicles to a nongovernmental organization.

NISSAN AS A COMMUNITY MEMBER

Nissan aspires to be a good corporate citizen, acting as a valuable member of and active contributor to local communities wherever it does business. The company provides support to communities in a variety of ways, such as by assisting with community events, sponsoring neighborhood cleanups and other environment-improvement activities near Nissan facilities and opening those facilities up for public tours. Many employees actively participate as volunteers.

Sponsorship of Disability Sports (Japan)

In December 2016, Nissan sponsored the Nissan Cup Oppama Championship 2016—the 17th National Wheelchair Marathon in Yokosuka, Kanagawa Prefecture—co-hosting the event with other local organizations.

*1 The contest has been held since 2000 with the aim of increasing the profile of disability sports, improving the level of competitors, engaging people in the area and building caring communities. During the road race between Grandrive, Nissan's test driving at the Oppama Plant, to Oppama Station, around 830 volunteers, including company employees and local community residents, were on hand to support the event.

The Nissan Technical Center (NTC) and Nissan Advanced Technology Center, in the city of Atsugi, Kanagawa Prefecture, contribute to the local community by promoting activities including neighborhood cleanups and cooperation with local events. As part of these efforts, since 2012 NTC has sponsored the Nissan Fureai Road Race. *2 This contest for both visually impaired and sighted competitors is held on the NTC grounds, creating a safe environment in which participants are able to compete. In the sixth competition, held in March 2017, 618 runners took part.

Foundation Support Activities (U.S. and Australia)

In the United States, Nissan supports communities through the Nissan Foundation, which funds educational programs that encourage people to value the cultural diversity that exists within American society. The Nissan Foundation, established in 1992, has contributed over \$9.3 million to more than 100 nonprofit organizations across the country. In fiscal 2016, the Foundation donated \$700,000 to 27 U.S. organizations.

In April 2016, Nissan Australia launched the Nissan Australia Foundation to support philanthropic activities through funding. It funds small and medium-sized Australian organizations, helping to expand their activities and promoting STEM and traffic safety education. The Foundation also plans to adopt a support system for encouraging employees to take part in volunteer activities and make donations.

▶▶ website

*1 Click here for more information on the Nissan Cup Oppama Championship (Japanese only).

▶▶ website

*2 Click here for more information on the Nissan Fureai Road Race (Japanese only).

QUALITY

The rating of a car and the value of an auto manufacturer's brand are dependent on the customer's appraisal of quality. Technical innovations are proceeding at a rapid pace in the automotive industry, and customers are demanding ever-higher levels of quality in the vehicles they purchase. A company can reinforce its brand by continually providing the value customers expect, but failing to meet expectations even once makes it harder to maintain a platform for providing new value to those customers.

Mobility needs are rising in the face of structural changes in the global economy, engendered by increased urbanization in countries around the world. Nissan is expanding production to fulfill its mission of offering people worldwide the rich benefits of mobility. At the same time, it believes that automakers have an important responsibility to constantly offer customers the kind of quality with which they will be satisfied.

Nissan aims to be a company trusted by its customers by addressing quality as a companywide issue. The company seeks to provide top-level quality to customers at every stage, from the planning of new vehicles through development, manufacturing, distribution and sales to after-sales service.

NISSAN'S ACTIONS

Customer feedback received by
Nissan's customer call center
(Japan, fiscal 2016):

200,000
customer inquiries

QUALITY

SCORECARD

FY2016 TARGET ACHIEVEMENT RATE: ✓✓ ACHIEVED ✓ MOSTLY ACHIEVED ✗ NOT ACHIEVED

Nissan makes year-round use of the CSR scorecard as a fundamental tool to manage, review and validate its progress in each of the sustainability strategies defined for its CSR activities. The table below shows some of the values behind Nissan's ongoing activities and the indices used in the scorecard to gauge the company's performance.

Nissan Priorities	Nissan Objectives and Long-Term Vision	Indicators of Progress		FY2016 Results	Assessment
Product quality	Strive for the top level in quality from the customer's perspective.	Achievement of high scores in external indicators published by third-party organizations, including magazines and other media sources	North America and Asia: J.D. Power IQS/VDS South Africa: Ipsos VQS Mexico and Brazil: Ipsos QAS	<ul style="list-style-type: none"> • J.D. Power IQS: <ul style="list-style-type: none"> - In U.S., Frontier ranked 1st in its segment, Altima and Infiniti QX80 ranked 2nd, Murano ranked 3rd - In China, Sylphy ranked 1st - In Indonesia, Grand Livina ranked 2nd - In Malaysia, Almera and Grand Livina ranked 2nd, X-Trail ranked 3rd • Ipsos VQS: <ul style="list-style-type: none"> - In South Africa, Micra ranked 1st, Qashqai ranked 3rd • J.D. Power VDS: <ul style="list-style-type: none"> - In U.S., Versa and Frontier ranked 2nd - In U.K., Note ranked 1st - In China, Qashqai ranked 3rd - In Japan, Nissan LEAF ranked 2nd 	✓
Sales and service quality	Achieve Top-Level Quality in all focus markets. Over the longer term, maintain Top-Level Quality for sales and service.		North America and Asia: J.D. Power SSI/CSI Europe: GfK SSI and TNS CSI Mexico and Brazil: Ipsos SSI/CSI	<ul style="list-style-type: none"> • Maintained Top-Level Quality in Japan and Mexico for second straight year in SSI/CSI surveys • Achieved Top-Level Quality in J.D. Power SSI in India 	✓



▶▶ GRI G4 Indicators
▶▶ G4-PR3/G4-PR5

NISSAN'S APPROACH TO QUALITY

There are many aspects to quality. Nissan seeks to provide high quality at all stages of the customer experience. To achieve this, Nissan pursues effective companywide cooperation at the cross-functional and cross-regional levels.

Nissan aims to be recognized by customers as a brand with top-level quality. The company is working on both product quality and sales and service quality.

The product quality of a vehicle is fundamental for a customer to use it safely and comfortably over the long term. Nissan aims to provide a high level of quality that meets customer expectations during the entire lifecycle of a vehicle. This includes the perceived quality when a customer opens the vehicle door in the showroom, sits in the seat and takes a test drive; the initial quality in the first year after purchase; and the durability that remains even after many years of use.

Nissan also conducts initiatives to increase customer satisfaction (CS) in the area of sales and service quality. The company aims to exceed expectations at every customer contact point, from visiting dealerships, purchasing a car and receiving maintenance to when the customer decides to replace the car.

Nissan listens to customers and reflects their feedback in every process throughout the company in its pursuit of CS.

COMPANY ORGANIZATION FOR QUALITY

Nissan has tapped a number of executives, headed by an executive vice president to be responsible for leading efforts to achieve top-level quality. This has raised the focus on quality in addition to boosting employee awareness, encouraging companywide endeavors to meet targets.

The company created forums to discuss specific issues, the most important of which is the Global Quality Meeting at which the top executives for each region and function gather together under the leadership of the CEO. The executives responsible for quality also head forums including the Global Quality Management Committee and the Sales & Service and Monozukuri Collaboration Committee. These teams operate cross-regionally and cross-functionally.

LISTENING TO CUSTOMER FEEDBACK

Quality is a means of displaying how successfully Nissan interacts with its customers. The aim is to provide the value that customers expect and to respond rapidly if they are not satisfied. The company listens to all feedback, reflecting it in measures to improve quality at every stage—from vehicle design and development to after-sales service.

Rapid Response to Customer Feedback

Nissan responds to customer comments and questions worldwide through a range of methods, such as points of contact at dealers, call centers and surveys.

Nissan's customer call center in Japan annually receives approximately 200,000 comments and questions from customers. All catalogs, instruction manuals and similar materials published over the last 50 years have been digitized for easy searching, letting operators address customer concerns as quickly as possible. Operators also have access to a database of frequently asked questions and their answers, organized by vehicle models, keywords and categories.

Employees who buy Nissan vehicles are also customers and important stakeholders. The "Quality Listening Box" on the company intranet lets employees actively contribute information to raise the quality of products and services.

Sharing Customer Feedback

Opinions and comments received by the customer call center in Japan are anonymized and shared companywide on the intranet, where employees can access and view the database at any time. At the same time, the information is promptly sent by email to executives and senior managers.

A space has also been set aside within the company for all employees to freely view customer feedback whenever they like, so they can reflect customer perspectives in the pursuit of their duties. In addition to details on comments and inquiries dealt with by the customer call center, this space features opinions, wishes and encouraging words of praise received directly from customers by CAs, or car-life advisors, at dealers.

Reflecting Customer Feedback in Products and Services

Nissan has implemented a system for reflecting customer feedback in its products and services. The feedback is put to work through reliable information sharing among all functions, including product planning, R&D, manufacturing and sales.

Vehicle quality involves more than just mechanical faults: It includes all factors that may affect customer satisfaction (CS). Nissan sees these factors as issues requiring action and strives to improve quality in all these areas.

The value that customers expect from vehicles varies according to their personal tastes and unique expectations and can be affected by such market factors as the level of car ownership or the climate in a certain market. Although Nissan uses a set of basic specifications for global design, it also makes adjustments to meet regional needs. The Chief Quality Engineer (CQE) performs this role, working to enhance CS and reduce defects by participating in the vehicle manufacturing process from the product planning stage. Nissan gleans customer perspectives from market information and employee monitors. Priorities are set from the planning and development stages to consider responses that will be reflected in products and services.

Developing a CS Mindset

To improve quality across the company, all employees must consider the customer's perspective and keep CS in mind as they work. For this reason, Nissan implements numerous activities for incorporating customer views. One of these is regular CS training.

The training covers CS policy in the Nissan Group and quality-improvement measures, incorporating actual feedback from customers in group discussions. Nissan lets employees discuss what the company can do for customers and what action is necessary in the current situation, thus fostering a quality-improvement mindset rooted in CS among individual employees. The training is currently offered in Japan, the United States, Europe, China and Asia and Oceania, with further expansion ongoing.

The company has held the Nissan Quality Forums for executives, employees and suppliers since 2003. These forums use information displays, video presentations and actual vehicles and parts to showcase Nissan's latest status on quality, customer feedback and activities aimed at meeting targets.

Almost 10,000 participants reaffirm the importance of quality at these annual forums, which are organized cross-functionally by the Total Customer Satisfaction Function (TCSX) and the R&D, manufacturing, sales/service and other divisions in order to raise all employees' awareness of CS and quality-improvement issues. The forums take place in Japan, the United States, Mexico, the United Kingdom, Russia, China, Thailand, Indonesia and other locations around the world.

PRODUCT QUALITY

Product quality is a basic feature in allowing customers to use a vehicle safely and comfortably over the long term. For Nissan, a leading automaker with a strong level of *monozukuri*, Japan's tradition of careful craftsmanship, the product quality of its vehicles is the foundation for its sustainability as a company. Nissan considers quality from the customer's perspective at all times and responds quickly in case a defect occurs, making efforts to prevent a recurrence so as not to inconvenience the customer. The company ascertains customer dissatisfaction and addresses it through all possible means. Product quality is being improved to increase customers' satisfaction.

Nissan categorizes product quality into areas including perceived quality, initial quality and durability. Quality-improvement efforts target the entire lifecycle of a vehicle, from planning and design to R&D, manufacturing, distribution, sales and after-sales service. Nissan monitors the results of third-party quality surveys for use as internal indices and makes improvements throughout the PDCA (plan, do, check, act) cycle.

Product Quality Assessments by External Bodies

Nissan uses the results of third-party quality surveys as internal indices, applying them in improving the manufacturing of its vehicles. The company has set high-level indices and is striving to achieve them in each of the regions in which it operates.

• The TCSX targets an overall increase in customer satisfaction with the goal of gaining a thorough understanding of customer dissatisfaction and making necessary improvements.

▶▶ [page_66](#)

• [Click here](#) for more information on product quality survey results in the CSR scorecard.

Perceived Quality

Perceived quality is the quality that customers feel when seeing, touching and operating a vehicle. For example, when customers come to the showroom they open the vehicle doors, sit in the seats and check things like the texture of interior fittings.

The feeling of quality is a subjective matter, and fixing quantified criteria requires very careful investigation. To define criteria for quality evaluation from the customer's point of view, Nissan evaluates cars using the opinions of numerous employee product monitors and specialists with in-house training. The company also surveys customers who have purchased or are considering purchasing a Nissan car.

The company is now working to gain a better understanding of customers' perceptions in different markets around the world while reflecting those perceptions in new vehicles from the development stage. Nissan scientifically measures and analyzes customer perceptions to gain a quantitative grasp of what makes people feel good. This information shapes the company's specific design targets.

Improving Initial Quality

Initial quality issues involve defects that occur within a year of a new car purchase. Nissan has endeavored to reduce defects by establishing internal indices showing the frequency of defect claims within 3 and 12 months following sales.

To ensure that customers are satisfied, Nissan maintains a firm commitment to enhancing quality at the manufacturing stage for every single vehicle that comes off the line. Toward this end, Nissan has implemented the Alliance Production Way as its fundamental approach in this area. The Chief Vehicle Engineer, responsible for development, and the COE meet to share information from the market in order to promptly respond to customers' wishes and potential satisfaction concerns.

The company confirms quality improvements for each process and considers the necessary risk-reduction measures by visualizing potential risks at the planning stage.

By advancing all these processes with transparent criteria, Nissan can ensure the high quality of new models from the outset.

Enhancing Durability

Product life is affected by durability issues that can arise from long vehicle use: molded resin parts changing color or deforming, surface materials becoming abraded, chrome stripping away and material fatigue producing odd noises in the vehicle. Nissan consistently obtains data for the two to four years after the initial sale during the warranty period and conducts quality checks on recovered vehicles and parts actually used by customers for the early identification of defects. Analysis of such data contributes to the development of technologies that are more resistant to durability issues.

Working with Suppliers to Improve Product Quality

As Nissan's production network expands worldwide, there is greater risk of problems arising related to quality and supply of parts in the areas of operation. The company works with suppliers to improve quality at all production sites from the parts design stage onward to help ensure product quality.

Nissan is promoting stronger global management for the head offices of its suppliers with global operations and working to enhance its own global quality management. Nissan representatives visit each supplier's plants and check the quality-control conditions on their production lines. The company also offers support for their improvement efforts so that they can reach required quality-control standards.

Nissan has also prepared checklists based on successful resolution of past issues. The company is implementing various quality-improvement measures by working not only with its direct suppliers but also with its tier-2 suppliers.

Swift Improvement of Quality in Local Markets

Nissan is strengthening direct communication with sales companies and customers to promptly identify and respond to customer dissatisfaction and defects. The Total Customer Satisfaction Function (TCSX) addresses customer dissatisfaction and quality issues based on information from sales companies and the customer call center. It shares the information with the R&D and manufacturing divisions to investigate the causes and come up with countermeasures. The countermeasures are reflected on the production models in the market. In this way, Nissan seeks permanent solutions to prevent additional issues.

The global expansion of Nissan's corporate activities has increased the company's exposure to potential customer dissatisfaction and quality issues in many more regions of the world. Nissan established its Field Quality Centers (FQCs) with the goal of promptly gaining an understanding of quality issues and analyzing the causes. There are now 19 FQCs in operation in locations including Japan, the United States, Europe, China, Mexico, Brazil, South Africa, India, Australia, Thailand, Indonesia and Malaysia.

The centers conduct market quality research and analysis in five phases. They recall problem products from the market to clarify the facts and conduct detailed interviews to replicate the defects, after which they bring suppliers together with the company's R&D and manufacturing personnel to share information, to decide on areas for further investigation and to assign responsibilities. Based on the findings of the detailed studies, all staff members gather again to scientifically pinpoint the cause of problems and decide on specific countermeasures. These measures are incorporated in future R&D and manufacturing activities and in building new management structures to prevent recurrence of reliability issues or incidents.

Producing Products of Consistent Quality Worldwide

Nissan has adopted the 4G Strategies to produce high-quality products globally. These strategies enable Nissan to quickly create optimum production structures for providing consistently high-quality products to customers around the world.

Nissan's 4G Strategies

Global Production Engineering Center (GPEC)

The GPEC develops optimized production processes through focused trials and analysis of new vehicles. In addition to dramatically improving quality in the vehicle production preparation stage, it strives to establish quality consistency globally by spreading high quality standards to manufacturing plants in and outside Japan.

Global Packaging Design Center (GPDC)

The GPDC functions as a training center for developing logistics specialists to work at manufacturing bases. Training includes parts packaging design, packaging testing and evaluation methods, CAD and optimum logistics cost management to maintain high quality.

Global Training Centers (GTCs)

Manufacturing quality and productivity depend greatly on the skills of individual workers. To raise these skills to a competitive level in Nissan's plants worldwide, the GTCs carry out training through classroom lectures and skills training activities based on the Alliance Production Way. Graduates of the Master Trainer programs take part in training programs for local staff in regional training centers, effectively passing their skills on to others.

Global Launching Experts (GLEs)

GLEs provide support in resolving issues related to *monozukuri* (production) that arise in the new vehicle launch phase. Nissan is meeting OCT (quality, cost, time) targets for each new vehicle launch thanks to the evaluations and advice from GLE core members and the support of GLE registered members.

Fair and Swift Action on Major Quality Issues

Nissan's primary responsibility as a manufacturer is to make every effort to ensure that product issues do not occur in the first place. Another duty is to ensure that vehicles, which are extraordinarily complex industrial products, are manufactured to be as ready as possible for various eventualities. Nissan's approach is to conduct recalls transparently and to handle them fairly and promptly. The decision to conduct a recall is based on the company's compliance with relevant laws and consideration of how the issue may affect customers' safety. When a recall is judged to be necessary, Nissan implements it swiftly, placing top priority on customers' safety and on minimizing disruption to their lives.

Nissan's robust recall decision process has received high praise from the U.S. Department of Transportation as a model for the automotive industry, and has already been implemented at all operation sites worldwide.

SALES AND SERVICE QUALITY

While targeting high quality in its vehicles, Nissan works to increase the quality of its sales and service to customers in the purchasing process. The goal is to exceed customer expectations at all contact points. Through effective management of sales and service quality at sales companies in major national markets around the world, Nissan strives to improve customer satisfaction (CS). Based on the Nissan Sales and Service Way (NSSW) principles, the company's goal is to achieve top-level CS in 17 key national markets, including Japan, the United States and major European markets, thereby boosting its brand image worldwide.

Customer Sales and Service Evaluation

To deliver top-level sales and service quality, the purchase and service experience of Nissan customers must be analyzed objectively. Nissan strives to improve sales and service quality in each national market based on indices from third-party CS surveys by organizations including J.D. Power.

In fiscal 2016, Nissan maintained top levels in external CS surveys for sales and service in Japan and Mexico.

The Nissan Sales and Service Way

Nissan has established the Nissan Sales and Service Way (NSSW) as a set of global guidelines. These aim to improve customer perceptions of Nissan's brands and products, as well as to increase satisfaction with its sales and marketing activities and after-sales service. The company conducts a range of activities to increase CS and to improve sales and service quality based on the NSSW. These activities include dealer training to improve product knowledge, technical capability and customer handling, as well as the provision of guidance to improve dealership operations in response to CS surveys. Nissan is also developing personnel and systems to put these improvements into place and to focus its operations even more on customer needs, with care given to feedback collected through channels including call centers and dealerships. Through these efforts, the company aims to respond rapidly to dissatisfaction and other issues.

Nissan carries out these initiatives globally while keeping in mind differences in cultural conditions and customs across countries and regions. The company strives to provide the best customer service during the vehicle purchase and ownership experiences.

Improving Dealership Operations

To ensure thorough application of NSSW guidelines at a global level and to boost the quality of sales and service activities at dealerships, Nissan trains specialist staff and makes continual improvements to these activities.

These specialists gain an accurate picture of what takes place on dealership sales floors, suggesting measures fitted to their individual situations and supporting implementation. They also visit dealerships after analyzing CS surveys and identifying customer sentiment, clarifying the issues by observing workplace operations and interviewing on-site staff. They then discuss potential solutions with the staff and provide guidance so these outlets can make autonomous improvements.

New Tools for Supporting Dealerships

Nissan dealerships aim to provide easy-to-understand product information so that customers can make decisions on the models they are considering with comprehensive knowledge of the vehicles' appeal. Outlets also endeavor to quickly and accurately grasp customers' repair and inspection needs after purchase. There has recently been room for improvement, though, with dealer actions failing at times to satisfy customers due to repetitious questions, long waiting times and complicated explanations.

Nissan reviewed its new vehicle purchase and repair processes from a customer perspective, introducing tablet devices to support dealership operations. For example, dealers previously referred to a standard catalog when explaining vehicle functions at the time of delivery. Now, tablets let customers select functions they wish to know about, allowing more comprehensive, effective and efficient explanations. Nissan strives to implement meticulous service tailored to customer needs throughout the entire process of purchasing a vehicle or bringing it in for repair or inspection.

Establishing Global Dealership Standards

To meet changes in customers' expectations of dealerships and purchasing behavior, Nissan is making improvements to sales facilities, as well as their service approaches and other intangible aspects. The Nissan Retail Environment Design Initiative (NREDI) 2.1 is a newly developed global standard for the next generation of dealerships under the Nissan brand, which the company has started rolling out worldwide.

The company has overhauled dealership design and layout with an eye on addressing customer dissatisfaction with existing stores, responding to diversifying needs and boosting brand appeal. Nissan is integrating these overhauls with a rethinking of other points of customer contact, such as its website, as well as intangible systems and services in dealerships. It aims to create attractive dealerships for all customers—whether they have come to purchase a new car or to get a vehicle inspected or serviced—that are comfortable, welcoming places to spend time while also offering needed services as efficiently as possible.

Nissan's goal is to provide its customers with dealership experiences of globally consistent high quality. The company is steadily expanding the adoption of new standards while continuing to enhance the content of the standards.

VALUE CHAIN

The challenges facing modern societies, such as climate change and energy supply, are increasingly global in their scope. To meet these challenges, it is essential for Nissan to identify significant issues at various stages of the value chain and make ongoing efforts to address them. As a business with worldwide operations, Nissan pursues its activities on a similarly global scale, with a value chain that extends throughout the world. The company promotes consistency in the procurement practices undertaken throughout the value chain, sharing its vision and principles with business partners and engaging with them to ensure their adoption.

Together with its business partners, Nissan aims to achieve sustainable growth built on a foundation of mutual trust. The company listens carefully to and works with its suppliers and dealers as equal partners, developing and maintaining cooperative and competitive relations that enable it to implement best practices.

NISSAN'S ACTIONS

*Renault-Nissan CSR Guidelines
for Suppliers distributed to:*

100%
of suppliers

VALUE CHAIN

SCORECARD

FY2016 TARGET ACHIEVEMENT RATE: ✓✓ ACHIEVED ✓ MOSTLY ACHIEVED × NOT ACHIEVED

Nissan makes year-round use of the CSR scorecard as a fundamental tool to manage, review and validate its progress in each of the sustainability strategies defined for its CSR activities. The table below shows some of the values behind Nissan's ongoing activities and the indices used in the scorecard to gauge the company's performance.

Nissan Priorities	Nissan Objectives and Long-Term Vision		Indicators of Progress	FY2016 Results	Assessment
Working with suppliers	Proceed continuously to ensure legal compliance in the supply chain and thorough understanding and implementation of appropriate measures.	Promote thorough understanding and implementation of CSR at suppliers, particularly instilling recognition of legal compliance.	Progress in suppliers' CSR activities, as gauged in third-party sustainability assessments	● Together with Renault, implemented third-party sustainability assessments for suppliers in Europe, North America and Japan	✓✓
		Conduct conflict mineral surveys to instill CSR mindset in the supply chain.	Level of implementation of conflict mineral surveys	● Conducted follow-up surveys at suppliers, where necessary, based on the previous year's results	✓✓
	Continuously advance cooperation with suppliers regarding environmental management to help reduce environmental impact.	Promote management of controlled and banned substances at suppliers to meet environmental regulations.	Level of implementation of Nissan Green Purchasing Guidelines and specific substance management initiatives	● Worked with Renault to unify technical standards for managing chemical substances and distributed revised Nissan Green Purchasing Guidelines, asking suppliers to apply them	✓✓
		Reduce environmental impact in the supply chain based on environmental surveys (CO ₂ emissions, wastewater and other waste) at suppliers.	Conducting of surveys at suppliers representing more than 70% of total procurement by value	● Continued participation in supply-chain program designed by international NPO CDP to gauge supplier situations, as well as follow-up activities	✓✓
Working with dealers	Provide support to help cement voluntary efforts at dealerships.	Implement the PDCA cycle to make improvements to promotion of CSR activities at dealerships.	Level of implementation of compliance self-inspection program	● Continued implementation of twice annual compliance self-inspection program to enhance compliance awareness	✓✓
			Discussion of policies for improvement based on examples of violations	● At meetings for dealership representatives, discussion covered examples of financial improprieties and approaches for improving such situations; dealers were asked to implement appropriate work management approaches	✓✓
			Level of implementation of training based on examples of violations and initiatives to prevent violations	● Distributed training materials and held training to prevent violations including information leaks, harassment and reckless driving	✓✓
			State of initiatives for building new system to bolster prompt internal information sharing and responses when violations occur	● To strengthen compliance, continued implementing systems to bolster prompt internal information sharing, preventive measures and responses when violations occur	✓✓

NISSAN'S APPROACH TO THE VALUE CHAIN

To promote effective purchasing activities, in 2001 the Alliance partners established a common purchasing company, the Renault-Nissan Purchasing Organization, and steadily increased the scope of its activities. This organization now covers all purchasing domains, incorporates all purchasing functions and builds mutually profitable business partnerships with all suppliers.

Nissan uses a common, transparent process and criteria worldwide when sourcing suppliers and provides a wide variety of opportunities for other companies to do business with it, regardless of their nationality, size or history with the company. When making selections, the relevant Nissan divisions meet to examine from a range of perspectives the proposals received from suppliers. Nissan explains its decision to every supplier that has taken part in the sourcing process, as part of a thoroughly fair, impartial and transparent system.

Transactions with suppliers are based on the three values of trust (work fairly, impartially and professionally), respect (honor commitments, liabilities and responsibilities) and transparency (be open, frank and clear), which are important to the Alliance.

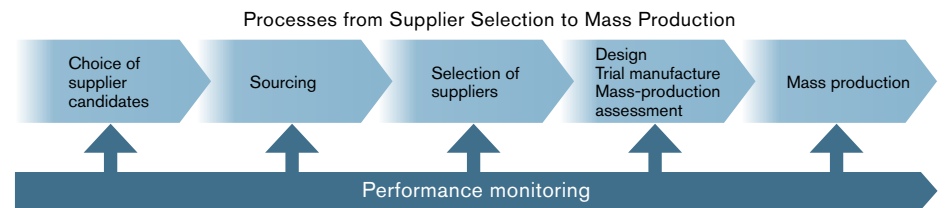
Nissan and Renault have produced a booklet, *The Renault-Nissan Purchasing Way*, outlining the values and processes the Alliance sees as important when doing business. This booklet has been shared with the tier-1 suppliers of Renault and Nissan since 2006.

In Japan, Nissan has also been practicing transactions confirming to "proper trading guidelines" issued by the Ministry of Economy, Trade and Industry for the automotive industry.

► website
 ► Click here to download *The Renault-Nissan Purchasing Way*.

COMPANY ORGANIZATION FOR THE VALUE CHAIN

The Renault-Nissan Purchasing Organization



WORKING WITH SUPPLIERS

To make its global supply chain sustainable, Nissan aims to conduct ethically, socially and environmentally responsible business at every stage. The company collates and manages a database of plant locations, total value of purchases, and other basic information for all of the suppliers with which it conducts transactions. Building on this understanding of its partners in the value chain, and based on the *Renault-Nissan CSR Guidelines for Suppliers* and the *Nissan Green Purchasing Guidelines*, the company is working together with all its suppliers to instill CSR principles.

Renault-Nissan CSR Guidelines for Suppliers

To effectively implement CSR practices worldwide, in December 2015, Renault and Nissan revised the *Renault-Nissan CSR Guidelines for Suppliers*. Renault and Nissan have distributed the revised guidelines to all suppliers worldwide. The Alliance partners have also asked suppliers to further distribute them to their own business counterparts to ensure they are shared throughout the supply chain. The 2010 first edition of the guidelines was drawn up for distribution by Renault and Nissan with reference to the CSR guidelines of the Japan Automobile Manufacturers Association, Inc.

Key revisions clarify the following areas: based on new Japanese government guidelines and regulations, updating procurement policy to include responsible mineral procurement; eliminating association with antisocial elements; requiring shared commitment to CSR activities with suppliers at the time the guidelines are distributed; and beginning third-party assessment of Alliance supplier CSR activities in fiscal 2016. As part of efforts to instill CSR practices at business partners in emerging countries, the new guidelines were published in Chinese, in addition to English and Japanese versions published to date.

Via explanations of expected practices in 26 categories across the following five areas, the guidelines aim to help suppliers to review their business activities from a CSR viewpoint and to implement CSR activities.

- 1 Compliance: Complying with laws; corruption prevention, etc.
- 2 Safety and Quality: Providing products and services that meet customer needs, etc.
- 3 Human Rights and Labor: Prohibition of child labor and forced labor; complying with working hours and remuneration laws, etc.
- 4 Environment: Implementing of environmental management; reducing greenhouse gas emissions, etc.
- 5 Information Disclosure: Open and impartial communication with stakeholders, etc.

The guidelines mandate compliance with laws and regulations. If suppliers engage in activities that violate the law, they are to report this immediately, along with investigation results, and to submit corrective countermeasures. In case of infringement, Nissan will take rigid actions based on its company rules and do everything necessary to prevent a recurrence.

Confirming CSR Observance at Suppliers

Nissan oversees its suppliers' observance of CSR requirements by confirming their acceptance of the *Renault-Nissan CSR Guidelines for Suppliers* and by checking their environmental management systems and environmental activities to be conducted with Nissan at time of selection.

In 2016, the Renault-Nissan Alliance began third-party assessment of suppliers' CSR activities to raise the standard of those activities through mutual confirmation. When results do not meet Alliance standards, suppliers are asked to draw up plans for improvement; Nissan then monitors their implementation.

The company also conducts CSR training in its purchasing department to ensure that employees there are equipped to check supplier CSR activities during routine operations.

Any problems in the supply of parts and materials may lead to problems for Nissan's production and value chain as a whole. The company therefore addresses CSR comprehensively, including confirmation of risk affecting suppliers' ability to supply under normal circumstances; annual follow-ups on suppliers' quality, cost, delivery, development, and management (QCDDM) performance; and measures crafted together with suppliers in response to natural disaster risk to ensure production continuity or early restoration of capacity.

Nissan promotes supplier observance of CSR requirements based on risk management, constantly assessing the situation at suppliers based on a range of factors. If cases of high risk emerge, the company works with suppliers to rapidly draft and implement countermeasures.

▶▶ website
 *1 Click here to download the Nissan Green Purchasing Guidelines.

▶▶ website
 *2 Click here to download the Renault-Nissan CSR Guidelines for Suppliers.

Suppliers and Environmental Activities

Nissan shares its environmental philosophy and environmental action plan with suppliers. To improve environmental performance throughout the value chain, Nissan published the Nissan Green Purchasing Guidelines ^{*1} in 2001, and has since then promoted actions in line with them. After Nissan and Renault integrated their technical standards for management of chemical substances in fiscal 2016, the company published a revised version of the guidelines in January 2017, instructing suppliers to apply them. The guidelines offer a more detailed explanation of the environment section in the *Renault-Nissan CSR Guidelines for Suppliers*.

Environmental activities at suppliers are based on the core components of compliance with environmental regulations and Nissan's basic environmental principles and activities to reduce environmental load.

To reflect trends in regulations worldwide, such as the European Union's Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Regulation and the European Reusability/Recyclability/Recoverability (RRR) Directive, Nissan has also added further banned substances and expanded component data management globally. Further, the company checks environment-loading substance management and activities when suppliers are selected for new cars. Nissan informs suppliers of specific actions to comply with the REACH Regulation and requires their compliance.

Based on the Nissan Green Program 2016, ^{*2} the company's midterm environmental action plan, Nissan holds annual environmental briefing sessions and has since fiscal 2012 conducted surveys to ascertain CO₂ emissions, water usage, waste production and other data related to environmental load. To further enhance its activities in this area, in fiscal 2014 Nissan adopted the supply-chain program offered by CDP, an international environmental NPO that manages a global system for disclosing corporations' environmental impact and strategies. In fiscal 2016, in partnership with CDP, Nissan worked to increase the accuracy of performance data. ^{*3}

▶▶ website

^{*1} Click here to download the revised version of the Nissan Green Purchasing Guidelines.

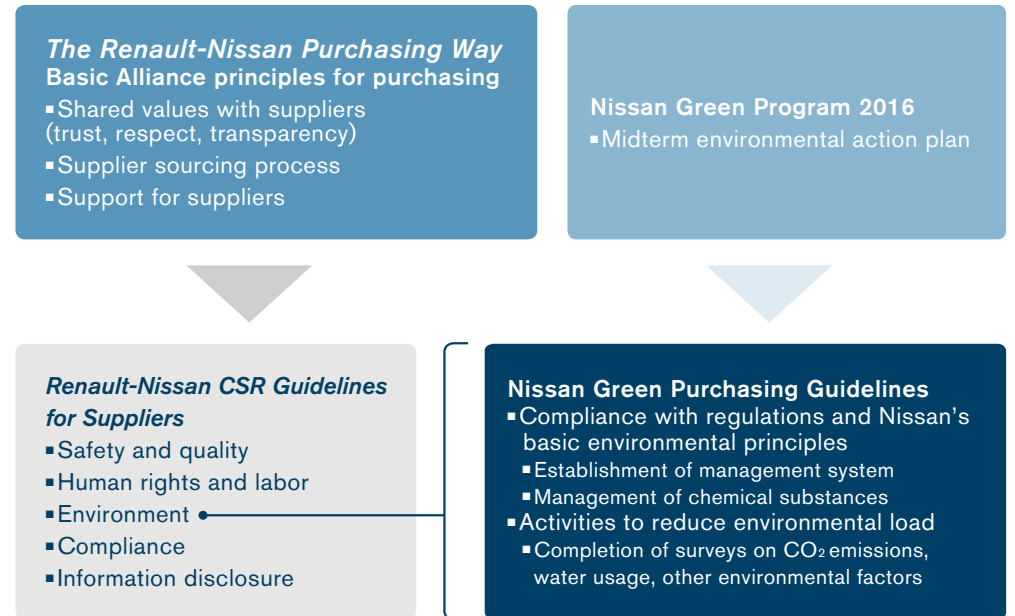
▶▶ page_19

^{*2} Click here for more information on Nissan Green Program 2016.

▶▶ page_126

^{*3} Click here for more information on supply-chain environmental survey data.

The Role of the Nissan Green Purchasing Guidelines



The Renault-Nissan Purchasing Way
Basic Alliance principles for purchasing

- Shared values with suppliers (trust, respect, transparency)
- Supplier sourcing process
- Support for suppliers

Nissan Green Program 2016
▪ Midterm environmental action plan

Renault-Nissan CSR Guidelines for Suppliers

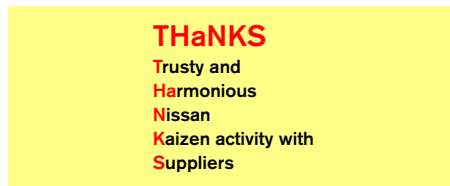
- Safety and quality
- Human rights and labor
- Environment
- Compliance
- Information disclosure

Nissan Green Purchasing Guidelines

- Compliance with regulations and Nissan's basic environmental principles
- Establishment of management system
- Management of chemical substances
- Activities to reduce environmental load
- Completion of surveys on CO₂ emissions, water usage, other environmental factors

Promotion of Monozukuri Activities with Suppliers

Nissan has been working to continually improve the competitiveness of its products through its Monozukuri Activities program, a collaboration among suppliers and Nissan that commenced in 2008. Since 2009, these activities have expanded through the joint THaNKS Activities initiative, which emphasizes trust and cooperation between Nissan and its suppliers. With the goal of working with suppliers to become cost leaders in today's challenging market conditions, the company is striving to improve product quality, reduce costs and rationalize manufacturing through measures that include increasing production volume per part, promoting localization and improving logistics. Based on activities at its own plants, Nissan is also making efforts together with major suppliers to reduce their electricity, gas and other energy costs and CO₂ emissions, as an energy-efficient THaNKS Activities initiative.



In fiscal 2013, Nissan introduced the Total Delivered Cost (TdC) Challenge as part of efforts to achieve the goals of its midterm business plan, Nissan Power 88. The initiative aims to optimize all fluctuating costs, including for specifications, materials, exchange rates and logistics. From fiscal 2017 onward, Nissan's various functional departments and suppliers will continue to come together to make strong efforts in the TdC Challenge and improve both quality and supply.

Engagement with Suppliers

Providing suppliers with timely and accurate information is a key task for Nissan. Suppliers' meetings are held in Japan and overseas to spread understanding of the company's purchasing policy for the fiscal year and midterm business plan, as well as other matters. In the case of Japan, Nissan holds monthly meetings and directly informs suppliers of its production plans, various activities and requirements. The meetings are also an opportunity for Nissan to respond to supplier questions and requests.

Recognizing Supplier Contributions Worldwide

Each year Nissan recognizes the contributions of its suppliers with awards presented in each of the regions where it operates, as well as with two worldwide supplier awards—the Global Quality and Global Innovation Awards. These are presented to suppliers that have contributed to its business performance at the global level. This awards system aims to encourage suppliers in the global supply chain to embrace Nissan's management approach, which balances economic activities of quality, cost reduction and technological development with environmental concern and social responsibility.

Global Quality Award recipients are selected by Nissan's purchasing, quality and other divisions using standard criteria applied worldwide. Global Innovation Award recipients are selected from suppliers nominated by its production, development and quality divisions in the two categories of product technology and process management. In fiscal 2016, six companies received Global Quality Awards, while Global Innovation Awards went to six companies in the product technology category.

Conflict Mineral Policy and Measures

In August 2012, the U.S. government enacted regulations requiring companies to report the use of four minerals mined in the Democratic Republic of the Congo and surrounding countries, believed to be sources of funds for armed insurgents. Agreeing with the spirit of this legislation and with the aim of ensuring full CSR awareness, Nissan investigated the supply chain for any use of conflict minerals and established a policy aimed at the non-use of conflict minerals, publishing related information on its website. Investigations began in fiscal 2013.

The search for conflict minerals throughout the global supply chain is a large-scale undertaking. Nissan works together with organizations including the Japan Automobile Manufacturers Association, Inc., the Japan Auto Parts Industries Association and the Japan Electronics and Information Technology Industries Association and regularly discusses the issue in working groups, while considering the best methods for investigation and result analysis.

► website
 Click here for more information on the midterm business plan, Nissan Power 88.

► website
 Click here for more information on Nissan's conflict mineral measures.

WORKING WITH DEALERS

Nissan undertakes various measures to ensure that its approach to compliance is shared with dealerships and to enhance its internal controls. The company is strengthening lines of communication with dealers to further improve its CSR management.

Working with Dealers for CSR Management

To promote consistency in the CSR management approaches taken by Nissan and its dealers, the company carries out activities on an ongoing basis aimed at helping dealerships in Japan enhance their compliance.

Twice a year Nissan organizes self-inspection programs at all dealerships to enhance understanding of compliance matters and improve their compliance management status. The dealerships check their current compliance status and issues based on Nissan's self-assessment checklists and use the PDCA (plan, do, check, act) cycle to make voluntary improvements. Nissan also annually updates, edits and expands the checklists based on audit results, informing dealerships of changes and ensuring compliance. The program status is shared among dealerships and applicable Nissan departments and reports are made to the Board of Directors. Through measures to check improvements and their effectiveness, and a unified approach with dealerships, Nissan strives to further improve its CSR management.

When major compliance issues occur, the legal, communications, external and government affairs and other applicable Nissan departments work together with dealers to take prompt and appropriate action.

Compliance Training for Dealers

Nissan conducts the following initiatives as part of training for dealers:

Regular Revision of Code of Conduct

Every three years, Nissan revises its Code of Conduct in response to legal amendments and social demands of corporate ethics. Nissan trains its employees concerning revisions and ensures thorough knowledge and implementation of the updated code.

Bolstering Information Security and Preventing Harassment

Based on teaching materials that cover the same topics as taught in Nissan's information security courses, each dealer implements training to avert risks arising from serious incidents occurring in the course of daily activities, such as virus infections, unintended email transmissions and information leaks due to misplaced or stolen PCs.

Examples of inappropriate posts on social networking services or blogs that are in violation of Nissan's global social media policy are shared with dealers, which further share these internally to help prevent such posts. To enhance awareness and prevent recurrence, Nissan shares information on the potential adverse impact, not just with the dealers but also with the Nissan Group as a whole, when such posts are made.

In the light of growing social interest in abuses of authority and incidents of such abuse at dealerships, Nissan is providing training materials with a focus on power harassment. Since fiscal 2012, dealers have implemented training on such topics as "examples of acts and statements that constitute harassment," "what impact a harassment case can have," "past incidents involving dealers" and "what steps should be taken when a case comes to light." In fiscal 2016, sections of the training materials, principally relating to "examples of acts and statements that constitute harassment," were again updated with reference to recent cases.

In fiscal 2016, Nissan also conducted work management surveys at dealers, offering guidance about how to make improvements at those outlets where management approaches were found to be deficient. These actions promoted appropriate work management.

▶▶ page_109

▶ Click here for more information on the Nissan Global Code of Conduct.

EMPLOYEES

The needs of customers are becoming increasingly diverse. To meet these needs Nissan employees from different backgrounds must work together. Employees are the driving force for the sustainable growth of Nissan, and the company places great importance on establishing a workplace that maximizes the performance of all.

The global expansion of Nissan's corporate activities has meant the growing diversification of not only Nissan's customers but also its employees. Work and lifestyle choices are changing, driven by demographic changes such as an aging population and urbanization. Nissan believes that for employees to work in a worry-free, self-initiated manner, they need to be able to pursue their careers regardless of gender, nationality or other factors and to choose from among various work styles to suit their particular stage of life. Skill development programs are another essential part of making the workplace attractive to employees.

The workplace environment is being strengthened around four pillars: "respecting diversity as a core component of management strategy," "offering career development and learning opportunities," "ensuring employee safety and health" and "strengthening internal communication."

NISSAN'S ACTIONS

Ratio of managerial posts filled by women (fiscal 2016, Japan):

10.1%

EMPLOYEES

SCORECARD

FY2016 TARGET ACHIEVEMENT RATE: ✓✓ ACHIEVED ✓ MOSTLY ACHIEVED × NOT ACHIEVED

Nissan makes year-round use of the CSR scorecard as a fundamental tool to manage, review and validate its progress in each of the sustainability strategies defined for its CSR activities. The table below shows some of the values behind Nissan's ongoing activities and the indices used in the scorecard to gauge the company's performance.

Nissan Priorities	Nissan Objectives and Long-Term Vision	Indicators of Progress	FY2016 Results	Assessment
Respect for diversity	Raise the ratio of women in managerial positions to 14% or higher globally (10% or higher in Japan).	Ratio of women in managerial positions	Global: 14% Japan (Nissan Motor Co., Ltd.):10%	✓✓
Career development and learning opportunities	Build a learning-oriented corporate culture.	The lowest of the average scores for each course in annual trainee satisfaction surveys (on a scale of 1 to 5)	4.2 or higher	✓✓
	Strengthen support for self-initiated career development.	Open Entry System (program under which employees can apply for advertised position openings) fill rate	55.6% Posts open for entry: 126 Successful applicants: 70	✓✓
Building safe workplaces	Strengthen efforts to create a safe work environment.	Lost-time injuries frequency rate (global) (Total lost-time injury cases ÷ total working hours × 1 million)	0.68	✓✓
Dialogue with employees	Aim for high implementation and participation rates of employee satisfaction surveys to better capture employees' views.	Number and participation rate of global and regional employee satisfaction surveys	Implemented FY2016 global employee satisfaction surveys in October–November 2016; global participation rate of 93% achieved	✓✓



NISSAN'S APPROACH TO EMPLOYEES

Nissan strives to create a meritocratic workplace where employees are motivated to rise to challenges and are able to work safely and comfortably. Nissan ensures employee rights by requiring that all employees respect the human rights of others and forbids discrimination against or harassment of others based on race, nationality, gender, religion, physical capability, sexual orientation, age, place of origin or other reason. Nissan employees are empowered to report the discovery of discrimination in the workplace. By respecting employee diversity, Nissan promotes the establishment of a work environment that maximizes the performance of every employee and encourages teamwork to achieve ambitious goals.

The company has established the Nissan Global Code of Conduct, which applies to all Group employees worldwide. It describes how employees should act, and the standards apply globally to all Nissan Group companies.

The Nissan Way is a guiding principle that aims to ensure sustainable growth by motivating each employee. Based on the company's belief that "the power comes from inside," the Nissan Way outlines five mindsets and five actions. The Nissan Way is implemented throughout the Group to ensure that the activities of all employees lead to value creation for the customer.

The Nissan Way has been made available to employees worldwide in eight languages (Japanese, English, French, Chinese, German, Spanish, Dutch and Russian). It places importance on approaching all issues with clarity and shared understanding as well as nurturing a mindset to achieve maximum results with minimum resources. It also encourages employees to pursue ambitious goals. Welcoming diversity by being inclusive of a variety of views can establish a work environment that maximizes the performance of every employee—regardless of gender or nationality—and engender new thinking that can contribute to the company's business performance.

Nissan employees are educated regarding the Nissan Way and are evaluated based on its principles. Best examples of implementing the Nissan Way are shared globally, and top executives communicate its importance throughout the company in an effort to promote its value.

▶▶ [page_109](#)

▶ [Click here for more information on the Nissan Global Code of Conduct.](#)

"The power comes from inside"

The focus is the customer, the driving force is value creation and the measurement of success is profit.

Mindsets

- 1 Cross-functional, Cross-cultural**
Be open and show empathy toward different views; welcome diversity.
- 2 Transparent**
Be clear, be simple, no vagueness and no hiding.
- 3 Learner**
Be passionate. Learn from every opportunity; create a learning company.
- 4 Frugal**
Achieve maximum results with minimum resources.
- 5 Competitive**
No complacency, focus on competition and continuous benchmarking.

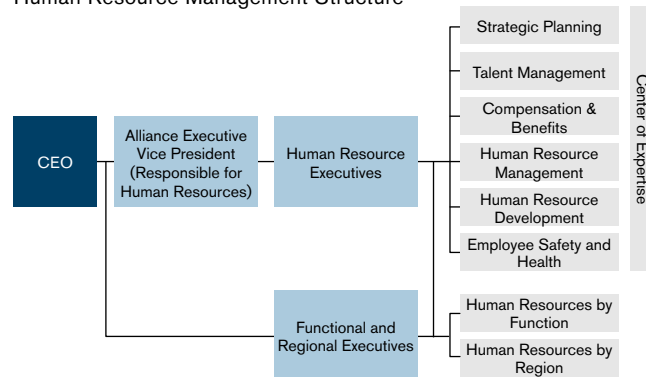
Actions

- 1 Motivate**
How are you energizing yourself and others?
- 2 Commit and Target**
Are you accountable and are you stretching enough toward your potential?
- 3 Perform**
Are you fully focused on delivering results?
- 4 Measure**
How do you assess performance?
- 5 Challenge**
How are you driving continuous and competitive progress across the company?

HR ORGANIZATION

Nissan maintains three human resource management initiatives centered on (1) a specialized Center of Expertise, (2) human resources by function and (3) human resources by region. These three approaches, respectively, support Nissan's global operations, the Renault-Nissan Alliance and management by function and region. Regarding human resource management by region and function, reports are submitted not only to executives in charge of human resource matters but also to those responsible for each region and function. Also, an organization independent of the human resource function exists for diversity promotion.

Human Resource Management Structure



As of March 2017.

RESPECT FOR DIVERSITY

Fostering diversity is an important management strategy at Nissan. The company undertakes a number of initiatives to realize the goal of achieving sustainable corporate growth while respecting diversity.

Promoting Diversity Around the Globe

Nissan's diversity policy is determined by the Diversity Steering Committee (DSC), comprising executives representing each business division. The DSC plays a leadership role in promoting diversity in Japan and Europe, while in North America, this role is performed by the Americas Diversity Council (ADC). The Diversity Development Office is a department dedicated to diversity issues in Japan, and the Americas Diversity Office is charged with promoting diversity in North America. In other markets, diversity is promoted by the human resource and other departments.

Global Structure for Diversity Promotion

Region	Promoting Body	Office in Charge
Japan (Global Headquarters)	Diversity Steering Committee	Diversity Development Office
North America	Americas Diversity Council	Americas Diversity Office
Europe	Diversity Steering Committee (Europe)	Human Resources and General Affairs (Europe)
Latin America and the Caribbean	-	Governmental Affairs and Social Responsibility
Africa and the Middle East	-	Human Resource Division (Africa and the Middle East)
Asia and Oceania	-	Human Resource Division (Asia and Oceania)

Diversity as a Source of Strength

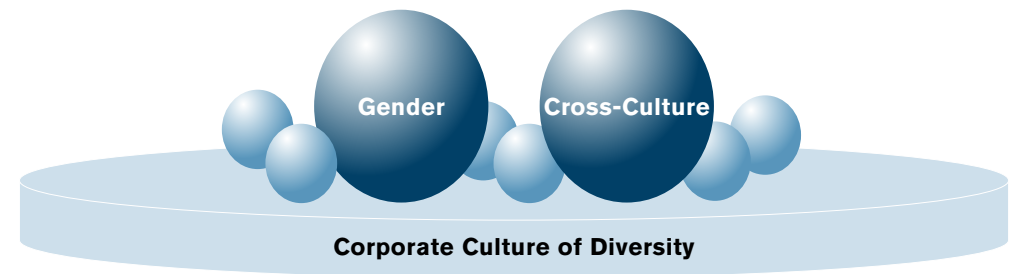
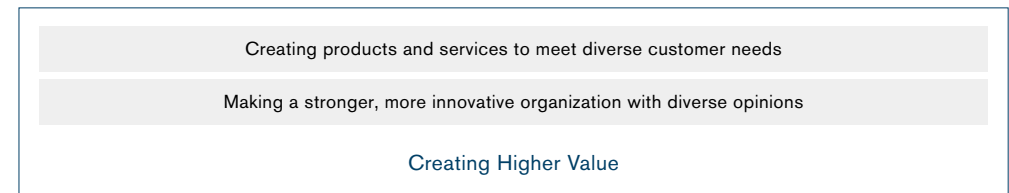
For Nissan, diversity is a source of strength. Ideas and perspectives contributed by employees from diverse backgrounds—in terms of gender, nationality, culture, age, academic background and lifestyle—can produce creative solutions with higher value, leading to enhanced corporate performance. Diversity rests at the foundation of Nissan’s business strategy to meet the diverse needs of global customers by offering better products and services. All Nissan facilities are engaged in efforts to harness workplace diversity in the areas of gender and culture. Nissan strives to increase female employees’ participation, while also actively exploring ways to create higher value through cultural diversity, in particular by utilizing the cross-cultural nature of the Alliance formed with Renault in 1999.

Work-life management is a key component of Nissan’s efforts in Japan, where all employees, regardless of their gender or age, may flexibly choose a suitable lifestyle for their particular stage in life. To ensure a workforce in which female employees boast a diverse range of skills, Nissan Motor Co., Ltd. has guidelines calling for 50% of newly hired office workers, 15% of engineers and 25% of technicians to be women. In North America, employees with diverse backgrounds in terms of race, sexual orientation and military service contribute to enhancing Nissan’s corporate value. In Europe, Nissan is advancing cross-cultural corporate initiatives with many Alliance partners.

The company also undertakes a full set of initiatives to nurture a diversity-oriented mindset among all employees to reinforce a corporate culture that respects diversity.

► website
 Click here for more information on Nissan’s diversity.

Nissan’s Diversity Initiatives



Global Initiatives to Support Women’s Participation

Since fiscal 2004, ongoing support has been provided for the participation of female employees in two main areas: career development and the business process.

Supporting Women's Career Development Around the Globe

The participation of women, particularly in management positions, is essential to providing diverse value to customers. Nissan focuses on increasing female representation in all levels of management and providing training to ensure that top candidates will be ready to take on greater responsibility. Support is provided for women's career development in every region where the company operates.

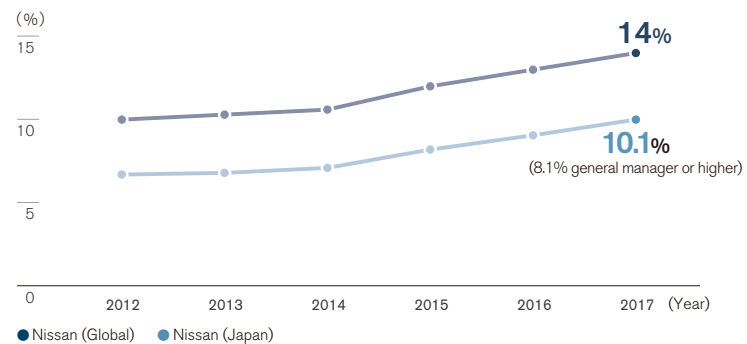
Specifically, activities are organized that are geared toward female employees, including skill-development training courses and networking events. Examples of career development initiatives include mentoring programs and roundtables led by Nissan executives. Activities focusing on young female engineers are conducted as well.

In Japan, Nissan provides personalized support for female employees through individual counseling sessions with career advisors. Career development meetings are organized for young female employees so they may network with other professional women outside of the company and with women who have risen into management roles in Nissan. Interviews with senior female employees contributing in a variety of fields within the company are posted on the corporate intranet to encourage more women to develop their careers. Additionally, to help employees who take childcare leave continue their careers smoothly, counseling from supervisors and other support is provided during the leave period.

As a result of a broad range of efforts, women comprise 8.1% of general and higher-level managers in Japan (as of April 2017), 4 times the 2008 level of 2.0%, and a total of 10.1% of managerial positions are filled by women. This compares favorably to the average of 4.2% for Japanese manufacturers with 1,000 or more employees (according to 2016 statistics from Japan's Ministry of Health, Labor and Welfare).

As of April 2017, women fill 14% of the managerial positions at Nissan globally, up from 7% in 2008, with many being appointed to overseas assignments.

Ratio of Women in Management Positions



Women's Forum

The Renault-Nissan Alliance sponsors the Women's Forum for the Economy and Society, which is an international platform to promote the advancement of women in the workplace. The annual global meeting in France gives women an opportunity to build networks and expand horizons through dialogue with their counterparts in diverse industries and by participating in workshops. Employees from Nissan Group companies around the globe are selected to participate in the meeting each year, and 10 took part in 2016.

Inviting Women's Input in the Business Process

In Japan, women have a significant influence on car-buying decisions, as 30% of all cars are purchased by women and roughly another 30% of purchases are by men with input from women, meaning that women participate in nearly two-thirds of vehicle purchase decisions. A similar trend can be seen globally as well. Adopting female employees' views is essential for meeting diverse customer needs worldwide.

Nissan facilitates input from female employees—including those working at affiliated and sales companies—in all stages of its business, from the development of new vehicles through their manufacture and sales. Models like the Nissan Serena minivan released in Japan in August 2016 have benefited from consideration of women's viewpoints. For example, designers and engineers adopted recommendations for a capless fuel tank, allowing drivers to refuel the vehicle without dirtying their hands, and dual back doors that require minimal force to open and allow cargo to be loaded even in confined spaces. In the assembly stage as well, Nissan promotes ergonomic design of equipment and work processes at its manufacturing plants to benefit female workers. This benefits women while at the same time effectively increasing efficiency and reducing errors for all employees. The company has been recognized for its efforts in these areas, receiving the Incentive Prize in the Japan Productivity Center's 2016 Empowerment Awards.

Nissan sales staff must also respond to the needs and questions of men and women customers alike. The Nissan Ladies First Project was launched in fiscal 2013 to introduce shop designs and services with female customers in mind. A pivotal role in the project is played by female sales staff known as CAs, or car-life advisors. Both male and female customers report high satisfaction with Nissan's female CAs, and the company offers ongoing training, such as workshops for young female CAs, in addition to improving the work environment, to give female employees more room to succeed. As of March 2017, 1,172 female CAs were active across Japan, accounting for 9.6% of the national total, compared to 8.5% in March 2016. A Ladies First Shop certification program was also launched in 2013 to enhance the satisfaction of female customers with both showroom and after-sales service experiences. Some 277 shops nationwide (as of March 2017) offer special services for female customers.

Nissan also employs women as technical advisors (TAs) to help facilitate the vehicle maintenance process for customers. Nissan has received a positive response for the polite and responsible service provided by the female TAs, thereby contributing to the enhancement of customer satisfaction of sales companies. Training courses and informal gatherings for female TAs are held to promote networking and skills development.

A Firm Grounding for Cultural Diversity

Nissan recognizes the need to make full use of the strengths and abilities of its multinational, multicultural family of employees in order to develop its business globally. The company is working to leverage the synergy created through the cross-cultural Alliance with Renault, which not only recognizes and accepts cultural differences but also seeks to make cultural diversity a source of strength. Overseas job transfers have increased in recent years, and many transferees, both men and women, are no longer necessarily from Japan, the United States or other major markets. This is seldom seen at other global businesses and demonstrates Nissan's commitment to this area.

Nissan makes cultural diversity an integral part of its corporate culture. A vital part of the company's success rests on ensuring that people are welcome no matter where they come from, what language they speak, how old they are or what their background or training is. Nissan's top decision makers, for example, often have different citizenship from the place where the company is headquartered, as can be seen from the company's Executive Committee, which is 40% Japanese and 60% non-Japanese. To more efficiently promote Nissan's partnership with Daimler AG and AVTOVAZ, efforts are being made to expand the share of managerial staff in Europe who speak German or Russian.

To help employees utilize cultural differences as a source of strength, the company has designed its e-learning program as a course open to anyone at any time. In Japan, for example, this enables Japanese people to learn skills for understanding and communicating with business partners of different cultural backgrounds so that they can work together to get results. Training sessions cultivate a better understanding of specific countries with which Nissan enjoys particularly close relations, and further efforts are underway to make cultural diversity an integral part of Nissan's corporate culture.

Nissan's Diversity Mindset

Nissan carries out regional diversity events and diversity training for employees around the world. All employees can learn about the company's diversity vision through the articles and other materials posted on the intranet site.

In Japan, where Nissan expects the number of employees balancing work with caring for elderly relatives to increase going forward, the company has held seminars since fiscal 2015 where employees can learn the basics of care and explore how company policies and local services can help them maintain the work-care balance. As a new approach in fiscal 2016, Nissan also hosted discussions led by people with care experience. The company also provides e-learning programs that offer opportunities for employees to learn about diversity at any time, including a course on gender diversity to understand and draw on male/female differences, as well as seminars and an e-learning program on the inclusion of sexual minorities (lesbian, gay, bisexual and transgender individuals).

Nissan believes that embracing diversity is essential to growing as a trusted company. To instill this awareness among all managers and employees, a program called Championing Diversity was held in the United States. The program is designed to enhance workplace communication among colleagues with diverse backgrounds and viewpoints and to produce results through cooperation among multiple teams.

In Europe, a multicultural effectiveness training program was conducted to raise awareness of cultural differences and to support all employees working in a multicultural environment.

Accelerating the Happy8 Revolution for Welcoming Workplaces (Japan)

Nissan has initiated a series of work-style reforms that provide a crucial foundation for supporting diversity, allowing employees with a range of values and life needs to perform at their best.

One example was the 2006 introduction in Japan of a system allowing employees to work from home when necessary to maintain the balance between work and caring for children or elderly relatives. This policy was revised in 2010 to allow all employees (except those involved in production processes) to work from home for any reason, and in 2014, a system was introduced allowing partial working from home in units of 30 minutes, with no limits on the number of days partially worked from home as long as the monthly total time is 40 hours or less. Roughly 5,500 employees made use of this system in fiscal 2016.

In 2015, Nissan introduced the Happy8 program, a work reform emphasizing the ideal of an eight-hour work day. By communicating this ideal to employees, Happy8 aims to increase their personal and organizational productivity while also improving their work experience, private life and health. As part of creating a more welcoming workplace, in February 2017 Nissan also began promotion of the Happy Friday program, allowing employees to leave at 3:00 p.m. on the last Friday of each month.

With the slogan "Eight productive hours! Richer lives, better health, Happy8," Nissan will continue striving for more flexible and appealing work styles.

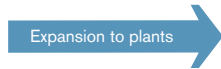


A symposium for Nissan employees on the theme of diverse work styles.

Creating an Environment Conducive to Work-Life Balance

Comprehensive Support for Employees	
<p>Supporting employee performance: Career development and work-life balance</p> <ul style="list-style-type: none"> • “Pre-parenthood seminar” • “Reinstatement seminar” Employees receive opportunities to think about their career paths and work prior to maternity leave and reinstatement. • Internal social networking site “Work-Life Balance Park” 	<p>Supporting managers who have employees in the nurturing stage</p> <ul style="list-style-type: none"> • Guidance on offering promotion exams before childcare leave • Management seminar for managers with employees in the nurturing stage • Diversity training for new managers • Diversity events
<p>Company infrastructure (systems)</p> <ul style="list-style-type: none"> • Work-at-home program Employees caring for young children or elderly parents can spend up to 50% of the month working at home, and others are allowed up to 40 hours per month. All employees except those in manufacturing processes are eligible. • Super-Flextime without core time • Shorter working hours (for employees engaged in childcare or nursing care) • Family support program (special paid holidays for marriage, childbirth by a spouse, childcare, nursing care and fertility treatment) • Childcare leave, nursing care leave, maternal protection leave • Accompanying-leave program (three years maximum) • Reemployment policy 	<p>Company infrastructure (facilities and equipment)</p> <ul style="list-style-type: none"> • In-house childcare center (four sites) <ol style="list-style-type: none"> 1. Supporting employees who actively work at balancing both work and childcare to help them perform at their best 2. Supporting employees' return to work when they wish, without being affected by the issue of daycare waiting lists in Japan • Lending personal computers to employees on leave (allowing them to access the company intranet and email) • MM care room (lactation room)

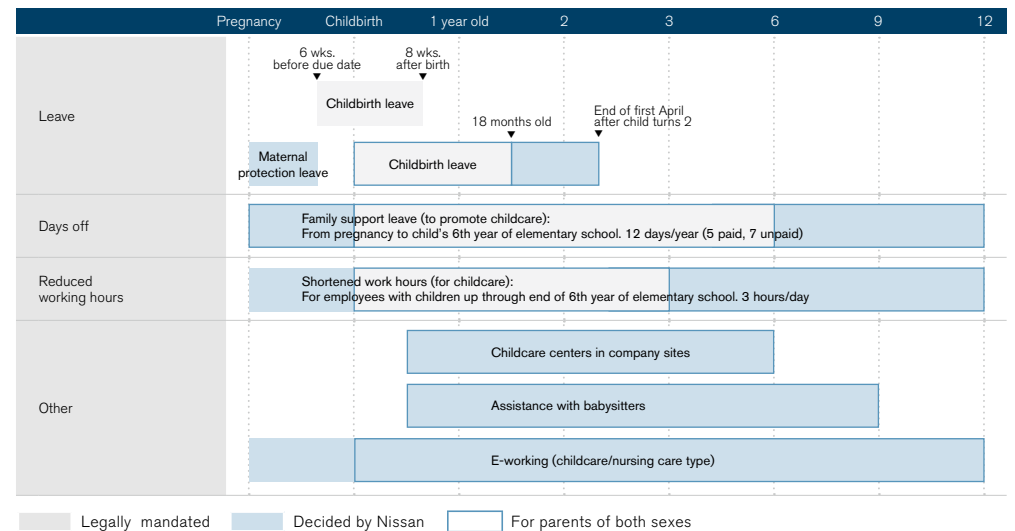
In-house Childcare Centers for Nissan Employees



	March Land Atsugi Nissan Technical Center (Atsugi)	March Land Atsugi Axt Nissan Global Information System Center (Atsugi)	March Land Minatomirai Nissan Global Headquarters (Yokohama)	March Land Oppama Nissan Oppama Plant (Yokosuka)
Capacity *	42	10	15	10
Hours	7:30 a.m.–10:00 p.m.	8:30 a.m.–6:30 p.m.	8:00 a.m.–8:00 p.m.	5:00 a.m.–7:30 p.m.
Established	April 2005	October 2012	January 2013	April 2017

* Capacity determined based on facility area.

Support Systems for Childbirth and Childcare (Japan)



Top-Down and Bottom-Up Approaches to Promoting Diversity

Nissan believes that both top-down and bottom-up approaches are needed to promote diversity. Diversity becomes a pervasive concept when activities spearheaded under the strong leadership of executives are combined with initiatives from the floor.

Regarding the bottom-up approach, Nissan emphasizes self-initiated opportunities for learning. Female engineers at the Nissan Technical Center and Nissan Advanced Technology Center in Atsugi, Kanagawa Prefecture, have launched a team effort to consider ways to balance work with life. Trials began in fiscal 2012, and full-scale activities kicked off in fiscal 2013. Participants acquire knowledge on ways to sustain their careers by sharing tips, seeking each other's advice and conducting interviews with female role models.

In the United States, employee-driven Business Synergy Teams (BSTs) have been launched with management support to leverage diversity to achieve business objectives, expand cross-functional interaction and assist with community outreach. These BSTs are operated from Nissan's North American headquarters in Franklin, Tennessee, R&D facility in Farmington Hills, Michigan, and the Dallas-based Nissan Motor Acceptance Corp., as well as at production facilities in Smyrna and Decherd, Tennessee, and Canton, Mississippi.

Employee-Driven BSTs Enhance Work Environments

BSTs link Nissan's diverse workforce under a common theme, and members have highly specialized knowledge. There are currently 24 BSTs across the United States, including the Women's BST (WBST), the first such group, established in 2007. This was followed by the creation of the Multicultural BST (MBST), which aims to encourage cross-cultural communications and awareness, the Gay-Straight Alliance at Nissan (GSAN), the Veterans Team and other teams.

In 2013, the WBST began a program to encourage young women to consider careers in technical fields by partnering with Microsoft Corp. It organizes "Digigirlz," a one-day event in which female high-school students participate in activities that expose them to the specific ways Nissan uses technology to create and market its innovative products. Also featured are presentations by Nissan executives who share their professional experiences and insights.

In 2014, the health-focused BST Wellness at Work (W@W) was established. This team is engaged in promoting not just physical and mental health but all dimensions of well-being.

By voluntarily participating in BSTs, employees actively work to create a more highly motivated and dynamic work environment while contributing to Nissan's promotion of diversity and inclusion.

Enhancing Workplace Diversity in the Americas

Mentoring Program for Female and Minority Employees

Mentoring is an important tool for raising the motivation and performance of Nissan's staff, particularly women and minorities. Nissan North America (NNA) offers mentoring in a variety of formats—closed and open, private and in small groups, and theme-based activities. The company evaluates the achievements of the program and makes improvements on an ongoing basis.

Supplier Diversity

NNA is committed to encouraging relationships with diverse suppliers. This commitment is grounded in the definitions of minority-owned and woman-owned businesses developed by the National Minority Supplier Development Council and Women's Business Enterprise National Council.

Diversity in the Community

NNA also fosters future leaders by investing in student programs and offering students opportunities to pursue careers in science, technology, engineering and math (STEM) fields. Together with major scholarship programs for students from disadvantaged areas, NNA's diversity recruitment group works to improve internship and employment opportunities for these students.

Enhancing Workplace Diversity in Europe

In Europe, as part of Nissan's efforts to promote gender diversity, the company holds career fairs and provides support for female employees as they continue their careers. To encourage increased hiring of women with engineering or other technical degrees, in 2014 the Nissan Skills Foundation was established at the company's plant in Sunderland, England, and in 2015 career development events were held for around 7,200 female students between 14 and 19. Additionally, in September 2015, Nissan Europe worked with an external group to start a daycare service within 10 kilometers of the company's French headquarters and employees' homes.

Future Issues in Promoting Diversity

More than 10 years have passed since Nissan announced its proactive commitment to diversity. The company has placed great importance on understanding and respecting other cultures, as some 90% of vehicle sales are now in markets other than Japan and as opportunities to work with partners around the globe have expanded. Women are actively working in a variety of fields at Nissan Group companies worldwide, and the share of women in managerial positions is steadily rising.

A key theme henceforth will be to enable all employees, regardless of gender or nationality, to perform at their best in a global business environment under flexible and efficient work arrangements.

Nissan will continue to vigorously pursue diversity as a corporate strategy by promoting the efforts of diverse human resources, thereby reinforcing organizational strength and maximizing business results.

History of and Recognition for Diversity at Nissan

Nissan established the Diversity Development Office in Japan in 2004 to play a principal role in supporting the advancement of female employees and promoting multicultural understanding. These efforts to enhance Nissan's diversity and the value it places on a diverse workforce have not gone unnoticed.

In 2015, Nissan became the first company in Kanagawa Prefecture to

earn Platinum Kurumin certification, which is granted to Kurumin-accredited companies (certified as supporting childcare) that provide an even higher standard of childcare support. In 2017, moreover, Nissan earned a spot as a Nadeshiko (active utilization of women) brand for the fifth consecutive year since 2013.

These awards are a clear sign that Nissan's commitment to diversity is producing results and that the company is on the right track in making cross-cultural and gender diversity key elements of its competitive strategy.

Nissan's Awards for Diversity

Year	Award	Sponsor
2017	Nadeshiko Brand (5th straight year)	METI and TSE
2015	Incentive prize, Empowerment Award	Japan Productivity Center
2015	Platinum Kurumin Mark	Kanagawa Labor Bureau, MHLW
2015	Perfect Score (100) in Corporate Equality Index (2nd straight year)	Human Rights Campaign (U.S.)
2015	Prize for excellence, 15th Tele-work Promotion Awards	Japan Telework Association
2015	Japan's Minister of State for Special Missions Prize, Advanced Corporation Awards for the Promotion of Women	Gender Equality Bureau, Cabinet Office
2014	DiversityInc Top 25 Noteworthy Companies for Diversity & Inclusion	DiversityInc (U.S.)
2013	Diversity Management Selection 100	METI
2013	Grand Prize, J-Win Diversity Awards	J-Win
2008	Catalyst Award	Catalyst Inc. (U.S.)



Nadeshiko Brand.



Platinum Kurumin Mark.



Advanced Corporation Awards for the Promotion of Women.

* Nissan was the recipient of other awards in the United States.

CAREER DEVELOPMENT AND LEARNING OPPORTUNITIES

Nissan believes that employees should “design their own careers” and that the company should actively assist their efforts to do so. Learning is an essential preliminary step for value creation, and a corporate culture of learning cannot exist without the desire to create value. As an organization that grows through constant learning, Nissan supports employees’ personal growth through proactive human resource development.

Continually Improving Human Resource Systems

Nissan values the skills and potentials of all employees, working constantly to improve its human resource systems to achieve an organization empowering employees to reach their full potential. The evaluation-based remuneration system used to accurately gauge employee contributions is structured in a way that motivates them to set and achieve high goals. An employee’s salary is determined through a combination of performance evaluations, which measure how well the employee achieved certain goals (commitments), and competency evaluations, which measure their skills, knowledge and attitude.

Support for Self-Designed Careers

Under a human resource management policy of offering employees opportunities for personal growth and satisfaction as long as they create value, Nissan invites employees to meet with their supervisors at least twice a year to discuss their performance and competency evaluations, as well as their career aspirations and goals.

Training programs to raise the evaluation skills of supervisors also contribute to the enhancement of career designing capabilities of employees. Specialized tools keep track of evaluation records so that even a newly instated supervisor can ascertain employee progress at a glance, maintaining consistency in human resource development. Nissan conducts surveys to gain employee input regarding the evaluation meetings and to learn their level of understanding and comfort with the system. Based on the results, the company implements measures and makes improvements if necessary. Nissan also monitors employee satisfaction regarding the meetings with their supervisors, and there has been an improvement in employee understanding and acceptance of the evaluation system.

Employees in Japan also have the chance to take on the challenge of a new position through the Shift Career System (SCS) and the Open Entry System (OES). The SCS enables employees to apply for positions in other departments and work in areas that interest them regardless of whether there is a position immediately available. The OES allows them to apply for all openly advertised positions. During fiscal 2016, a total of 205 employees applied for 126 open posts, and 70 of them succeeded in getting the positions they applied for.

Offering Learning Opportunities

Within the company, Nissan implements training programs allowing employees to gain the task- and position-specific skills they need and giving them opportunities to extend their knowledge in fields of their choosing. These measures create a culture of constant learning at the global level within Nissan.

Training Programs at Global Headquarters in Japan

	FY2014	FY2015	FY2016
Number of trainees	14,007	13,597	14,194
Total hours in training	452,631	495,779	452,174
Hours per trainee	19.4	21.9	20.1
Trainee satisfaction (out of 5)	over 4.2	over 4.2	over 4.2
Investment per trainee (¥)	71,700	74,000	69,000

Nissan Learning Center

Employees are the most important resource for Nissan, and cultivating their skills is a vital task for the company. The Nissan Learning Center is a specialized training institute established to offer employees high-quality and timely skill-development opportunities to support their growth. The center provides training for all employees based on the Nissan Way and structured around the four pillars of “enhancing familiarity with the Nissan Way,” “improving management skills,” “improving business skills” and “improving technical skills.” The center also operates Monozukuri University to enhance the skills of Nissan’s core manufacturing-related human resources.

Monozukuri University

The auto industry today is marked by the rapid pace of innovation and increasing technological sophistication. To maintain and develop its *monozukuri* tradition of careful craftsmanship that underpins the company's internationally competitive product manufacturing, Nissan needs individuals who have an understanding of the latest technologies that go into building an automobile and well-rounded personalities with outstanding management skills. Monozukuri University was set up within the Nissan Learning Center to develop capable leaders who can pass down Nissan's technologies and skills to future generations. It offers a variety of programs aimed at developing engineers and technicians who carry forward the "Nissan DNA" and achieve continued success through the implementation of the Nissan Way. The "university" comprises Nissan Technical College, Genba Kanri (shop-floor management) School and Engineering School.

Engineering and Technical Skill Education Around the World

To support Nissan's efforts to expand its business globally, the company must improve the engineering skills of individual employees working across the globe. The company offers opportunities for personal growth equally to all employees in both R&D and manufacturing, whether they work in Japan or elsewhere, to help them enhance their capabilities.

Education for Engineers

Nissan developed a global training program (GTP) to be administered to its 19,000 engineers at development centers worldwide and completed basic training of all engineers from 2012 through 2015. Since 2016, Nissan has been working on advanced training covering more specialized content.

Education for Technicians

To clearly spell out the production methods shared by Nissan and Renault as the APW (Alliance Production Way) and improve the day-to-day management skills of shop-floor supervisors in the 106 plants operated by the two companies around the world, a shared Nissan-Renault group framework for stratified APW training is being developed, with the goal of making the training available simultaneously worldwide by the end of fiscal 2017.

Improving Management Quality

Nissan has worked to improve the quality of its management at the global level in order to fulfill the goals of Nissan Power 88, its midterm business plan through fiscal 2016, and achieve sustainable growth. In Japan, the company has established a training framework for midlevel managers. This gives them opportunities to promote activities that put the Nissan Way into practice and to extend their skills in managing people and business operations.

Specifically, Nissan engages in (1) cultural diversity training to promote understanding of the actions and mindsets described in the Nissan Way; (2) business skills and leadership training to nurture professionals; and (3) training in on-site management to teach the importance of operational excellence and people motivation and to achieve maximum results through collaboration. These three core components of the training framework are supplemented with additional programs.

In North America and Europe, meanwhile, the Nissan Way Leadership Academy program for managers examines how the Nissan Way has been put to use most effectively and shares those actions as part of training tools to elevate management quality overall.

Training Future Leaders

To continually foster future managers and specialists who will lead the company, Nissan implements a strategic and systematic approach to training, job rotations and recruitment.

Specifically, Nissan engages in leadership training aimed at passing down the knowledge and experience to the next generations of workers. These programs are offered at various development stages, including those for young employees, regional middle managers and Group senior managers. Training consists of group sessions for intensive training in business skills, action-based sessions where participants tackle issues actually facing Nissan and cultural diversity classes to promote understanding of the issues.

A number of rotational programs are strategically and systematically implemented to give promising employees the experience needed to serve in management posts and direct global functions as capable managers and leaders.

Nissan is reinforcing its human resources not only through the recruitment of new graduates but also by actively hiring outstanding mid-

►► website

► Click here for more information on the Nissan Power 88 midterm business plan.

level management candidates.

These talent management schemes are effectively operated through regular human resource meetings among senior managers. In these meetings, outstanding human resources are identified, then development plans and succession plans are made. Nissan's strategic talent management system is globally coordinated and active at the global, regional and functional levels.

Fostering Specialized Skills

Helping employees develop specialized skills over the medium to long term is vital for a company to achieve sustainable growth. The Nissan Expert Leader System is a means of strengthening and fostering further development of specialized skills in a wide range of technical and nontechnical areas like purchasing and accounting. In fiscal 2016, the system's 11th year, there were 43 employees active as Expert Leaders and 2 management-level employees as Nissan Fellows in a total of 99 fields of specialization. The Expert Leaders and Fellows make use of their specialized knowledge to contribute to Nissan's business endeavors overall. In addition to sharing their knowledge with others via the corporate intranet and other communication tools, they contribute to the fostering of the next generation of experts by passing on their specialized skills in seminars and training courses.

BUILDING SAFE WORKPLACES

Nissan promotes practices aimed at reducing worker burdens and improving productivity. Promotion of employee health is a top priority and has been established as a key tenet in Nissan's companywide declaration on workplace safety.

Employee Safety and Health Management

Nissan has adopted a Basic Policy on Safety and Health so that all employees can focus on their work in a safe environment. It gives top priority to worker safety as well as their well-being as a matter of company policy. The work environment relating to employee safety and health is managed uniformly according to the Basic Policy at all Nissan sites, both in Japan and globally.

In Japan, Nissan holds a Central Safety and Health Committee meeting each year chaired by the executive in charge and attended by management and labor union representatives from Nissan facilities. Activities over the past year are reviewed in such areas as workplace safety, fire prevention, mental health, health management and traffic safety, and then plans are laid out for the following year. Each facility holds a Safety and Health Committee meeting each month, attended by labor union representatives. A safety and health officer is assigned at each workplace to ensure that all employees receive relevant information.

Globally, each facility applies the PDCA cycle. A teleconference is held twice a year linking all Nissan facilities worldwide to share information and discuss key issues. Regional managers for employee safety and health also meet every other year for a Global Safety Meeting. In the event of an accident, details and responses are shared globally in an effort to fully prevent their recurrence.

Many facilities both in Japan and globally have introduced the OHSAS 18001 occupational safety and health standard, creating a structure for the steady implementation of employee safety and health activities.

A Uniform Set of Global Safety Standards

To allow all employees to maximize their performance, Nissan designs workplaces with employee safety and health in mind.

The company works proactively at all levels to identify potential issues or concerns in the workplace environment, develops measures to address them and makes it easier for employees to get their jobs done. In 2010, Nissan standardized the safety indices that previously differed among its global sites. Safety performance is monitored quarterly for each production site.

Improved Production-Line Environments

Nissan seeks to fulfill the company's mission of engaging in "human-friendly production" by continuously improving the workplace environments of its manufacturing facilities worldwide. In workplaces where summer temperatures can be high, for example, Nissan has installed internal cold-air ducts and ensured there are set breaks to drink water, particularly in locations with considerable workloads. This is part of constant improvements to allow employees to work in a comfortable environment.

• An internationally recognized standard for occupational safety and health management systems. Certification may be issued by a third-party accrediting body.

Creating Safe Workplaces

Nissan employs its own safety management diagnostic methods, as well as a risk-assessment approach to workplace management, to help reduce hazards in the work environment and prevent accidents.

Two tools developed internally by Nissan to identify the potential for a work accident are the Safety Evaluation System (SES) and the Fire-Prevention Evaluation System (F-PES). Applied in Japan, they call for workplace patrols in accordance with established evaluation standards to identify potential dangers and fire risks to help reduce incidents. The use of these tools has been effective in achieving these aims.

Global initiatives to avoid accidents and create a safe workplace include inviting employees from Nissan facilities around the world to undergo training on workplace safety. Responsible managers and leaders also received training in SES and F-PES in preparation for the implementation of these programs at all Nissan facilities worldwide, a process that began in fiscal 2014 and was completed in fiscal 2015.

Since 2011 Nissan has been systematically carrying out risk-prediction training at plants in Japan to ensure that individual workers are aware of the risk of accidents and to help prevent accidents. This training, which was continued in fiscal 2016, cultivates appreciation of danger among workers, thus reducing their risk of work accidents. Nissan is endeavoring to increase this method's effectiveness through repeated application.

Specialized Mental Healthcare

Nissan has put together a specialized team led by a mental health professional to care for the mental well-being of employees. In 2005, in cooperation with external mental healthcare specialists, the company introduced the Employee Assistance Program (EAP), a mental healthcare program providing employees with consistent care covering everything from prevention and early diagnosis to treatment and recovery. Since fiscal 2007 the program has expanded to include production-line workers, giving employees and their family members access to mental-health professionals for consultations, diagnosis and counseling. Nissan also offers specialized care programs that respect employee privacy, such as the yearly "Stress Check," through which employees receive advice from a doctor via email or letter. In fiscal 2011 the company's mental health training was extended to cover items bolstering the mental health of individual employees. Nissan promotes mental healthcare through a wide range of approaches.

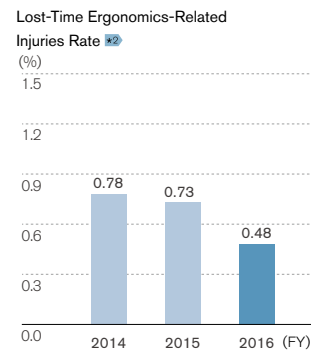
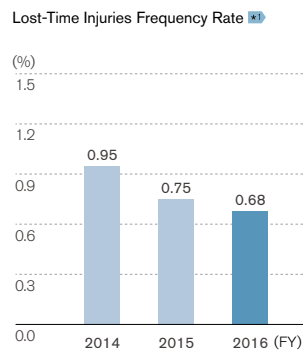
Rehabilitation Center to Facilitate Return to Work

Appropriate support mechanisms are required to facilitate an employee's return to work in case of long-term or recurrent absence due to a mental or physical ailment. Nissan's support in this area includes rules established in 2008 for the use of external rehabilitation centers to ease employees' return to the workforce following long-term or recurrent absence. An in-house rehabilitation facility opened in 2012. By offering various programs suited to the needs of the respective workplaces, Nissan is seeing improvements in the return-to-work ratio.

Global Occupational Accident Trends

*1 Total lost-time injury cases ÷ total working hours × 1 million

*2 Total lost-time ergonomics-related injury cases ÷ total working hours × 1 million



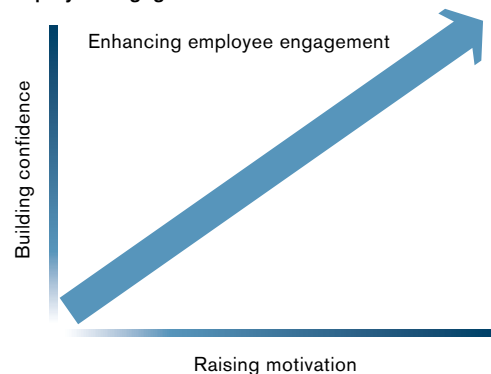
DIALOGUE WITH EMPLOYEES

For both Nissan and its employees to continue to grow in the face of globally expanding corporate activities, employees need to understand the direction in which the company is moving and implement their own actions toward the achievement of business objectives. Overcoming challenges to achieve those goals can lead to personal growth for the employee and contribute to the realization of the company’s vision. Nissan is strengthening its communication with employees so they will feel united with the company and be more engaged in tackling the challenges before them.

Strengthening Communication to Raise Motivation and Build Confidence

Nissan worked as a company to promote the Nissan Power 88 midterm business plan during its implementation period through fiscal 2016. To achieve the plan’s objectives, though, all employees were called on to embrace Nissan’s corporate vision and understand the significance of Nissan Power 88. Employees’ pride in the company’s achievements and trust in the sustainability of its corporate activities were essential for the plan’s success. At the same time, the company needed to motivate employees, encouraging them to take self-initiated action. Internal communication activities thus focused on building confidence among employees and increasing their motivation.

Employee Engagement



Enhancing Communication Channels

Building confidence between a company and its employees is based on the trust established through transparency of communication. Nissan discloses its statement of accounts and other business results to employees in a timely manner. Joint Renault-Nissan Alliance teams are organized in R&D, production engineering, supply-chain management, purchasing and human resources to deliver additional synergies. Information about the Alliance is shared with employees, enabling them to understand the goals and benefits derived from the Alliance.

A deeper understanding of Nissan’s Intelligent Mobility concept and the company’s products, services and technologies is gained through timely communications that engage employee interest and boost their motivation. Nissan proactively updates its employees on its leadership in achieving a zero-emission society, development of Autonomous Drive vehicles and other long-term projects, as well as providing test drive opportunities and other occasions for employees to participate in company activities. In order to improve understanding of its sponsorship activities, Nissan also held a competition in which “challenge stories” were submitted by employees worldwide and selected employees from each region were invited to the Rio de Janeiro 2016 Olympic Games. In addition to improving understanding, this activity raised the motivation not only of the chosen employees but also of the employees who read the stories.

Nissan is enhancing coordination among its various departments and with senior management and actively sharing information that contributes to relationships of mutual trust and higher employee motivation.

Every new fiscal year starts with the CEO delivering the state of the company address, reflecting on the past year’s performance and highlighting the direction for the new year. These are specific communication events that help build relationships of trust between the employee and the company. Leadership Exchange meetings, where the CEO and other Executive Committee members examine important issues with middle and senior managers, are held twice a year. The issues discussed are then shared and cascaded within each department. On a monthly basis, topics based on employee interest are also broadcasted through live web conferences called Management Information Exchanges (MIE), which encourage engagement between Executive Committee members and managers.

Employee motivation is also raised through new model announcements and test drive events, where employees gain a deeper understanding of

Nissan's products and learn to convey product features and attractiveness to their friends and families more effectively. These have been well received, with some participants stating that their enhanced knowledge of Nissan products has boosted their pride in the company and their work motivation, and have been highly effective in creating "brand ambassadors" for Nissan.

Nissan's internal communication tools also help build relationships of confidence and boost employee motivation. Since Nissan introduced a corporate intranet system called WIN (Workforce Integration @ Nissan), it has been actively used to promote communication, information sharing and collaboration among employees. The WIN network now goes beyond Nissan Group companies to include Nissan's major business partners, helping communicate information that raises motivation on a global basis.

In fiscal 2014, Nissan began issuing Engagement Kits that summarize its global operations, business performance and major achievements. These kits are distributed to managers every month and are used as communication tools for information sharing. The managers receiving this information are responsible for disseminating it in their respective departments. This is intended to promote workplace communication, deepen employee understanding and raise motivation. A printed in-house newsletter called *Nissan News* is published monthly for employees at Nissan production sites, letting them access needed information with no time lag.



Nissan employees selected to go to the Rio 2016 games.

Timely Communication to Employees on Mitsubishi Motors

Nissan's new relationship with Mitsubishi Motors Corp. was also communicated to employees in a timely fashion. The shared press conference was broadcast live to the company's offices, and the CEO held a town-hall meeting with employees the day after the announcement. Following this, in order to answer employee questions and ensure highly transparent information disclosure, both companies used their intranets to promote mutual understanding by sharing information about each other along with the results of an employee survey conducted at both companies.



The CEO's town-hall meeting connected GHQ and other sites.

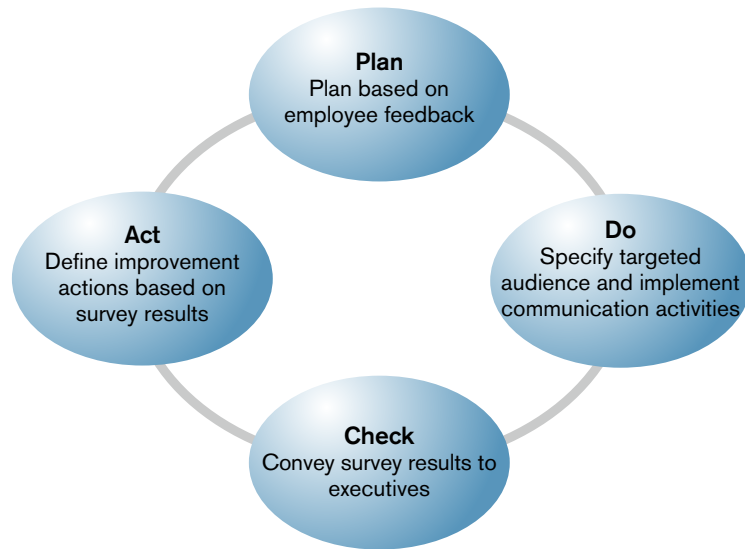


Materials carried on the company intranet.

Employee-Executive Exchange

Deepening mutual understanding and confidence requires opportunities for employees to voice their views and to share them with company executives. Nissan has made efforts to communicate information that will lead to greater employee confidence toward the achievement of its Nissan Power 88 midterm business objectives. These efforts are monitored on an ongoing basis through key performance indicators (KPIs) and reflected in internal communication activities. The company conducts regular surveys regarding these communication initiatives and the results are conveyed to company executives. The survey results are also used to run a PDCA (plan, do, check, act) cycle, with plans implemented based on decisions on whom to target and what type of additional information to communicate.

PDCA Cycle for Internal Communication Activities



ECONOMIC CONTRIBUTION

The global economy is today undergoing a dramatic shift. Countries around the world are seeing rapid urbanization, creating demand for improved infrastructure and transforming people's needs for enhanced mobility solutions. As a global automaker, Nissan aims to provide mobility for all and to help create a sustainable mobility society. In working toward these goals, the company develops a detailed understanding of shifts in global economic power and works to expand its business geographically so as to provide its products and services in markets around the world. It is also globalizing all stages of its value chain, from the development and procurement of parts and materials to manufacturing, logistics and sales.

Nissan believes these actions must be accompanied by sustainable, profitable growth that benefits the company while also contributing to the economic development of society as a whole through the creation of jobs and regional development. This principle is behind the business strategies that Nissan formulates and implements in order to sustainably maximize the company's economic value as a corporation. Through the corporate vision of Enriching People's Lives, Nissan is pursuing technological innovation and creating value in wider society by establishing new markets, such as those for zero-emission vehicles, and by operating in a transparent manner through open disclosure of its performance to stakeholders.

NISSAN'S ACTIONS

Nissan automobile production sites (as of end of March 2017) located in:

20
countries/areas

ECONOMIC CONTRIBUTION

SCORECARD

FY2016 TARGET ACHIEVEMENT RATE: ✓✓ ACHIEVED ✓ MOSTLY ACHIEVED × NOT ACHIEVED

Nissan makes year-round use of the CSR scorecard as a fundamental tool to manage, review and validate its progress in each of the sustainability strategies defined for its CSR activities. The table below shows some of the values behind Nissan's ongoing activities and the indices used in the scorecard to gauge the company's performance.

Nissan Priorities	Nissan Objectives and Long-Term Vision	Indicators of Progress	FY2016 Results *1	Assessment *2
Acceleration of profitable corporate growth	Implementation and promotion of Nissan Power 88: achieve 8% operating profit margin, 8% global market share by end of FY2016. Over the longer term, target sustainable, profitable growth and continue providing value to all stakeholders.	Consolidated operating profit margin (consolidated companies; for joint ventures in China, calculated on a proportionally consolidated basis)	7.0%	✓✓
		Global market share (consolidated companies)	6.1%	×

*1 Announced May 2017.

*2 Assessment based on fiscal 2016 outlook announced in May 2016.



▶▶ GRI G4 Indicators
▶▶ G4-6

NISSAN'S APPROACH TO ECONOMIC CONTRIBUTION

Through its business activities, Nissan aims to create value and contribute to the development of a sustainable society. The company continues to implement business strategies to maximize its corporate value.

COMPANY ORGANIZATION FOR ECONOMIC CONTRIBUTION

The Nissan Group consists of Nissan Motor Co., Ltd., subsidiaries, affiliates and other associated companies. Its main activities comprise the manufacture and sales of vehicles and related parts in its automotive business. The Group also provides financing services to support its sales activities.

Nissan's Global Headquarters makes decisions about the allocation of resources to each business and manages operations of the entire Group. The Group has six regional management committees responsible for activities in Japan, Asia and Oceania; China; North America; Latin America and the Caribbean; Europe; and Africa, the Middle East and India, respectively. These regional structures are integrated with cross-regional functional departments covering activities including research and development, purchasing and manufacturing.

ACCELERATING SUSTAINABLE AND PROFITABLE CORPORATE GROWTH

Nissan plays a leading role in the global automotive industry, making a significant contribution to its development. The company is committed to optimizing mobility for people around the world and helping to address a broad range of issues toward its goal of realizing a sustainable mobility society, while creating and delivering additional value through innovation. Sustained, profitable corporate growth is vital to achieving these goals. By making full use of its capabilities as a global company, Nissan aims to create jobs and other value for society as a whole. At the same time, it continues to invest in strategic initiatives and key markets to ensure future sustainable growth.

Strategic Investment in Focus Areas and Markets

To accelerate its growth in global markets, the company must expand its business and provide relevant products that satisfy the demands of customers. Climate change and energy are pressing issues that are of particular concern to customers around the world. As a global company, Nissan is deeply committed to helping address them. As one of the world's top automobile manufacturers, the company also has a role to play in reducing the number of traffic accidents caused by vehicles. Actively investing in technologies that can impact these kinds of social issues is important to its long-term growth.

In 2016, the company announced its Nissan Intelligent Mobility vision for building a zero-emission, zero-fatality future for driving. The target is a safer, more sustainable society for customers around the world. Based on the vision, Nissan is working to increase vehicle electrification and intelligence and to create "connected cars" that are integrated with social infrastructure. Going forward, the company will enhance its operations with new approaches to *monozukuri* craftsmanship and new services.

The new Serena, launched in Japan in August 2016, represents Nissan's intelligent vehicle initiatives. It is equipped with the ProPILOT autonomous drive technology for traveling within a single expressway lane. Automated control of all steering, acceleration and braking functions in heavy highway traffic is an industry first in Japan. The Note e-POWER, launched in Japan in November 2016, features a 100% electric powertrain. It is driven by an electric motor powered by a gasoline engine, which allows owners to enjoy the EV driving experience without needing to charge the vehicle.

In the connected car field, Nissan is developing applications that will make it easier for people to stay connected to work, entertainment and social networks. The company also plans to provide services making remote vehicle diagnostics, preventive maintenance and other forms of after-sales service more accessible. To achieve this, the Renault-Nissan Alliance has signed a multiyear agreement with Microsoft Corp. to partner on developing next-generation technologies. The companies will work together to provide vehicle connectivity services linked to the Microsoft Azure intelligent cloud platform.

Nissan's acquisition of a 34% stake in Mitsubishi Motors Corp. bolsters its manufacturing capabilities. Mitsubishi Motors is now part of the global Alliance with Nissan and Renault, making the Alliance one of the world's top three automotive groups, with sales of 10 million units in fiscal 2016. The Alliance will achieve further economies of scale, globally strengthening the

productivity and innovative technologies that allow it to provide customers with vehicles that meet their needs.

Targeting New Value and Competitiveness Through IT

In 2016, the Tokyo Stock Exchange (TSE) named Nissan a Competitive IT Strategy Company on a list of TSE First Section companies recognized for their efforts to make active use of IT to deliver greater profits and business innovation. The designation was established in fiscal 2014 as part of joint efforts between the TSE and the Ministry of Economy, Trade and Industry to promote strategic use of IT among Japanese companies. This was the second Competitive IT Strategy Company list.

Leading companies around the world use IT to actively drive development of products and services and create new value through business-model reforms, thereby strengthening competitiveness. The designation aims to introduce corporations with a strategic IT approach to investors and others, while simultaneously encouraging a profound shift in how senior managers view the importance of IT.

The TSE praised Nissan for linking its management strategies with the construction of solutions based on its global IT strategy VITESSE, which targets fast and efficient creation of business value through information technology. The acronym derives from “value innovation,” “technology simplification” and “service excellence.”

One specific example from 2015 is the global construction of the industry's first next-generation vehicle design infrastructure together with Hewlett Packard Enterprise Co. and Siemens AG. In January 2016, Nissan announced the selection of the Microsoft Azure cloud platform to power the Connect Telematics Systems in vehicles including the Nissan LEAF. In May of the same year, the company announced its adoption of the cloud-based system Workday Human Capital Management to standardize its global human resources processes.

As its new businesses expand worldwide, Nissan seeks to further increase corporate value through continuing to make connections between management and IT.



攻めのIT経営銘柄
Competitive IT Strategy Company

SHAREHOLDER AND INVESTOR ENGAGEMENT

Nissan's shareholders and investors are partners in the creation of a more sustainable society. To facilitate a deeper understanding of the company, Nissan has an active IR program that provides information both promptly and transparently.

Communication with Shareholders and Investors

To communicate with shareholders and investors, the company's IR team holds quarterly results briefings, meets frequently with institutional investors and sell-side analysts and responds to inquiries in a timely manner. Nissan proactively discloses information on its operations through business briefings and participation in conferences hosted by securities companies. It also cooperates with securities companies to hold briefings for individual investors. The latest information is also available on the IR website.

Each year Nissan holds events to present its business activities to investors and analysts, focusing on themes most relevant to them and making available the company's divisional and regional managers to actively provide the required information. In fiscal 2016, presentations covered the trends and strategies in the Datsun business and in the ASEAN region. Nissan takes advantage of a broad range of opportunities to disclose information on the long-term vision behind its strategies, the innovations it is introducing to boost competitiveness and the latest market trends.

The company will continue to disclose information appropriately to meet the needs of stakeholders and investors, thereby increasing understanding of its business.

117th Shareholders Meeting

The 117th Ordinary General Meeting of Shareholders was held at the Pacifico Yokohama on June 22, 2016, and was attended by 2,098 shareholders. After the meeting all board members and corporate officers, including the CEO, attended an informal gathering to interact directly with shareholders.

The General Meeting of Shareholders is an opportunity for the executive team and the company's owners to communicate directly. Nissan aims to develop trust through these meetings and various other forms of interaction with shareholders, paying full attention to their opinions and offering careful explanations to enhance their understanding.

Beginning in 2009, the company has collected questions and opinions from shareholders before the General Meeting and worked to provide appropriate explanations, reports and responses.

Positive External Assessment for IR Activities

At the 22nd Awards for Excellence in Corporate Disclosure presented by the Securities Analysts Association of Japan, Nissan ranked third in the automobiles, auto parts and tires category. Winners of these awards, established with the goal of improving corporate disclosure, are selected through assessment by analysts in five categories: company management's IR engagement, briefings, fair disclosure, corporate governance and voluntary disclosure. The analysts recognized Nissan for its fair disclosure, such as its timely release of balanced information through its website and other outlets, for its active implementation of informational meetings and site tours and for its corporate governance.

▶▶ [website](#)

Click here for more IR information.

CORPORATE GOVERNANCE & INTERNAL CONTROL

To be a sustainable company, Nissan must display a high level of ethics and transparency, as well as a strong foundation for the organization. It is also expected that the company will actively disclose its initiatives to this end. Nissan has extensive global operations with numerous stakeholders around the world. It is essential that the company continue to earn their trust while ensuring the high ethical standards and compliance of all employees.

Rapid technological advances are transforming every industry, including the automotive industry, and the global economy is undergoing a period of great change. The risks that companies face are becoming ever more complex and require finely tuned responses. Nissan has established a corporate governance system that maintains business transparency. The system allows Nissan to implement various monitoring systems, as well as assess and effectively manage risks that have the potential of preventing the company from achieving its business goals. In addition to carrying out cooperation among sites in the regions in which it operates, Nissan has set up global management systems and provides relevant training programs to its employees and business partners.

NISSAN'S ACTIONS

Global participation rate for Nissan
Global Anti-Bribery Policy and
Export Control training:

95.0%

CORPORATE GOVERNANCE & INTERNAL CONTROL

SCORECARD FY2016 TARGET ACHIEVEMENT RATE: ✓✓ ACHIEVED ✓ MOSTLY ACHIEVED × NOT ACHIEVED

Nissan makes year-round use of the CSR scorecard as a fundamental tool to manage, review and validate its progress in each of the sustainability strategies defined for its CSR activities. The table below shows some of the values behind Nissan's ongoing activities and the indices used in the scorecard to gauge the company's performance.

Nissan Priorities	Nissan Objectives and Long-Term Vision	Indicators of Progress	FY2016 Results	Assessment
Compliance	A fully functioning framework for the prevention of conduct violations and compliance at all Nissan companies.	<ul style="list-style-type: none"> • Holding of Global Compliance Committee meetings • Implementation of global compliance plan and policies as necessary 	<ul style="list-style-type: none"> • Conducted regular Global Compliance Committee meetings • Established a new global policy management strategy • Launched and integrated global externally hosted compliance hotline system • Conducted investigation training to support hotline preparedness • Conducted general compliance training for the R&D function • Rolled out biennial antibribery and export control training 	✓✓
Risk management	Implementation of PDCA cycle annually and ensuring that risk management is functioning properly.	Implementation level in the following areas based on the risk-management process <ul style="list-style-type: none"> • Assessment of corporate risks and revision of risk map • Reports and proposals to management • Disclosure of risk-management activities to stakeholders • Oversight of risk-management activities and regular reports to Board of Directors 	<ul style="list-style-type: none"> • Conducted risk survey according to annual process • Proposed candidates of FY16 corporate risks and owners to the Corporate Risk Management Committee • Managed each risk under lead of risk owners • Submitted interim and year-end reports on level of implementation of activities via the Internal Control Committee to the Board of Directors; acknowledged that the risk-management PDCA cycle was mostly functioning properly • Updated "Business and other risks" in financial information (<i>Yukashoken-Hokokusho</i>) and "The current state of Nissan's risk management" in Sustainability Report • Held meetings to share information and to exchange opinions with major Japanese affiliates twice a year; with major overseas affiliates and Renault once a year 	✓✓
	Achievement of benchmark levels for maintenance and enhancement of information security, prevention of information leaks, and damage limitation and maintenance of transparency in the event of leaks.	Degree of implementation of measures in the following areas based on the Information Security Policy: <ul style="list-style-type: none"> • Holding of Information Security Committee meetings • Implementation of annual training • Management of incidents • Management of information assets • Assessment of information security 	Implemented the following measures based on the Information Security Policy: <ul style="list-style-type: none"> • Strengthened Information Security Committee management • Implemented annual training and revised content as needed • Quickly identified internal incidents and implemented actions to prevent recurrence • Continually improved management of information assets and strengthened asset identification and tracking process • Assessed information security and revised assessment indicators • Based on examples of cyber attacks, internal violations and other recent incidents at other companies and organizations, made improvements to help prevent similar incidents from occurring at Nissan 	✓

NISSAN'S APPROACH TO CORPORATE GOVERNANCE & INTERNAL CONTROL

Governance systems, compliance and risk management are key factors in Nissan's business management. The company's global approach to corporate governance is founded on three pillars: construction of a system in which management responsibility is clear and transparent; compliance built on the high ethical standards of all employees; and an effective and appropriate risk-management system.

CORPORATE GOVERNANCE SYSTEM

Nissan believes that enhancing corporate governance is one of its most important business issues. Ensuring clear management responsibility is a key way to achieve this. Nissan announces clear management targets and policies to all stakeholders and discloses its performance promptly with a high degree of transparency. In addition to this dedication to clear targets, management shares the message, set strongly at the top levels of the company, that the only way to achieve sustainable results is through complete transparency and a process of learning from mistakes.

Corporate Governance System in Detail

To increase management transparency and flexibility, Nissan uses a corporate structure with supervision by the Board of Directors and auditing by the Statutory Auditors. The company has also adopted a corporate officer system. This clarifies the structure for taking responsibility and ensures appropriate supervision and auditing of activities by the directors. The Board of Directors includes outside directors and makes key decisions on important company operations, as well as supervising individual directors' execution of duties.

Nissan's Board of Directors is compact, enabling effective and flexible management, with authority regarding operations clearly entrusted to corporate officers and employees. Additionally, Nissan has established focus committees whose chairs are responsible for carrying out discussions on important company matters and daily operations.

Internal Control Systems

Nissan places high value on transparency in its corporate management, both internally and externally. The company focuses on consistent and efficient management to achieve clear commitments. In line with this principle, and in accordance with Japan's Companies Act and its related regulations, the Board of Directors has decided on Internal Control Systems to pursue these goals and its own basic policy. The board continually monitors the status of implementation regarding these systems and the policy, making adjustments and improvements if necessary. One board member is assigned to oversee the Internal Control Systems as a whole.

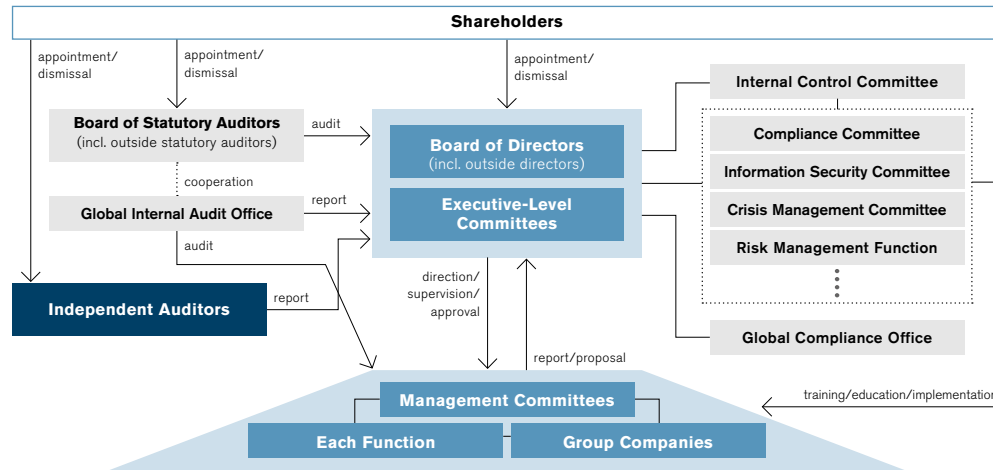
Nissan has adopted a system under which the Board of Statutory Auditors oversees the Board of Directors. The Statutory Auditors attend board and other key meetings and carry out interviews with board members to audit their activities. The Statutory Auditors regularly receive reports on the results of inspections, as well as plans for future audits, from independent accounting auditors and exchange information to confirm these reports. The Statutory Auditors also receive regular reports from the Global Compliance Office and the Global Internal Audit Office, making use of this information for their own audits.

Independent Internal Audits

Nissan has established a global internal audit unit, an independent department to handle internal auditing tasks. Under the control of the Chief Internal Audit Officer, audit teams set up in each region carry out efficient, effective auditing of Nissan's activities on a groupwide and global basis.

▶▶ website
 ▶ Click here for more information on the Board of Directors.

Nissan's Internal Governance System (As of March 2017)



COMPLIANCE

Nissan understands that acting with integrity and with high standards is of paramount importance not only because it is the right thing to do, but also because it allows all employees to perform at the highest levels. Nissan expects all employees to do their jobs, maintaining the highest ethical standards. To raise compliance awareness throughout the company, Nissan has established a Global Compliance Office, as well as specialized departments, and has appointed officers to promote compliance in each region where it operates.

Employees and Compliance

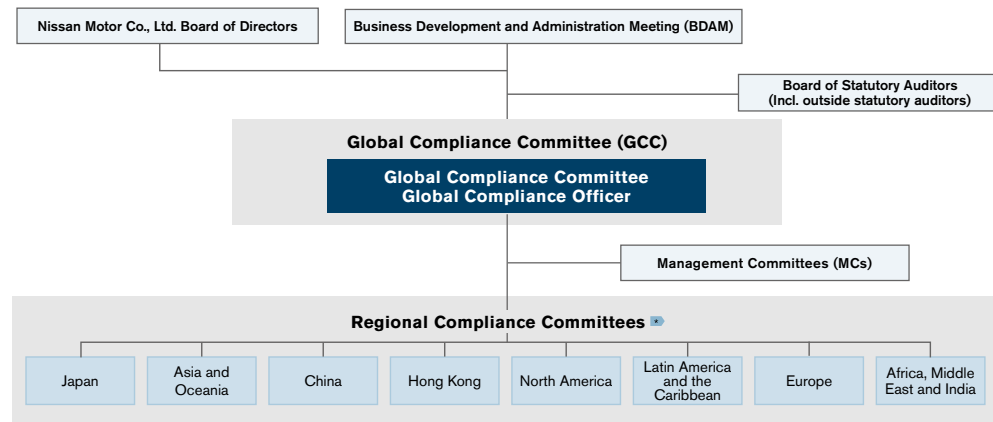
The foundation of Nissan's CSR promotion is based on each employee's ability to do his or her job with a high level of integrity. In 2001, the company produced the Nissan Global Code of Conduct, outlining a set of guidelines for employees to put into practice. Today this Code of Conduct is applied at all Nissan Group companies worldwide.

Nissan has also produced guidance for directors and corporate officers regarding compliance, holding regular seminars and educational activities to ensure strict adherence to the rules. Under the oversight of its Global Compliance Committee, the company has established regional compliance committees in each region where it operates to form a system for detecting and deterring illegal and unethical behavior. Nissan is working with all regions and bases of operation to ensure full awareness of compliance issues and to engage in prevention of illegal activities. The company has processes in place to take appropriate disciplinary actions against those who violate or infringe on the Global Code of Conduct or the law. In fiscal 2015, Nissan established a Global Compliance Office to ensure more rigorous compliance management.

▶▶ page_109

✦ Click here for more information on the Nissan Global Code of Conduct.

FY2016 Global Compliance Committee Organization (As of March 2017)



Each Regional Compliance Committee oversees various local compliance committees as appropriate.

Security-Related Export Controls

To help maintain both national and international peace and security, Nissan thoroughly complies with export control laws and regulations in Japan and other countries and regions where it operates to prevent sensitive goods and technologies from reaching sponsors of terrorism, as well as corporate espionage or human rights violations. In line with these rules, Nissan implements export controls under an independent system headed by its representative executive. Specifically, working together with business owners, the Export Control Global Secretariat sets control and monitoring mechanisms to ensure compliance with security-related export controls. The company strictly applies this process to its operations.

Nissan is responsible for compliance with all regulations related to managing exports of goods, software and technologies in all areas in which it operates. In 2017, the company developed the Global Export Regulatory Compliance Policy to more clearly establish its responsibilities for ensuring compliance. This applies to all its global employees, as well as those working at Nissan's contractors, affiliated companies and subsidiaries. It also applies to the company's business partners (third parties, suppliers, distributors and dealers).

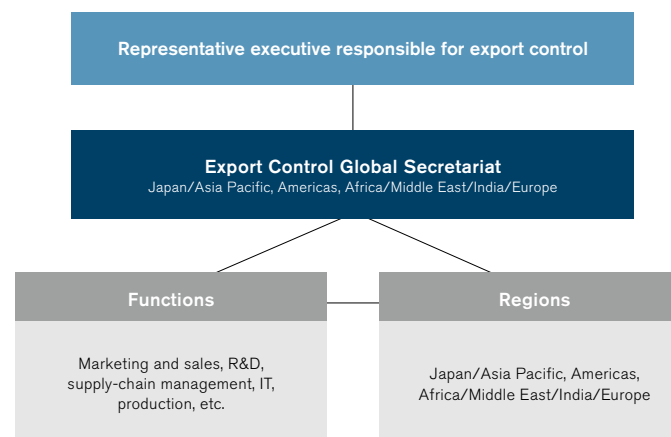
With the overall aim of improving the level of internal control, Nissan

strives to conduct regular risk-assessment activities in connection with export controls in each region, to create monitoring mechanisms that are in step with regulatory requirements and business demands and to continually improve its operations. The company has also continued to actively engage employees in understanding export control issues through sustained training efforts. Specialized training for the R&D function, carried out in Japan, is also offered in the United States and China; in Spain and Russia, meanwhile, a consistent educational program is carried out across the Renault-Nissan Alliance.

Overall, the Secretariat has increased knowledge globally and demonstrated that compliance can help minimize risk and facilitate trade. More specifically, the Secretariat supports global sales initiatives in large exporting Nissan entities with relevant controls and proactively provides regulatory advice on new Nissan technology, such as Autonomous Drive, in-car connectivity and EVs, so as not to hinder their development.

Targeting further rapid progress, Nissan has begun detailed discussions with Mitsubishi Motors Corp. on optimizing export controls for ensuring compliance with regulations concerning trade of goods, software and technologies.

Global Export Control Policy Framework



Promoting Thorough Compliance

Nissan has established a Global Code of Conduct and has set up a Global Compliance Office as well as departments and officers at each of its operations worldwide to take responsibility in promoting compliance measures.

Moreover, all Group-affiliated companies have introduced their own codes based on the Nissan Global Code of Conduct. The Code of Conduct is supported by training courses to establish a full understanding of the content. The overall policy management strategy was redesigned in fiscal 2016 in order to support the promotion of compliance knowledge, including the creation of a Policy on Policies and related standardized procedures. With this enhanced process, Nissan seeks to ensure across-the-board understanding, making sure all employees are fully aware of Nissan's policies and have the ability to act appropriately when faced with compliance issues.

Nissan has created a series of internal regulations that are applied globally, covering areas such as decision-making, insider trading, personal information management, information security, bribery and corruption and use of social media. With these policies in place, Nissan is working to heighten awareness and reduce infractions.

A number of education programs to promote compliance are held regularly for employees in all regions in which Nissan operates. For example, by fiscal 2016, 95% of targeted employees had undergone training on the Nissan Global Anti-Bribery Policy, which is one of the core compliance policies of Nissan. Furthermore, following known industry issues, Nissan proactively launched compliance training for all research and development employees worldwide.

▶▶ website
 ▶ Click here for more information on the Nissan Global Anti-Bribery Policy.

Global Code of Conduct for Nissan Group

Principle

The following standards apply to all employees in Nissan Group companies (collectively herein referred to as "Nissan" or "Company"). Each member of the Company is charged with responsibility to uphold and extend this Code of Conduct.

Global Code of Conduct

- ① **Comply with All Laws and Rules**
 Nissan employees will abide by all laws of the country, and all regulations of the Company, in which they work.
- ② **Avoid Conflict of Interest**
 The best interests of Nissan are expected to be foremost in the minds of employees. It is prohibited to behave, act or use information in a way conflicting with Company interests.
- ③ **Preserve Company Assets**
 Nissan employees are personally accountable for preserving and safeguarding Company assets. Unauthorized use or diversion of Company assets, including funds, information and intellectual property, is prohibited.
- ④ **Be Impartial and Fair**
 Nissan employees must maintain impartial and fair relationships with business partners, including dealers, parts suppliers and other third parties.
- ⑤ **Be Transparent and Accountable**
 Nissan employees shall make fair, transparent, timely and appropriate disclosure of the Company's business activities to our stakeholders, including stockholders, customers, other employees and local communities.
- ⑥ **Value Diversity and Provide Equal Opportunity**
 We value and respect the diversity of our employees, suppliers, customers and communities. Discrimination or harassment, in any form or degree, will not be tolerated.
- ⑦ **Be Environmentally Responsible**
 Nissan employees shall strive, within the business objectives of Nissan, to consider environmental protection when developing products and services, to promote recycling and to conserve materials and energy.
- ⑧ **Be Active; Report Violations**
 Nissan employees are expected to carry out their work in accordance with the Code of Conduct. Employees who suspect that a violation of the Code of Conduct has occurred are obligated to report it as soon as possible, and such employees shall be protected from retaliation.

Nissan's Stance Against Discrimination and Harassment

Item 6 of Nissan's Global Code of Conduct, "Value Diversity and Provide Equal Opportunity," is the requirement to respect and value the diversity found among the company's employees, business partners, customers and communities, while rejecting discrimination and harassment in all forms, regardless of the magnitude. Nissan executives and employees must respect the human rights of others and may not discriminate against or harass others based on race, nationality, gender, religion, physical capability, sexual orientation, age, place of origin or any other reason; nor may they allow such a situation to go unchecked if discovered. The company also works to ensure that all employees, both male and female, can work in an environment free from sexual and other forms of harassment.

Internal Reporting System for Corporate Soundness

To promote thorough understanding of compliance among employees worldwide and to facilitate sound business practices, Nissan established a globally integrated reporting system. This system continues to allow Nissan to comply with Japan's Whistleblower Protection Act of April 2006. Through this system, employees can ask questions or voice concerns to the company, thereby improving workplaces and operations. The system introduced under the name "SpeakUp" facilitates, where allowed by law, employees' and other stakeholders' anonymous reporting and two-way confidential communication. Employees are encouraged to report violations of the Code of Conduct or other company rules and are protected from retaliation by Nissan's nonretaliation policy, which is a cornerstone of the Compliance Program.

Principles for and Approach to Corporate Risk Management

Risk management must be a real-world activity that produces concrete measures. Based on its Global Risk Management Policy, Nissan carries out activities on a comprehensive, groupwide basis.

To respond to changes in its business environment, Nissan has set up a department in charge of risk management that carries out annual interviews of corporate officers, carefully investigating various potential risks and revising the "corporate risk map" in line with impact, frequency and control level.

The Executive-Level Committees make decisions on risk issues that must

be handled at the corporate level and designate "risk owners" to manage the risks. Under the leadership of these owners, the company designs appropriate countermeasures. Finally, the board member in charge of internal control regularly reports to the Board of Directors on progress.

With respect to individual business risks, each division is responsible for taking the preventive measures necessary to minimize the frequency of risk issues and their impact when they do arise as part of its ordinary business activities. The divisions also prepare emergency measures to put in place when risk factors materialize. Nissan Group companies in Japan and overseas are strengthening communication to share basic processes and tools for risk management, as well as related information, throughout the Group.

In addition, Nissan has created an area on its intranet called "Corporate Risk Management." Information relating to risk management is also distributed to subsidiaries in Japan, North America, Europe and other overseas regions, as well as to major affiliated companies.

The business environment in which the company operates has been increasingly volatile in recent years, including such aspects as the widespread adoption of new technologies and growing geopolitical risks. Nissan will continue to bolster its activities in this area so it can appropriately meet any changes ahead.

Protecting Personal Data and Reinforcing Information Security

Nissan shares its Information Security Policy with Group companies worldwide as a basis for reinforced information security, implementing via the Information Security Committee measures enhanced through the PDCA cycle. The company reliably addresses issues by identifying internal and external information leaks as they occur worldwide and reinforces information security on a timely basis. To thoroughly educate and motivate employees to adhere to relevant policy, the company institutes regular in-house educational programs.

Moreover, Nissan recognizes its social responsibility to properly handle customers' personal information in full compliance with the respective personal information protection law in each region. Nissan has set up internal systems, rules and procedures for handling personal data. All Group companies are fully enforcing these processes.

► website

Click here for more information on risk management.

▶▶ website

Click here for the GRI Sustainability Reporting Guidelines Index.

CORPORATE PROFILE

Date of Establishment	December 26, 1933
Location of Organization's Headquarters	1-1, Takashima 1-chome, Nishi-ku, Yokohama, Kanagawa 220-8686, Japan
Group Structure and Business Outline	The Nissan Group consists of Nissan Motor Co., Ltd., subsidiaries, affiliates and other associated companies. Its main business includes sales and production of vehicles, marine products and related parts. The Nissan Group also provides various services accompanying its main business, such as logistics and sales finance.
Brands	Nissan, Infiniti, Datsun
Consolidated Number of Employees (as of March 31, 2017)	137,250
Global Network (as of March 2017)	R&D: 16 countries/areas (Japan, U.S., Mexico, U.K., Spain, Belgium, Germany, Russia, China, Taiwan, Thailand, Indonesia, South Africa, Brazil, India, Vietnam; total of 45 sites)
	Design: 5 countries (Japan, U.S., U.K., China, Brazil; total of 7 sites)
	Automobile Production: 41 bases in 20 countries/areas (Total includes Nissan's consolidated vehicle assembly plants and nonconsolidated assembly plants. Plants for OEM production are included, except for those providing OEM vehicles to Nissan in Japan [Fuso, Suzuki, Mitsubishi Motors, etc.])

 **▶▶ GRI G4 Indicators**
▶▶ G4-4/G4-5/G4-9

FINANCIAL DATA

	(FY)		
	¥ billion		
	2014	2015	2016
Net sales	11,375.2	12,189.5	11,720.0
Operating income	589.6	793.3	742.2
Ordinary income	694.2	862.3	864.7
Profit before tax	687.4	732.9	965.2
Net income attributable to owners of the parent	457.6	523.8	663.5
Capital expenditure	463.1	479.0	469.3
Depreciation	373.3	401.9	380.8
Research and development costs	506.1	531.9	490.4

▶▶ website
Click here for more detailed financial information at Nissan's IR website.

 **▶▶ GRI G4 Indicators**
▶▶ G4-9

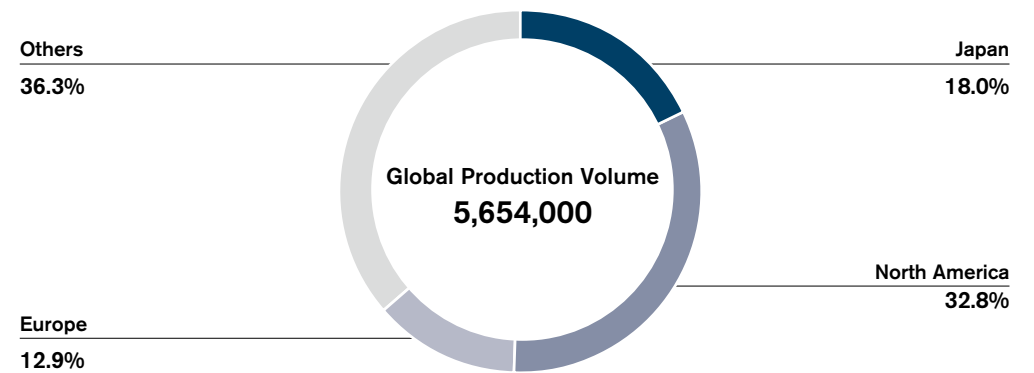
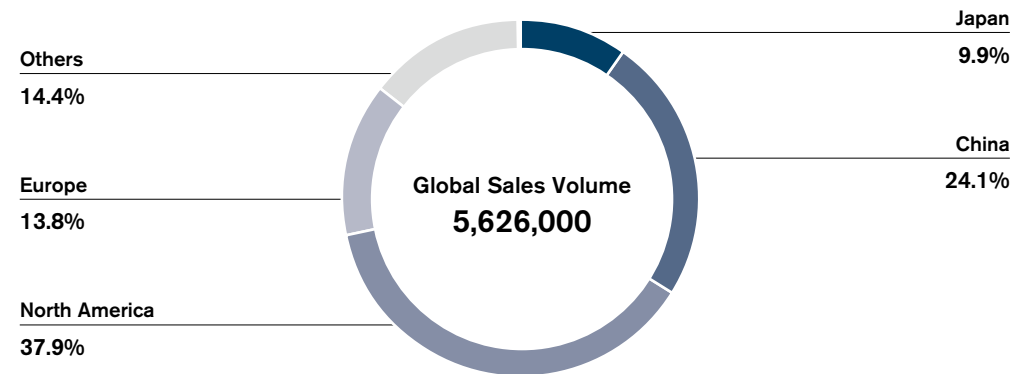
GLOBAL SALES VOLUME AND PRODUCTION VOLUME

	(FY) thousand units		
	2014	2015	2016
Global Sales Volume	5,318	5,423	5,626
Japan	623	573	557
China	1,222	1,250	1,355
North America	1,829	2,011	2,130
Europe	755	754	776
Others	889	835	808

	thousand units		
	2014	2015	2016
Global Production Volume	5,061	5,203	5,654
Japan	871	849	1,015
North America	1,744	1,825	1,855
Europe	720	661	730
Others	1,726	1,868	2,054

▶▶ website
 Click here for more detailed financial information at Nissan's IR website.

FY2016 figures



EMPLOYEE DATA

	(FY)		
	2014	2015	2016
Nissan Motor Co., Ltd.			
Number of employees	22,614	22,471	22,209
Male	20,567	20,346	19,971
Female	2,047	2,125	2,238
Average age (years)	43.0	43.0	43.1
Male	43.5	43.5	43.7
Female	38.0	38.0	37.9
Average service (years)	20.1	20.0	19.5
Male	20.6	20.5	20.1
Female	14.9	14.8	14.4
Employee turnover rate	4.3	3.8	3.4
Voluntary leave	1.1	1.1	1.0
Company initiated	3.2	2.7	2.4
Average annual salary (yen) ^(*)	7,767,269	7,950,212	8,164,762
Disabled employment ratio	2.04	2.08	2.07
Number of employees taking parental leave	269	280	303
Male	11	23	15
Female	258	257	288
Ratio of returnees from parental leave	97	98	96.9
Male	100	100	100
Female	97	98	96.6
Number of employees taking nursing care leave	6	7	11
Male	2	4	5
Female	4	3	6
Number of employees taking maternity leave	258	280	159
Days of paid holiday taken	18.7	18.9	19.0
Taken paid holiday ratio	93.5	95.3	96
Average overtime hours/month	16.3	19.6	21.4
Number of unionized employees	22,179	21,182	22,235

^(*) Average annual salary for employees not in managerial positions; includes bonuses and overtime pay. Beginning in fiscal 2013, calculated for employee base including managerial positions.



▶▶ GRI G4 Indicators
 ▶ G4-9/G4-10/G4-11/G4-12/G4-38/
 G4-EC1/G4-LA1/G4-LA3/G4-LA12

	(FY)		
	2014	2015	2016
Number of female managers	214	242	279
Ratio	8.2	9.1	10.1
Target	(Internal target)		
General and higher-level managers	58	62	76
Ratio	6.4	7.0	8.1
Number of female corporate officers	1	1	2
Ratio	2.0	1.9	4.2
Target	(Internal target)		
Number of female board members	0	0	0
Ratio	—	—	—
- Female board members (internal)	0	0	0
Ratio	—	—	—
- Female board members (external)	0	0	0
Ratio	—	—	—
Number of auditors	0	0	0
Ratio	—	—	—
Number of new graduates hired	606	535	576
Male	477	402	453
Female	129	133	123
Bachelor/master graduates	400	349	355
Male	306	265	267
Female	94	84	88
Others	206	186	221
Junior college, tech school graduates	18	9	19
Male	17	8	19
Female	1	1	0
High school graduates	188	177	202
Male	154	129	167
Female	34	48	35
Retention			
Number of new recruits 3 years ago	220	324	520
Male	158	254	399
Female	62	70	121
Number of the above 3 years later	206	307	491
Male	149	242	379
Female	57	65	112

	(FY)		
	2014	2015	2016
Consolidated			
Consolidated number of employees ^(*)	149,388	152,421	137,250
Japan	65,771	64,837	59,441
North America	37,185	40,151	35,951
Europe	16,535	16,148	16,065
Asia	25,439	26,310	20,837
Other countries	4,458	4,975	4,956

^(*) Numbers in brackets represent part-time employees not included in the consolidated number of employees.

UNION INFORMATION

Nissan Motor Co., Ltd.'s employees are affiliated with the All Nissan Motor Workers' Union, for which the governing body is the All Nissan and General Workers Unions, and the Japanese Trade Union Confederation (Rengo) through the Confederation of Japan Automobile Workers' Unions. The labor-management relations of the company are stable, and the number of union workers was 22,235 as of March 31, 2017.

At most domestic Group companies, employees are affiliated with their respective trade unions on a company basis, and the governing body is the All Nissan and General Workers Unions.

At foreign Group companies, employees are affiliated with their respective trade unions. In Mexico, for example, workers are affiliated with a domestic trade union for which the governing body is the Confederation of Mexican Workers (CTM) or independent trade unions, whereas most employees in the United Kingdom are affiliated with the Unite the Union Nissan Motor Manufacturing (U.K.) Ltd. Branch. Local employees of other Group companies are affiliated with different types of trade unions according to the labor environment in each country.

SOCIAL-CONTRIBUTION ACTIVITY DATA

Global social contributions (FY2016): ¥1.6 billion

- Expenses for implementing philanthropic programs (labor costs are excluded)
- Monetary donations, sponsorship fees and membership fees spent for philanthropic purposes
- In-kind donations included as equivalent monetary value

Breakdown of FY2016 social contributions (Nissan Motor Co., Ltd.)

	Activity costs	Monetary donations	Donations of items (value)	Sponsorships, etc.	Total
Amount (¥ million)	332	1,131	66	71	1,600
% of total	20.8%	70.7%	4.1%	4.4%	100%

	(FY)		
	2014	2015	2016
Donations for disaster relief	¥38.0 million (by Nissan Motor Co., Ltd. for Great East Japan Earthquake) 2.0 million yuan (about ¥33.0 million) (by Nissan Motor Co., Ltd. for Yunnan Province earthquake in China) ¥5.0 million (by Nissan Motor Co., Ltd. for heavy rain and landslides in Hiroshima) ¥10.0 million (by Nissan Motor Co., Ltd. for Ebola outbreak in Liberia)	¥10.0 million (by Nissan Motor Co., Ltd. for Nepal Earthquake) \$50,000 (by Nissan North America, Inc. for heavy rain and flooding in U.S.) ¥10.0 million (by Nissan Motor Co., Ltd. for heavy rain and flooding in northern Kanto region, Japan) ¥26.0 million (by Nissan Motor India Pvt. Ltd. for heavy rain and flooding in Tamil Nadu, India)	¥10.0 million Matching funds for employee donations Around 100 EVs loaned to local governments Emergency relief supplies (by Nissan Motor Co., Ltd. and Nissan Motor Kyushu Co., Ltd. for the Kumamoto earthquakes) Two NV350 vehicles (by Nissan Chile SpA for major forest fire in Chile)



ENVIRONMENTAL DATA

	.....	117
Material Balance	117	
Energy	117-118	
CO ₂	119-120	
Water	120-121	
Emissions	122-123	
Waste	123-124	
Logistics	124-126	
Supply Chain	126-127	
Environmental Accounting	127	
Facility	128	

	.....	129
Fuel Economy, CO ₂	129-132	
Technologies	133-134	
Other Emissions	134-135	
Lifecycle Assessments (LCAs)	136-137	
Materials, Recycling	138	
ELV Programs	139	

	.....	139
	.....	140
Third-Party Assurance	140	
GRI Index	141	

Regarding Data for Publication

- Fiscal year: April 1, 2016, through March 31, 2017.
- Scope: All Nissan manufacturing facilities, management offices and subsidiaries worldwide covered under consolidation of Nissan Motor Co., Ltd., and equity method affiliated manufacturing companies.
- Environment Management Regions: Managed companies included in the scope are categorized by following regions:
 - Japan: Japan
 - North America: United States, Mexico, Canada
 - Europe: United Kingdom, Spain, Russia, Germany, Italy, France, Netherlands, Belgium, Hungary, Finland, Switzerland (Russia data moved from Others and included in Europe from fiscal 2013)
 - Others: China, Thailand, Indonesia, India, Australia, South Africa, Brazil, Egypt, Vietnam, UAE, others
- Calsonic Kansei Corporation became out of scope in fiscal 2016 though it is included in the data for fiscal 2016. However, Calsonic Kansei Corporation is not included in CO₂ emission calculation of scope 3 employee commuting.

Restatement of Information Provided in Previous Years

- Fiscal 2015 data were reviewed and some were revised.

▶▶ [page_22](#)

▶ See p. 22, Employee Engagement and Education, for additional environment-related information.

CORPORATE INDICATORS

Material Balance

Input	(FY)		Output	(FY)	
	Unit	2016		Unit	2016
Raw materials	ton	7,537,092	Vehicles		
Water	1,000 m ³	29,118	Global production volume	unit	5,654,000
Energy	MWh	10,189,082	Waste	ton	158,939
			Waste for disposal	ton	8,707
			Recycled	ton	150,231
			Wastewater	1,000 m ³	20,516
			CO ₂ emissions	t-CO ₂	3,577,689
			VOC	ton	11,933
			NOx	ton	430
			SOx	ton	31

Nissan's midterm environmental action plan, Nissan Green Program 2016 (NGP2016), focused on reducing the environmental impact of corporate activities and pursuing harmony between resource consumption and ecology. To minimize the company's corporate carbon footprint, Nissan aims to reduce CO₂ emissions per vehicle sold and to improve resource efficiency by increasing the recycled material usage ratio. Four key actions, including the above, are implemented throughout Nissan's corporate activities.

- ▶ GRI G4 Indicators
- ▶ G4-EN1/G4-EN3/
G4-EN8/G4-EN15/
G4-EN16/G4-EN21/
G4-EN22/G4-EN23

CORPORATE INDICATORS – ENERGY

Energy Input

	Unit	(FY)				2016
		2012	2013	2014	2015	
Total	MWh	8,984,864	9,207,124	9,474,368	9,683,528	10,189,082
Japan	MWh	4,565,499	4,424,486	4,191,517	4,115,353	4,497,562
North America	MWh	2,157,793	2,061,393	2,424,942	2,583,613	2,643,303
Europe	MWh	982,332	1,027,027	1,156,519	1,107,279	1,093,103
Other	MWh	1,279,240	1,694,218	1,701,391	1,877,283	1,955,115
Primary						
Natural gas	MWh	2,847,325	2,894,901	3,060,122	3,346,141	3,537,674
LPG	MWh	360,891	339,751	295,800	303,826	249,426
Coal	MWh	235,239	149,232	199,801	206,307	217,431
Heating oil	MWh	248,445	226,513	225,114	188,943	209,232
Gasoline	MWh	211,449	263,663	322,624	302,564	303,040
Diesel	MWh	72,151	71,371	99,045	55,099	57,488
Heavy oil	MWh	67,967	61,359	58,274	34,289	43,853
External						
Electricity (Purchased)	MWh	4,785,477	5,038,384	5,084,989	4,979,114	5,247,663
Renewable energy	MWh	15,522	118,917	154,515	141,076	157,226
Chilled water	MWh	25,947	11,646	4,239	12,116	12,919
Heated water	MWh	7,492	6,227	4,635	4,630	4,690
Steam	MWh	114,281	133,849	110,953	100,000	136,593
Internal						
Electricity (In-house generation)	MWh	8,199	10,227	8,772	9,423	11,847
Renewable energy	MWh	8,199	10,227	8,772	9,423	11,847
Total renewable energy	MWh	23,721	129,144	163,287	150,499	169,073
Ratio of renewable energy	%	0.26%	1.40%	1.73%	1.55%	1.66%

Despite the extensive energy-saving activities at Nissan facilities, energy usage was 10.19 million MWh in fiscal 2016, a 5.2% increase from fiscal 2015. Energy-saving activities throughout our corporate operations and efficient manufacturing contributed to limiting the rise, given that sales volume increased by 8.7% in the same period. Production sites globally accounted for 8.946 million MWh of total energy consumption.

Nissan's objective was to increase the usage of renewable energy to 9% of total energy used in global activities by fiscal 2016. Direct use of renewable energy increased to 1.66% as a result of purchasing wind-power-generated electricity at the India plant. Taking into account renewable energy in electricity, the percentage reached 9.2%, achieving the target.

▶▶ page_140

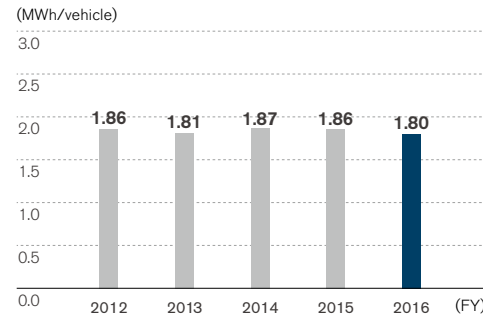
▶ This figure is subject to assurance by KPMG AZSA Sustainability Co., Ltd. For details, please see p.140.



▶▶ GRI G4 Indicators
▶▶ G4-EN3

Energy per Vehicle Produced

In fiscal 2016 energy per vehicle produced was 1.80 MWh, a 3.2% improvement from fiscal 2015. This result shows our continuous efforts to reduce energy used per vehicle produced.



(By Region)

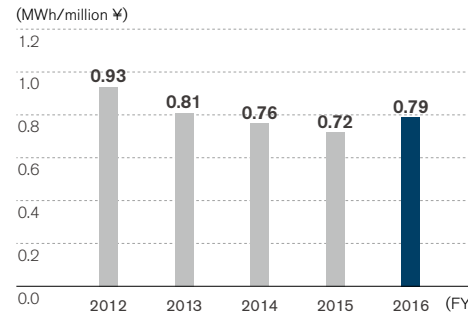
	Unit	(FY) 2016
Japan	MWh/vehicle	4.43
North America	MWh/vehicle	1.42
Europe	MWh/vehicle	1.50
Other	MWh/vehicle	0.95

Data for the Japan region includes manufacturing of powertrains and other components for use in overseas assembly operations. Since the denominator is vehicles produced in the region, this results in intensity tending to show higher values.



▶▶ GRI G4 Indicators
▶▶ G4-EN3/G4-EN5/
G4-EN6

Energy per Revenue



In fiscal 2016, global Nissan facilities saw energy per revenue rise to 0.79 MWh, an increase of 9.5% compared to the previous fiscal year. Nissan is taking continuous steps toward decoupling financial capital generation from energy use; however, an increase of production volume and decrease of revenue result in an increase of energy per revenue.



▶▶ GRI G4 Indicators
▶▶ G4-EN3/G4-EN5/
G4-EN6

CORPORATE INDICATORS – CO₂

Carbon Footprint

	Unit	2012	2013	2014	2015	2016
Scope1	t-CO ₂	835,766	812,062	861,457	926,790	963,661
Scope2	t-CO ₂	2,432,889	2,538,360	2,422,410	2,547,951	2,614,028
Scope1+2	t-CO ₂	3,268,655	3,350,422	3,283,867	3,474,741	3,577,689
Japan	t-CO ₂	1,526,182	1,446,871	1,267,676	1,479,572	1,579,089
North America	t-CO ₂	758,457	698,934	769,696	800,724	823,340
Europe	t-CO ₂	284,079	259,972	290,109	208,088	176,285
Other	t-CO ₂	699,937	944,644	956,386	986,359	998,976
Scope3						
Commuting	t-CO ₂	468,346	426,487	455,510	319,189	304,100
Japan, U.S., Europe	t-CO ₂	214,619	217,091	227,248	218,137	213,747
Logistics	t-CO ₂	1,490,050	1,678,903	1,608,582	1,598,891	1,925,281

In fiscal 2016, the total of Scope 1 and 2 emissions was 3.58 million tons. Given that sales volume increased by 8.7% in the same period, the increase in CO₂ emissions from Nissan facilities was limited to 2.9% from the previous fiscal year, due to increase of production volume. Total CO₂ emissions from manufacturing processes were 3.139 million tons (Scope 1 emissions: 0.841 million tons, Scope 2 emissions: 2.297 million tons).

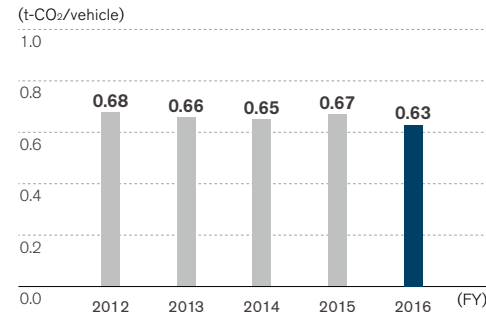
▶▶ page_140

▶ This figure is subject to assurance by KPMG AZSA Sustainability Co., Ltd. For details, please see p.140.



▶▶ GRI G4 Indicators
▶ G4-EN15/G4-EN16/
G4-EN17/G4-EN19/
G4-EN30

Scope 1 and 2 Emissions per Vehicle Produced



For fiscal 2016, CO₂ emissions per vehicle produced improved 5.3% from the previous fiscal year, with combined Scope 1 and 2 emissions at 0.63 ton. Energy conservation diagnosis and best-practice sharing among global Nissan plants contributed to these significant improvements.

(By Region)

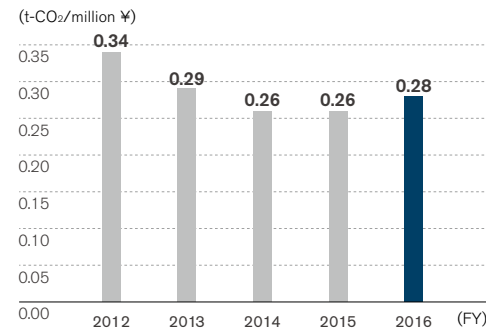
	Unit	2016
Japan	t-CO ₂ /vehicle	1.56
North America	t-CO ₂ /vehicle	0.44
Europe	t-CO ₂ /vehicle	0.24
Other	t-CO ₂ /vehicle	0.49

Data for the Japan region includes manufacturing of powertrains and other components for overseas assembly use. Since the denominator is vehicles produced in the region, this results in intensity tending to show higher values.



▶▶ GRI G4 Indicators
▶ G4-EN15/G4-EN16/
G4-EN18

Scope 1 and 2 Emissions per Revenue



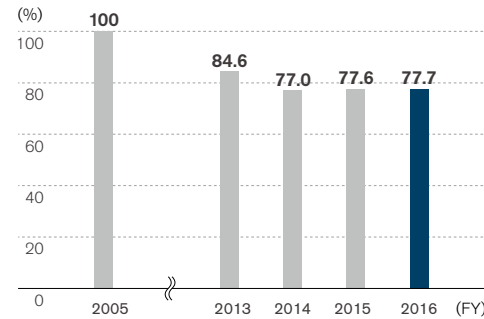
In fiscal 2016, as measured by the per revenue CO₂ emissions from our global operations, the result was 0.28 ton per ¥1 million, increased 7.2% from fiscal 2015. A decrease in revenue resulted in this increase of emissions per revenue.



▶▶ GRI G4 Indicators
▶ G4-EN15/G4-EN16/
G4-EN18

Corporate Carbon Footprint per Vehicle Sold

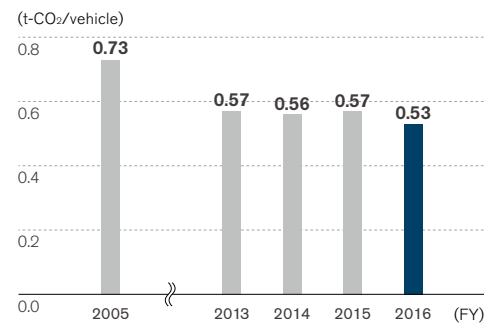
In the Nissan Green Program 2016 (NGP2016), the company aimed to reduce CO₂ emissions from corporate activities by 20% compared to fiscal 2005, focusing on manufacturing, logistics, offices and dealerships in Japan. In fiscal 2016, overall corporate emissions were reduced by 22.3% compared to fiscal 2005, achieving the target. Lower CO₂ emissions from manufacturing and dealerships in Japan contributed to emission reduction.



▶▶ GRI G4 Indicators
▶▶ G4-EN15/G4-EN16/
G4-EN18

Manufacturing CO₂ per Vehicle Produced

In the Nissan Green Program 2016 (NGP2016), the company aimed to reduce CO₂ emissions per vehicle produced from manufacturing activities by 27% in fiscal 2016 compared to fiscal 2005. In fiscal 2016, Nissan's manufacturing CO₂ emissions per vehicle produced reached 0.53 ton, a 27.0% reduction compared to fiscal 2005, achieving the target.



▶▶ GRI G4 Indicators
▶▶ G4-EN15/G4-EN16/
G4-EN18

CORPORATE INDICATORS—WATER

Water Input

	Unit	2012	2013	2014	2015	2016
Total	1,000 m ³	29,537	30,967	29,162	28,570	29,118
Japan	1,000 m ³	15,956	16,818	15,018	14,990	15,563
North America	1,000 m ³	4,770	5,176	5,419	5,427	5,483
Europe	1,000 m ³	2,410	2,404	2,310	2,330	2,299
Other	1,000 m ³	6,401	6,569	6,415	5,823	5,774

Nissan's objective was to reduce water input by 15% in fiscal 2016 compared with fiscal 2010 in cubic meters per production unit; the target was achieved. In fiscal 2016, water input in our global sites was 29,118 thousand m³, the same level as in fiscal 2015. This is mainly due to water-saving activities in vehicle production plants, as shown in Vehicle Production Plant Water Input per Vehicle Produced on p. 121. Water input from production sites of Nissan Motor Co., Ltd. in Japan is 6,900,254 m³. *

▶▶ page_140

▶ This figure is subject to assurance by KPMG AZSA Sustainability Co., Ltd. For details, please see p. 140.



▶▶ GRI G4 Indicators
▶▶ G4-EN8

Water Discharge

	Unit	2012	2013	2014	2015	2016
Total	1,000 m ³	21,228	23,482	20,938	20,680	20,516
Japan	1,000 m ³	13,710	15,114	13,358	12,976	12,681
North America	1,000 m ³	3,055	3,658	3,550	3,916	4,028
Europe	1,000 m ³	2,031	2,054	1,793	1,740	1,767
Other	1,000 m ³	2,432	2,656	2,237	2,048	2,040

	Unit	2012	2013	2014	2015	2016
Quality						
Chemical oxygen demand (COD)	kg	34,894	32,130	27,883	28,042	29,730

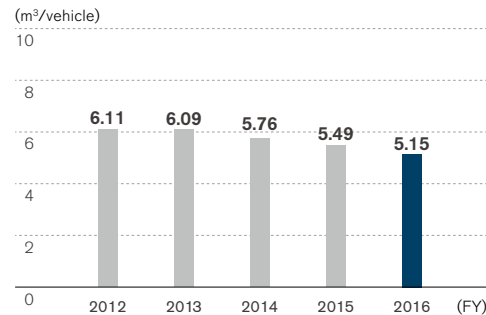
In fiscal 2016, water discharges from our global sites totaled 20,516 thousand m³, which was the same level as in fiscal 2015.



▶▶ GRI G4 Indicators
▶▶ G4-EN22

Water Input per Vehicle Produced

In fiscal 2016, water input per vehicle produced decreased to 5.15 m³, a 6.2% improvement from fiscal 2015. This is mainly due to the water-saving activities in vehicle production plants as shown below.



(By Region)

	Unit	(FY) 2016
Japan	m ³ /vehicle	15.33
North America	m ³ /vehicle	2.96
Europe	m ³ /vehicle	3.15
Other	m ³ /vehicle	2.81

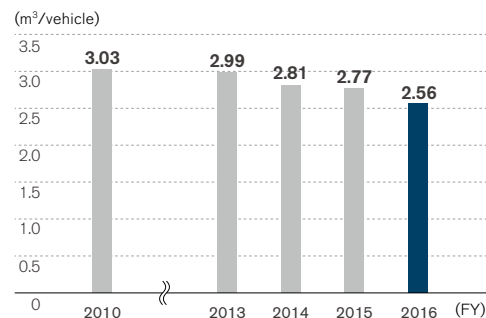
Data for the Japan region includes manufacturing of powertrains and other components for overseas assembly use. Since the denominator is vehicles produced in the region, this results in intensity tending to show higher values.



▶▶ GRI G4 Indicators
▶▶ G4-EN8

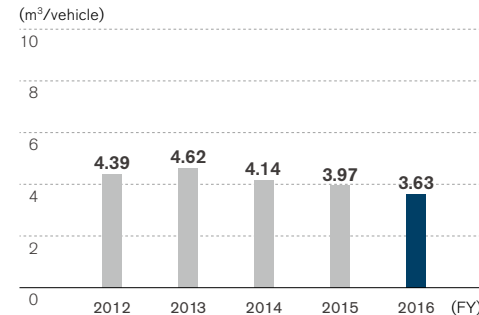
Vehicle Production Plant Water Input per Vehicle Produced

Nissan's objective was to reduce water input by 15% in fiscal 2016 compared with fiscal 2010 in cubic meters per production unit. In fiscal 2016, water input per vehicle produced in vehicle production plants improved 15.7% compared with fiscal 2010, achieving the target.



Water Discharge per Vehicle Produced

In fiscal 2016, water discharge per vehicle produced was 3.63 m³, which was a 8.7% improvement from fiscal 2015.



(By Region)

	Unit	(FY) 2016
Japan	m ³ /vehicle	12.49
North America	m ³ /vehicle	2.17
Europe	m ³ /vehicle	2.42
Other	m ³ /vehicle	0.99

Data for the Japan region includes manufacturing of powertrains and other components for overseas assembly use. Since the denominator is vehicles produced in the region, this results in intensity tending to show higher values.



▶▶ GRI G4 Indicators
▶▶ G4-EN22

CORPORATE INDICATORS—EMISSIONS

Emissions

	Unit	2012	2013	2014	2015	2016 (FY)
NOx	ton	525	450	453	450	430
SOx	ton	43	40	40	37	31

 GRI G4 Indicators
G4-EN21

In fiscal 2016, NOx and SOx emissions from Nissan facilities were 430 tons and 31 tons, respectively.

Volatile Organic Compounds (VOCs)

	Unit	2012	2013	2014	2015	2016 (FY)
Total	ton	12,305	11,734	11,316	10,820	11,933
Japan	ton	3,623	3,492	2,826	2,850	3,580
North America	ton	5,194	5,338	5,511	5,309	4,851
Europe	ton	3,488	2,904	2,979	2,661	3,502

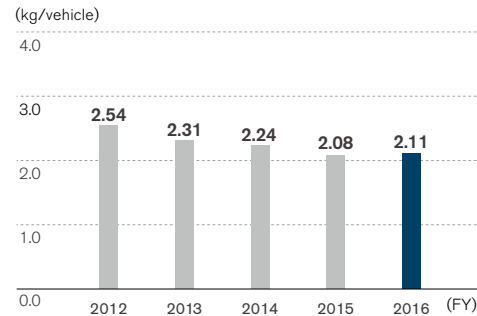
 GRI G4 Indicators
G4-EN21

Nissan's objective was to reduce volatile organic compounds (VOCs) from the body manufacturing process by 15% in fiscal 2016 compared with fiscal 2010 in grams per square meters. In fiscal 2016, VOCs from manufacturing plants were 11,933 tons globally, a 10.3% increase from fiscal 2015. This is mainly due to increase of global production volume.

VOC Reduction from Paint Shop Technologies

In 2013, Nissan opened its most advanced paint plant in the world. The state-of-the-art facility in Smyrna, Tennessee, sets new standards for quality, efficiency and environmental impacts, as it is capable of reducing energy consumption by 30%, carbon dioxide emissions by 30% and volatile organic compound (VOCs) emissions by 70%. The plant uses an innovative three-wet paint process that applies all three paint layers in succession, before the vehicle goes into the oven. The plant is Nissan's "Showcase Project" as part of the U.S. Department of Energy's Better Buildings Better Plants Challenge, where Nissan has committed to reducing energy intensity in its three U.S. plants by 25% by 2020.

VOCs per Vehicle Produced



In fiscal 2016, VOCs per vehicle produced were 2.11 kg, the same level as the previous fiscal year.

(By Region)

	Unit	2016 (FY)
Japan	kg/vehicle	3.53
North America	kg/vehicle	2.62
Europe	kg/vehicle	4.80

 GRI G4 Indicators
G4-EN21

Released Substances Designated by PRTR Law (Japan)

	Unit	2011	2012	2013	2014	2015 (FY)
Japan site total	ton	4,441	4,158	4,183	3,879	4,129
Oppama	ton	981	715	676	402	488
Tochigi	ton	915	942	1,155	1,317	1,435
Kyushu	ton	1,390	1,394	1,300	1,152	1,173
Yokohama	ton	555	581	579	547	531
Iwaki	ton	320	183	128	114	132
NTC	ton	280	343	347	347	370

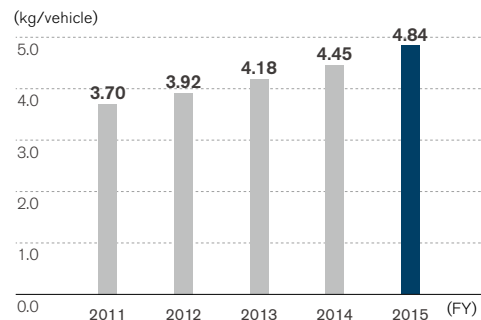
The table shows chemical substance emissions calculated based on the Japanese government PRTR guideline. PRTR emissions show total volume excluding substances adherent to the product.

In fiscal 2015, released substances designated by the PRTR (Pollutant Release and Transfer Register) Law in Japan were 4,129 tons, an increase from the previous fiscal year.

 GRI G4 Indicators
G4-EN21

PRTR Emissions per Vehicle Produced (Japan)

In fiscal 2015, PRTR emissions per vehicle produced in Japan were 4.84 kg, an 8.8% increase from the previous fiscal year.



 GRI G4 Indicators
G4-EN21

CORPORATE INDICATORS—WASTE

Waste

	Unit	2012	2013	2014	2015	2016 (FY)
Total	ton	168,617	172,849	173,513	159,345	158,939
Japan	ton	65,412	61,999	59,808	63,630	61,115
North America	ton	40,208	51,767	58,452	49,129	45,459
Europe	ton	50,495	51,295	45,358	37,204	41,110
Other	ton	12,502	7,788	9,895	9,382	11,255

Detail

Waste for disposal	ton	31,187	17,903	13,153	11,355	8,707
Recycled	ton	137,430	154,946	160,360	147,990	150,231

Nissan's objective was to reduce waste in manufacturing plants by 2% per year for Japan and 1% per year globally compared to BAU (business as usual); the target was achieved in fiscal 2016. For fiscal 2016, waste generated totaled approximately 159,000 tons, the same level as in fiscal 2015. Contributing to this were waste-reduction activities at manufacturing plants in Mexico and Spain. The boundary of the waste data is limited to global production facilities. Waste generated from production sites of Nissan Motor Co., Ltd. in Japan is 28,842 tons.

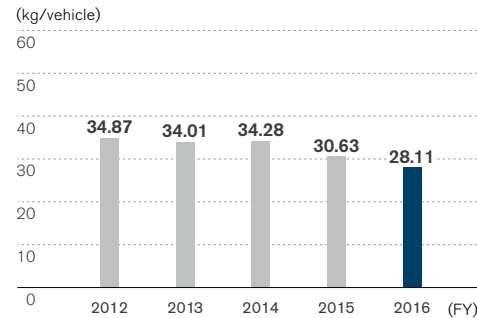
▶▶ page_140

This figure is subject to assurance by KPMG AZSA Sustainability Co., Ltd. For details, please see p. 140.

 GRI G4 Indicators
G4-EN23

Waste per Vehicle Produced

Waste per vehicle produced was 28.11 kg, an 8.2% decrease from fiscal 2015 and the second straight year of considerable decrease.



(By Region)

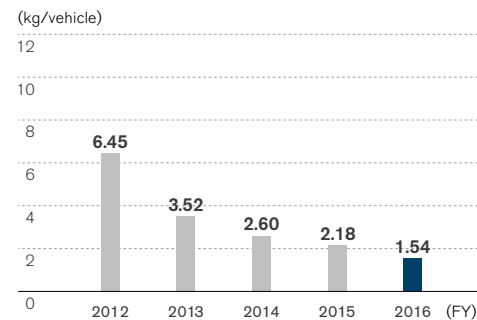
	Unit	(FY) 2016
Japan	kg/vehicle	60.21
North America	kg/vehicle	24.51
Europe	kg/vehicle	56.31
Other	kg/vehicle	5.48



▶▶ GRI G4 Indicators
▶▶ G4-EN23

Waste for Disposal per Vehicle Produced

In fiscal 2016, Nissan reduced the volume of waste for disposal to a total of 1.54 kg per vehicle produced, a 29% reduction from fiscal 2015. This was mainly due to waste-reduction efforts at the manufacturing plant in Mexico.



▶▶ GRI G4 Indicators
▶▶ G4-EN23

CORPORATE INDICATORS – LOGISTICS

Logistics Volume

	Unit	2012	2013	2014	2015	(FY) 2016
Total	mil ton-km	35,747	37,719	35,243	35,546	39,930
Inbound	mil ton-km	12,156	12,883	11,578	11,221	10,634
Outbound	mil ton-km	23,591	24,836	23,665	24,325	29,296
Sea	%	70.7	64.3	62.0	60.1	60.9
Road	%	20.6	24.9	25.0	26.5	24.8
Rail	%	8.2	10.5	12.5	13.0	14.0
Air	%	0.5	0.4	0.5	0.3	0.4

In fiscal 2016, global shipping increased by 12.3% from the previous fiscal year to reach 39,930 million ton-km due to increase of global production volume. Nissan has been continuously working to reduce shipping by upsizing trucks, improving truck loading rates, improving fuel economy of car-transporting ships and shifting to rail and sea shipping. However, the impact was not large enough to cancel out the impact of the global production increase.



▶▶ GRI G4 Indicators
▶▶ G4-EN30

CO₂ Emissions in Logistics

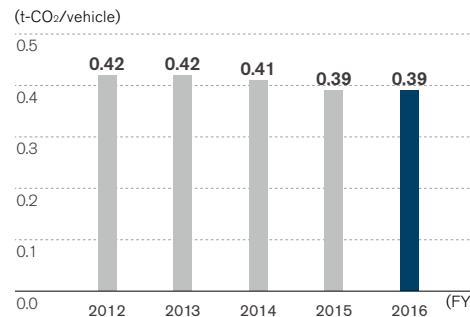
		(FY)					
		Unit	2012	2013	2014	2015	2016
Total		t-CO ₂	1,490,050	1,678,903	1,608,582	1,598,891	1,925,281
Inbound		t-CO ₂	821,030	908,804	822,867	797,034	809,088
Outbound		t-CO ₂	669,020	770,098	785,715	801,857	1,116,193
Sea	%		23.9	20.2	18.5	18.3	17.8
Road	%		55.3	61.7	60.5	65.7	62.1
Rail	%		4.3	5.2	5.1	5.4	5.6
Air	%		16.4	12.9	15.9	10.6	14.5

▶ "Inbound" includes parts procurement from suppliers and transportation of knockdown parts, and "Outbound" includes transportation of complete vehicles and service parts.

In fiscal 2016, CO₂ emissions from logistics were 1,925,281 tons, an increase of 20.4% from the previous fiscal year. Emissions from air freight increased 65.0%, impacting the overall emission level.

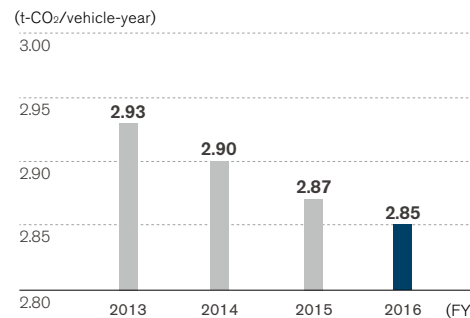


CO₂ Emissions per Vehicle Transported



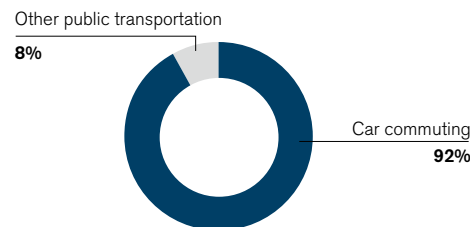
In fiscal 2016, despite an expansion in global production, the CO₂ emissions per vehicle transported were 0.39 ton, the same level as the previous fiscal year.

Employee Commuting CO₂ Emissions



In fiscal 2013, Nissan introduced a companywide CO₂ reduction plan for car commuting employees in Japan. For fiscal 2016, CO₂ emissions from car commuting in Japan were approximately 40 kton, or 2.85 ton-CO₂/vehicle annually. This plan encourages car commuters to shift from internal combustion engine vehicles to the zero-emission electric vehicle Nissan LEAF to reduce CO₂. The objective is to reduce emissions by 1% in ton-CO₂/vehicle annually.

CO₂ Emissions from Commuting



▶ Calculated by using below parameters together with vehicle homologation data:
 - Average car commuting range (Japan): 9,000 km/vehicle-year
 - National Greenhouse Gas Inventory Report of Japan (2009), Ministry of the Environment, Japan: 0.33 kg-CO₂e
 - CO₂ emission factor in fiscal 2014, Tokyo Electric Power Company: 0.000496 t-CO₂/kWh

▶ Employees of Nissan offices and manufacturing plants in Japan, fiscal 2016.

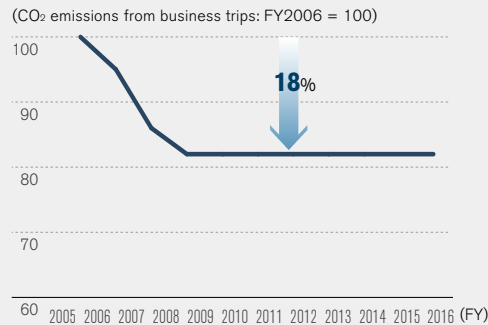
CO₂ Emissions from Business Trips

In 2005 the company started the Nissan Meeting Way program to improve the efficiency of meetings. This program has five major rules: keep things paperless, require as little movement of people as possible, take only 1 hour per unit of discussion, confirm meeting objectives and record clear minutes. As a result of this program, meeting efficiency was improved; CO₂ emissions from business travel were also reduced through the use of video and telephone conference systems.

Achieved 18% Reduction of CO₂ Emissions from Business Travel

Currently, CO₂ emissions from business travel are approximately 226 kton. Nissan has achieved an 18% reduction in business-travel-related CO₂ emissions compared to fiscal 2005 through the use of video and telephone conference systems since 2009.

Contribution to CO₂ Reduction by Nissan Meeting Way



CORPORATE INDICATORS—SUPPLY CHAIN

Supplier Emissions

	Unit	(FY) 2015
Carbon footprint	kt-CO ₂	9,382
Energy input	GWh	22,893
Low-carbon/renewable energy	GWh	516
Water input	1,000 m ³	65,869
Water discharge	1,000 m ³	52,970

A supply-chain environmental survey was conducted on global tier-1 suppliers. Calculations were based on actual submitted data from suppliers and combined with other estimated data. This survey is one of Nissan's efforts to reduce CO₂ emissions throughout the entire value chain. In fiscal 2016, the carbon footprint of contract suppliers was 9,382kt-CO₂. With tier-1 suppliers' own individual targets, overall CO₂ emissions and water input are expected to improve. Nissan is regularly engaging with global suppliers to continuously reduce environmental impacts. The company is involved in energy-saving collaborative Thanks Activities with suppliers to reduce energy/CO₂. From fiscal 2017, Nissan has joined the CDP supply chain program as a lead member for the first time as a Japanese company.



▶▶ GRI G4 Indicators
▶▶ G4-EN17/G4-EN19

Scope 3 Emissions by Category			(FY)
Category	Unit	2016	
1. Purchased goods & services	kt-CO ₂	17,914	
2. Capital goods	kt-CO ₂	1,180	
3. Fuel- and energy-related activities	kt-CO ₂	411	
4. Upstream transportation & distribution	kt-CO ₂	809	
5. Waste generated in operations	kt-CO ₂	197	
6. Business travel	kt-CO ₂	226	
7. Employee commuting	kt-CO ₂	304	
8. Upstream leased assets	kt-CO ₂	0	
9. Downstream transportation & distribution	kt-CO ₂	871	
10. Processing of sold products	kt-CO ₂	0	
11. Use of sold products	kt-CO ₂	127,666	
12. End-of-life treatment of sold products	kt-CO ₂	423	
13. Downstream leased assets	kt-CO ₂	461	
14. Franchises	kt-CO ₂	0	
15. Investments	kt-CO ₂	0	
Total	kt-CO ₂	150,462	

▶▶ page_140

▶ The values marked with an asterisk are subject to assurance by KPMG AZSA Sustainability Co., Ltd. For details, please see p. 140.

Nissan conducted a study based on the Corporate Value Chain (Scope 3) Accounting and Reporting Standard from the GHG Protocol. The results showed that about 90% of Scope 3 emissions were from the use of sold products. Nissan has introduced fuel-efficient vehicles globally and disclosed the resulting progress in corporate average fuel efficiency. As about 10% of Scope 3 emissions were from purchased goods and services, Nissan believes actions are necessary along the entire value chain. Since 2011, the company has shared its environmental policy and promoted collaboration with suppliers.



▶▶ GRI G4 Indicators
▶▶ G4-EN17

CORPORATE INDICATORS—ENVIRONMENTAL ACCOUNTING

Environmental Conservation Cost

	Unit	(FY)			
		2014		2015	
		Investment	Cost	Investment	Cost
Total	mil ¥	4,268	180,000	3,491	172,428
Business area	mil ¥	28	1,532	71	1,519
Upstream/downstream	mil ¥	–	566	0	513
Management	mil ¥	0	2,321	0	2,297
R&D	mil ¥	4,240	175,000	3,420	167,800
Social activities	mil ¥	0	353	0	296
Damage repairs	mil ¥	–	228	0	3
	Unit	2014		2015	
Total	mil ¥	6,366		5,599	
Cost reduction	mil ¥	1,341		2,289	
Profit	mil ¥	5,025		3,310	

All environmental costs are based on the guidelines provided by Japan's Ministry of the Environment, and are calculated for activities in Japan only.



▶▶ GRI G4 Indicators
▶▶ G4-EN31

CORPORATE INDICATORS—FACILITY

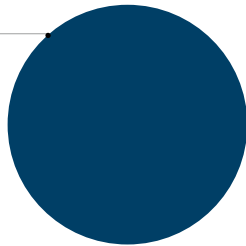
Carbon Credit

	Unit	2013	2014	2015	(FY) 2016
Allowance	t-CO ₂	48,124	46,194	45,824	43,424

Nissan Motor Iberica, S.A. in Barcelona and Cantabria, Spain, entered EU-ETS, and the verified allowance earned for fiscal 2016 was 43,424 tons.

ISO 14001 Certification

Certified facilities 100%



Nissan is progressing with the introduction of environmental management systems to all its operating sites worldwide. In January 2011 the company obtained integrated ISO 14001 certification for its Global Headquarters and all main facilities in Japan for research and development, production and distribution, as well as for product development processes. Nissan has also obtained ISO 14001 certification at all major production plants outside Japan.



▶▶ GRI G4 Indicators
▶▶ G4-DMA

Green Building Policy

With ISO 14001 management processes for evaluating environmental impact, Nissan makes it a key task to optimize its buildings in the construction or refurbishing stages to make all its structures greener. Evaluation metrics in this area include buildings with a smaller environmental footprint, such as lower CO₂ emissions; construction methods producing less waste and emissions; and reduced use of hazardous materials and other quality control tasks. Furthermore, in Japan Nissan uses the Ministry of Land, Infrastructure, Transport and Tourism's Comprehensive Assessment System for Built Environment Efficiency (CASBEE) as one performance index.

Among Nissan's current business facilities, the Global Headquarters in the city of Yokohama has earned CASBEE's highest "S" ranking, making it the second Nissan structure to do so following the Nissan Advanced Technology Center (NATC) in Atsugi, Kanagawa Prefecture. The Global Headquarters gained a Built Environment Efficiency Rating of 5.6, the highest CASBEE rating for a new structure, making it one of Japan's greenest office buildings. The building's use of natural energy sources to reduce its energy usage and its CO₂ emissions were evaluated highly, as were its methods of water recycling and its significant reduction in waste produced.

Since April 2000, Nissan has been deploying unique environmental facility certification system based on ISO 14001 for dealerships called the Nissan Green Shop. The company's environmental policy requires all dealerships in Japan to meet a certain standard and continue to be audited by Nissan each year. The dedicated evaluation sheet has a total of 84 KPIs and is regularly revised to reflect requirements of national legislation, local communities and the Nissan Green Program.

Fines from Environmental Laws

There were no fines from violations of environmental laws in the reporting year. However, there was one environmental accident for which we received guidance from the government as below.

Wastewater exceeding the COD regulation value was released to the river unintentionally at the Yokohama Plant (Kanagawa Prefecture, Japan) on March 20, 2017. We immediately stopped the wastewater and introduced activated carbon powder to keep the quality of wastewater at regulation levels. In parallel, we have been identifying causes and considering permanent measures through cooperation with the municipal government. In addition, we improved the monitoring system to notice abnormal values before wastewater is released. Monitoring at other plants has also been enhanced to prevent recurrence.



▶▶ GRI G4 Indicators
▶▶ G4-DMA

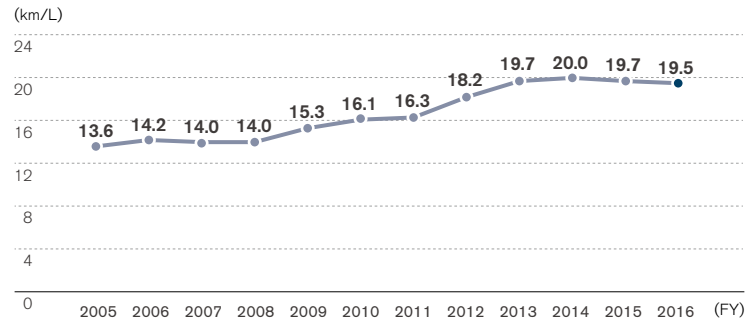


▶▶ GRI G4 Indicators
▶▶ G4-EN24/G4-EN29

PRODUCT INDICATORS

PRODUCT INDICATORS—FUEL ECONOMY, CO₂

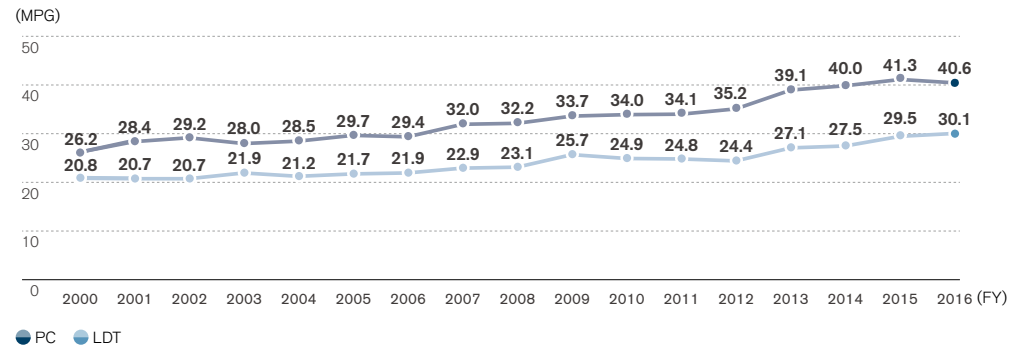
Corporate Average Fuel Efficiency (CAFE, JC08 Mode) in Japan



In fiscal 2016, mainly due to strong sales of the Note e-POWER, the average fuel economy improved to 19.5km/L in JC08 mode. Regarding the fiscal 2016 results for Japan, provisional values determined by Nissan are used.


 ▶ GRI G4 Indicators
 ▶ G4-EN7/G4-EN27

Corporate Average Fuel Efficiency (CAFE) in the United States

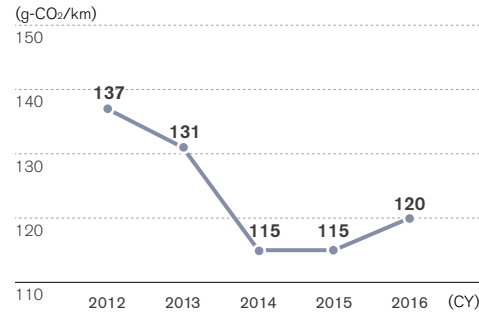


In fiscal 2016, sales of Infiniti large-segment vehicles increased, resulting in CAFE of 40.6 MPG for passenger cars. CAFE for light-duty trucks improved by 5.1% from fiscal 2015 to 30.1 MPG.


 ▶ GRI G4 Indicators
 ▶ G4-EN7/G4-EN27

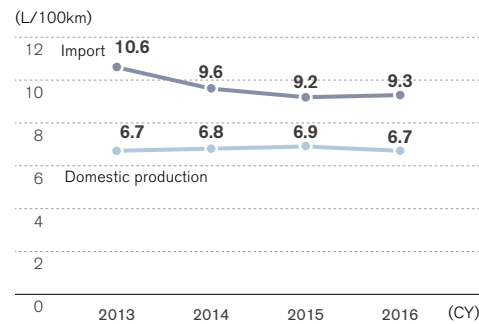
CO₂ Emission Index from Nissan Vehicles in Europe

In 2016, the sales mix of diesel/petrol vehicles increased, worsening CO₂ emissions by around 4% compared to 2015 for Nissan's passenger car models sold in Europe. Regarding the fiscal 2016 results for Europe, provisional values determined by Nissan are used.



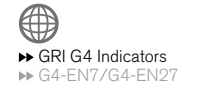
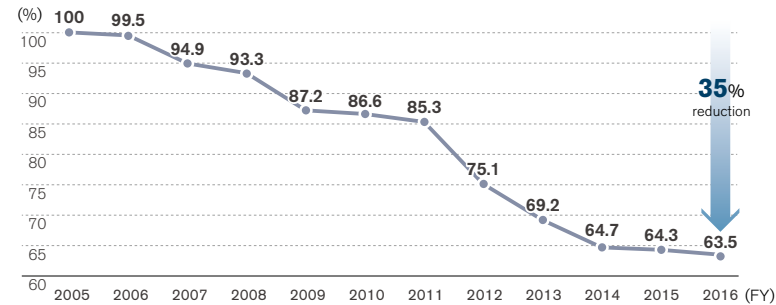
Corporate Average Fuel Consumption in China

Fuel efficiency for domestically produced vehicles improved by 3% from the previous calendar year, while the level for import vehicles worsened by 1.1% due to petrol volume increase.



Global Corporate Average Fuel Efficiency (CAFE)

Nissan's CAFE result in fiscal 2016 represented a 36.5% improvement from the fiscal 2005 level (as measured by fuel efficiency standards in the Japanese, U.S., European and Chinese markets). The sales of hybrid cars in Japan, the Note in Europe and the Altima and Versa in the U.S. market improved the overall CAFE result.



Top Fuel Economy Models

Region	Model	Unit	(FY) 2016
Global	Note e-POWER 1.2L	km/L (JC08)	37.2
Best selling model	X-Trail (Rogue)	km/L (JC08)	16.0~20.6
Japan (excl. light vehicles)	Note e-POWER 1.2L	km/L (JC08)	37.2
Japan (incl. light vehicles)	Note e-POWER 1.2L	km/L (JC08)	37.2
Europe	Micra 1.5L dCi + Stop/Start System	g-CO ₂ /km	85
U.S.	Versa 1.6L 2WD CVT	MPG	35
China	Sylphy 1.6L 2WD CVT + Stop/Start System	L/100km	5.2



▶▶ GRI G4 Indicators
▶▶ G4-EN7/G4-EN27

100% electric vehicles are excluded. From fiscal 2013, fuel economy in Japan is shown in JC08 mode.

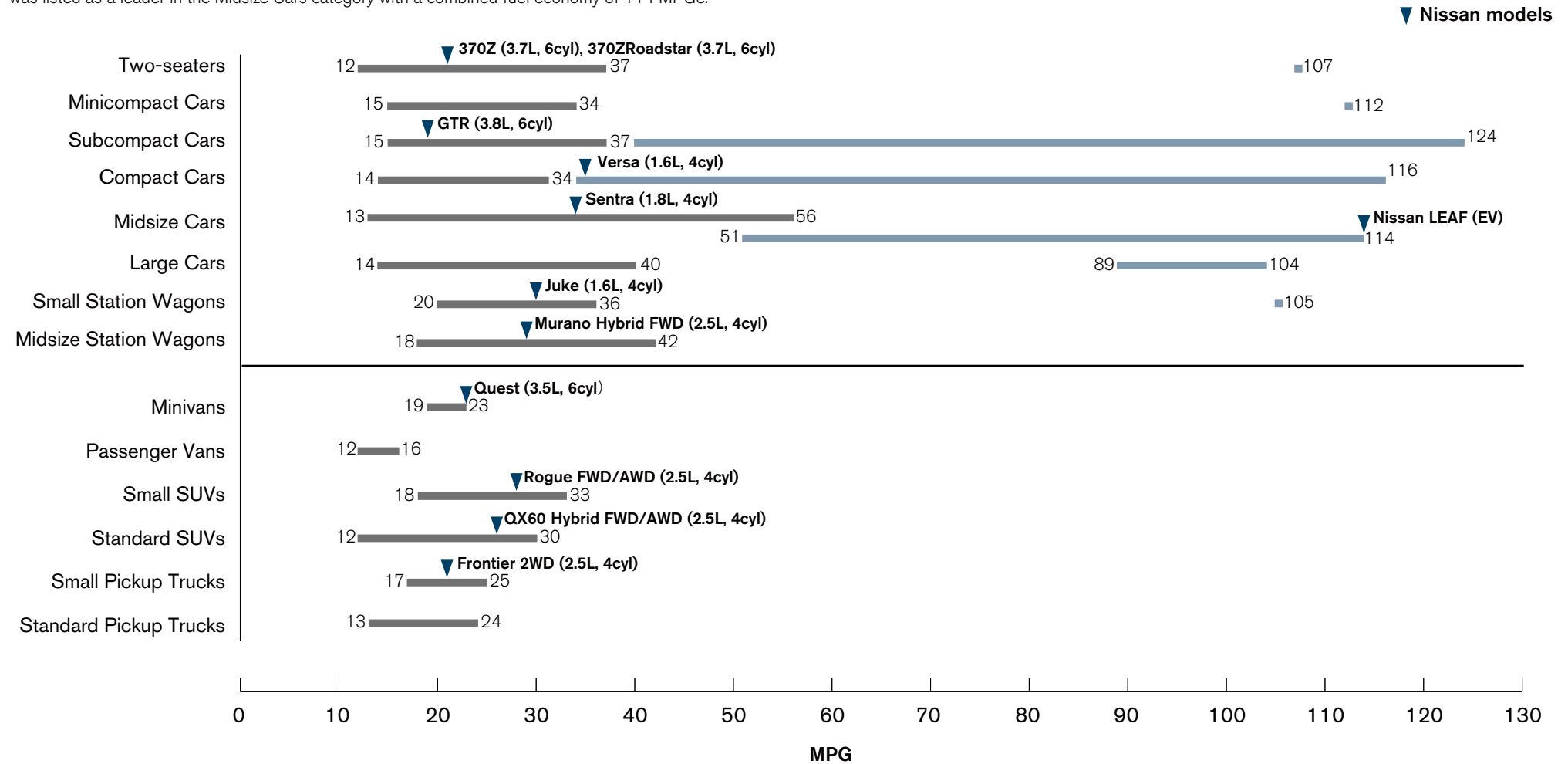
Applying EVs Toward a Zero-Emission Society

During fiscal 2016, Nissan started lending the e-NV200 for free for up to three years to 500 municipal governments and companies that proposed vehicle utilization plans to help improve urban development and solve administrative or corporate issues. Through this activity, Nissan is aiming to realize a zero-emission society.

The e-NV200, a multipurpose, zero-emission commercial vehicle, delivers a cruising range of 185-190 kilometers in Japan's JC08 mode and is equipped with "Power Plug" outlets that can draw a maximum of 1,500W from the onboard battery. Nissan expects the proposed activities to take full advantage of the e-NV200's clean, quiet operation and electric power availability. Assuming average cruising operation in Japan, the activities overall will mitigate approximately 1,450 tons of CO₂ annually.

Fuel Economy Leaders

The *Fuel Economy Guide* published by the U.S. Environmental Protection Agency (EPA) and Department of Energy (DOE) helps buyers to choose the most fuel-efficient vehicle. Based on the *Model Year 2016 Fuel Economy Guide*, the all-electric Nissan LEAF was listed as a leader in the Midsize Cars category with a combined fuel economy of 114 MPGe.



Compiled from the *Model Year 2016 Fuel Economy Guide* by the U.S. Environmental Protection Agency (EPA) and Department of Energy (DOE).

Left side of ranges (■): conventional vehicles
 Right side of ranges (■): electric vehicles/plug-in hybrids

PRODUCT INDICATORS – TECHNOLOGIES

Ratio of Powertrain Type (Shipment Base)

	Unit	Gasoline-powered vehicles	Diesel-powered vehicles	Natural-gas drive vehicles	Hybrid drive vehicles	Electric drive vehicles
Japan	%	55.1	2.7			
North America	%	98.5	0.7			
Europe	%	47.7	49.2	0.0	3.3	2.1 ▶
Other	%	90.7	8.4			



▶ GRI G4 Indicators
▶ G4-EN27

Sales of the all-electric Nissan LEAF—the world's best-selling zero-emission car—surpassed 250,000 units in fiscal 2016. The ratio of EVs is steadily improving as the new Note e-POWER and a commercial EV, the e-NV200, were launched.

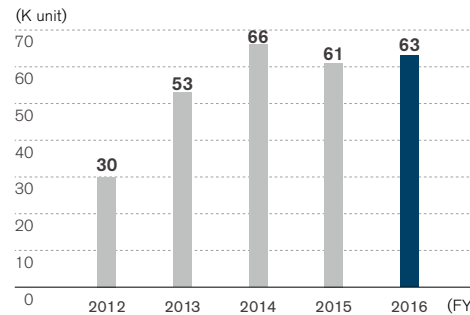
Green Product Innovation

Nissan believes it is important not only to develop and introduce zero-emission vehicles such as electric vehicles and fuel-cell vehicles, but also to improve the fuel economy of engine-powered vehicles. Nissan's PURE DRIVE title is given to vehicles that not only meet existing fuel economy requirements in each market but clear more stringent internal standards which we periodically review in line with societal demands. PURE DRIVE implements innovative environmental technologies that maximize energy efficiency to lower fuel consumption and reduce CO₂ emissions. Cars featuring these technologies are being marketed worldwide.

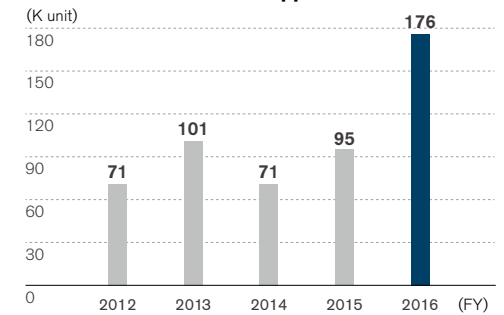
Core Technologies for Green Products

Nissan strives to develop technologies that maximize the overall energy efficiency of internal combustion engines and improve transmission performance, as well as zero-emission technologies. Nissan's core technologies in this area are lithium-ion batteries, Intelligent Dual Clutch Control Hybrid and the Xtronic transmission (Continuously Variable Transmission, or CVT) system.

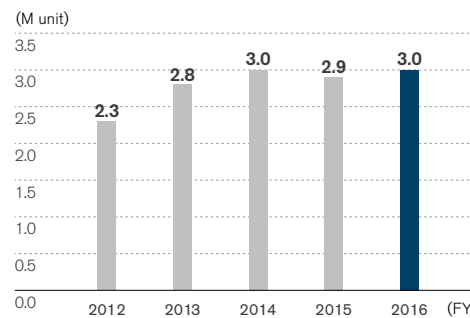
Number of 100% EV Units Sold



Number of HEV Units Shipped



Number of ICE with CVT Units Sold



▶ The Note e-POWER represents 1.1% of global sales.

EV

The Nissan LEAF is now sold in 47 countries, with sales increasing every year. In 2016, total sales worldwide reached 250,000 vehicles. The second-generation LEAF newly launched in 2016 provides a longer driving range with a battery capacity improved from 24 kWh to 30 kWh.

Nissan also launched the company's first commercial EV, the e-NV200, in the European and Japanese markets in 2014.

e-POWER

Nissan's e-POWER powertrain combines a gasoline engine with an electric motor, enabling the low noise level of a motor-powered vehicle while offering excellent fuel efficiency. This powertrain was equipped in the new Note in Japan, which took the top spot in the Japan sales ranking for the compact segment in the second half of fiscal 2016.

HEV

Nissan launched the X-Trail Hybrid in fiscal 2015 with expansion of its electric vehicle (EV) mode and optimized system mode operation to offer 25% improved fuel economy compared to equivalent conventional vehicles, achieving top-level fuel economy in its class.

In fiscal 2013, Nissan launched two rear-wheel-drive vehicles, the Skyline and the Infiniti Q50, equipped with an original hybrid system. Nissan is also expanding use of its hybrid system for front-wheel-drive vehicles. The extremely compact system is combined with the Xtronic transmission in the fiscal 2013 Pathfinder and Infiniti QX60.

The Xtronic Transmission

Nissan has achieved the goal of shipping 20 million Xtronic-equipped vehicles, with their fuel efficiency benefits, by fiscal 2016 from their first launch in 1992, thereby helping to reduce global CO₂ emissions. Nissan sold 3.03 million Xtronic vehicles in fiscal 2016, bringing the cumulative total to 25 million.

The compact segment includes small and ordinary passenger vehicles with engine displacement under 1,600 cc.

PRODUCT INDICATORS—OTHER EMISSIONS

Compliance with Emission Regulations (Passenger Cars Only)

	Unit	(FY) 2015
Japan 75% lower than 2005 standard (SU-LEV)	%	99
Europe Euro 6b	%	100
U.S. U-LEV/SULEV/ZEV	%	98
China National 5	%	100

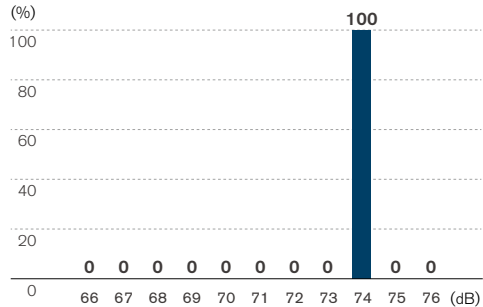
While Nissan has zero-emission vehicles, the ultimate clean car, in its portfolio, the company endeavors to make the entire fleet as clean as possible by reducing exhaust emissions. Nissan has introduced vehicles that comply today with each region's or country's more stringent future emission regulations. Due to differences in regulations, there is no direct way to compare by region or country, but this shows the percentage of Nissan's fleet in each location produced to the strictest standards of that region or country.

both PC & LCV

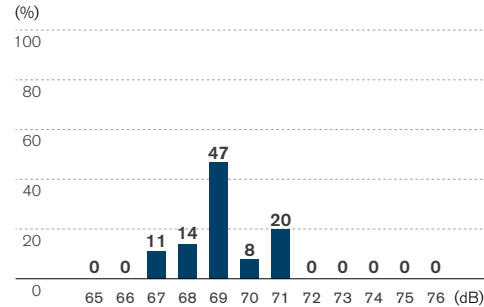
GRI G4 Indicators
G4-EN27

Share of Noise Emissions

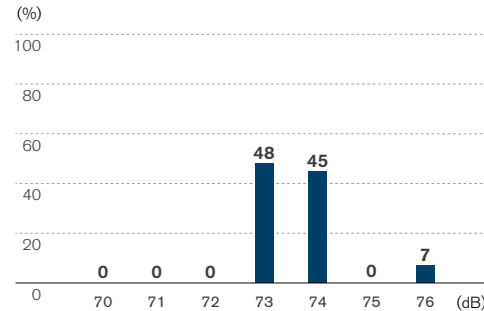
Japan



Europe



China

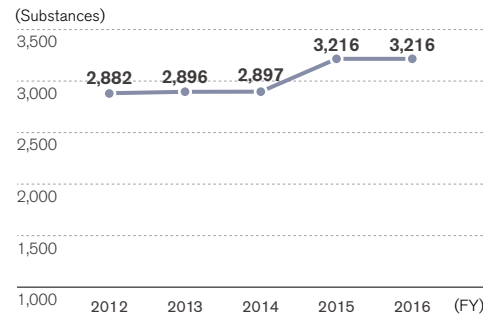


Noise emissions are shown by the noise produced by the acceleration of vehicle in accordance with each national regulation. Only complete, built-up imported models are shown for China data.

Regulated Chemical Substances

In 2007, Nissan created a unified global approach to reducing environment-impacting substances. Since then the company has enhanced management of these substances and advanced plans to reduce or to replace their use. Through communication with NGOs, Nissan restricts usage of substances that have potential to be hazardous, that are thought to have a high risk of falling into this category or that have been identified as potential threats even if they are not covered by laws and regulations in each country where it does business. As defined in the Nissan Engineering Standard (NES) titled "Restricted Use of Substances," these substances are banned or subject to controls in line with this approach. Nissan is working to apply this standard from the early development phase onward to the modules, raw materials and service parts that go into all Nissan vehicles. In fiscal 2016, the company revised its standard for assessment of hazards and risks in the Renault-Nissan Alliance, actively applying restrictions to substances that are increasingly the subject of consideration around the world going beyond regulation. As a result, the number of substances covered by the NES rose to 3,216.

Defined Chemical Substances



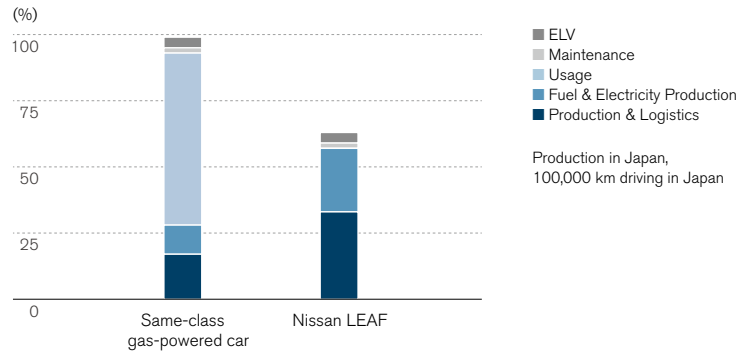
PRODUCT INDICATORS—LIFECYCLE ASSESSMENTS (LCAs)

Lifecycle Assessment to Reduce Environmental Impact

Nissan uses the lifecycle assessment (LCA) method to evaluate and comprehensively assess environmental impact in all stages of the vehicle lifecycle, from resource extraction to production, transport, customer use and vehicle disposal. Climate change related to emissions is our primary concern, yet LCAs can also offer insights for management of environmental impacts beyond climate change. The company carries out LCAs for new technologies as they are introduced for better understanding and evaluation of their environmental impacts.

CO₂ Equivalent Emissions over Vehicle Lifecycle for Nissan LEAF

CO₂, CH₄, N₂O, etc.

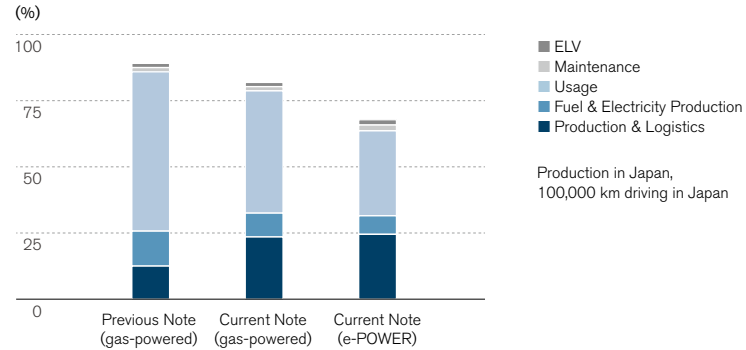


Company calculations show that the Nissan LEAF reduces CO₂ emissions by up to 40% over its lifecycle compared to gasoline-powered vehicles of the same class. This assessment was certified by a third-party LCA assessment organization, the Japan Environmental Management Association for Industry.

Nissan introduced its new e-POWER system in fiscal 2016, marking another significant milestone in the electrification strategy with lifecycle emission improvements. Calculations show that e-POWER reduces CO₂ emissions by more than 32% over the vehicle's lifecycle compared to the previous-generation Note and by 18% compared to same the same-generation Note.

CO₂ Equivalent Emissions over Vehicle Lifecycle for Note e-POWER

CO₂, CH₄, N₂O, etc.



Unlike a full EV, an electrified e-POWER vehicle only requires small battery as the system is supported by a gasoline engine as its power source for charging. This means that emissions at the manufacturing stage can be kept at a lower level, similar to that for gasoline-powered vehicles. Nissan is also making efforts to reduce CO₂ emissions in manufacturing by improving the yield ratio of materials, using more efficient manufacturing processes and increasing the use of recycled materials. In the fuel-production and energy-use stages, the weight reduction and optimal energy management of e-POWER vehicles leads to lower CO₂ emissions.

Nissan also continues to pursue technology development on electric powertrains, power savings on ancillary devices and the use of renewable energy to reduce CO₂ emissions over the entire electrified vehicles' lifecycle. In the end-of-life stage, used batteries can be utilized for energy storage and further contribute to CO₂ emission reduction in society.

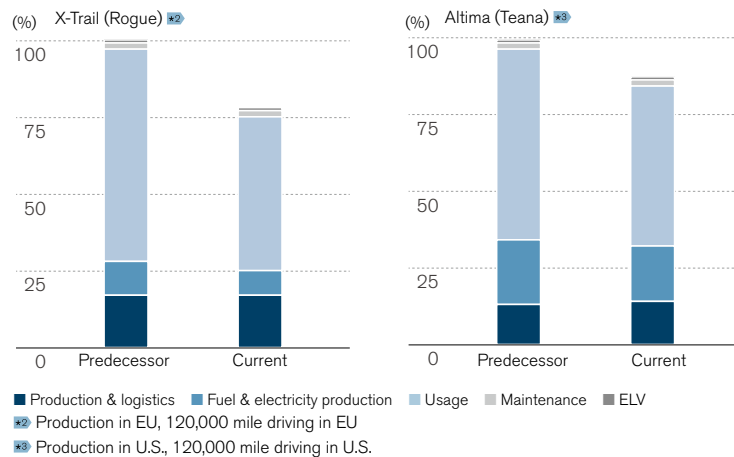
Global Top Selling Model's Life Cycle Improvements

Nissan has been working to enhance the application of the LCA method and to extend quantitative understanding of the environmental impact of its products, especially the most impactful top-selling models worldwide.

The global best-selling model in fiscal 2016, X-Trail (Rogue), shows a 23% emission improvement over the entire lifecycle compared to the predecessor model, while that of another top selling model, Altima (Teana), shows around 13% improvement. Both models show major emission reduction improvements at the fuel production and use stages.

CO₂ Equivalent Emissions ^{*)} Improvement in the New Model over Vehicle Lifecycle

^{*)} CO₂, CH₄, N₂O, etc.



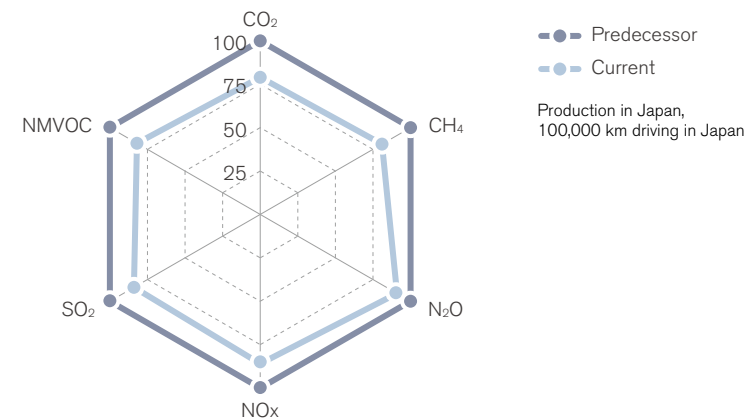
Nissan also studies on products' environmental impact over a wider range of segments, including small- to large-size gasoline-powered vehicles and zero-emission vehicles. In fiscal 2016, the LCA application rate as a percentage of total sales volume in the EU was more than 90%.

Lifecycle Improvements beyond Climate Change

With growing societal concerns over air quality, ocean acidification and eutrophication, Nissan has expanded the LCA study scope to chemical types beyond greenhouse gases.

Company calculations show that the current gasoline-powered Note has holistic environmental improvements over the lifecycle with approximately 9%-18% emission reduction for all targeted chemical types, as compared to the predecessor model. It creates well-balanced and holistic environmental benefits for society over the lifecycle.

Emissions Improvement in the New Note over Vehicle Lifecycle

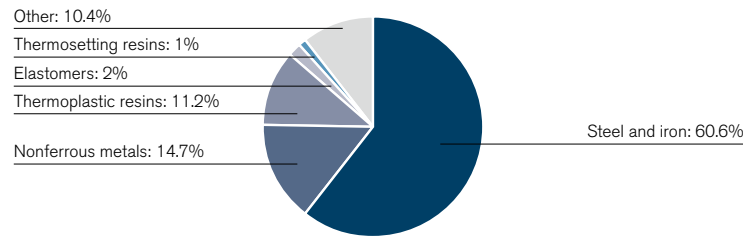


Chemicals	Environmental Impacts
CO ₂ – Carbon dioxide	Global warming potential
CH ₄ – Methane	Global warming potential, Photochemical ozone creation potential
N ₂ O – Nitrous oxides	Global warming potential
NO _x – Nitrogen oxides	Acidification potential, Photochemical ozone creation potential, Eutrophication Potential
SO ₂ – Sulphur dioxide	Acidification potential, Photochemical ozone creation potential
NMVOC – Non-methane volatile organic compound	Photochemical ozone creation potential

PRODUCT INDICATORS—MATERIALS, RECYCLING

Material Ratio

Nissan is increasing the use of renewable resources and recycled materials in addition to the traditional approach of using resources more efficiently to reduce reliance on them. The company's efforts with respect to recycled materials are based on the thought that once a natural resource is extracted, it should continue to be used, while maintaining quality, to minimize environmental impact. Nissan has set a target of increasing the recycled material usage ratio per new vehicle for which production begins in fiscal 2016 by 25% in Japan, the United States and Europe. The data shown here represents the status in fiscal 2016.




 GRI G4 Indicators
 G4-EN1/G4-EN2/
 G4-EN27/G4-EN28

Recycling

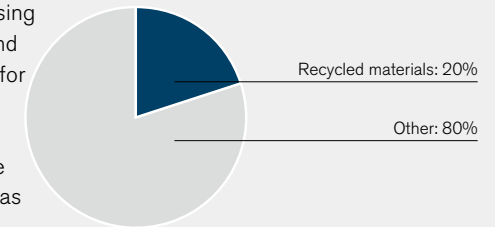
Nissan has defined a long-term goal of maintaining global usage of these natural resources at 2010 levels through 2050.

Toward this end, Nissan is presently researching ways to increase the recovery rate further in order to reclaim and reuse valuable materials from end-of-life vehicles (ELVs). As of fiscal 2016, company calculations showed that Nissan had achieved a recovery rate of 99.7% in Japan.

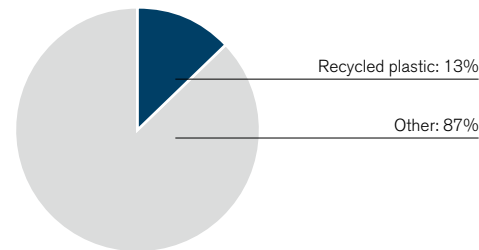
From the early development stage, Nissan considers the use of highly recyclable materials and makes structural improvements for ease of recycling. Since the Note, launched in 2005, all new models have achieved a 95% or greater recyclability rate based on the national regulations on ELVs in regions such as Europe, Japan and Korea.

Recycled Material Ratio

For production, Nissan has focused efforts on using recycled materials containing steel, aluminum and plastics. As a result, recycled materials account for approximately 20% by weight in the average vehicle. For example, the recycled ratio of cast aluminum in vehicle components such as engine cylinders is over 90% in total. This calculation was based on Nissan production in fiscal 2010.

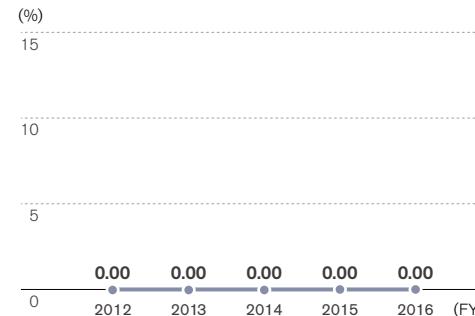


Recycled Plastic Usage in Vehicle



Ratio of recycled plastic to total plastic was based on the best performance model in Europe. Recycled plastic use in fiscal 2016 was 13%.

Automotive Shredder Residue to Landfill Ratio



Based on the Automobile Recycling Law in Japan, Nissan calculated the ratio of landfill to residue after removing ferrous and nonferrous metals from ELVs. Nissan achieved a zero landfill ratio in fiscal 2016 by enhancing recycling capability through the acquisition of additional facilities that comply with the law.


 GRI G4 Indicators
 G4-EN2/G4-EN27

PRODUCT INDICATORS—ELV PROGRAMS

ELV Programs

Nissan has joined forces with other automotive companies to promote the recycling of ELVs through dismantling and shredding. In fiscal 2016, the program in Japan achieved a final recovery ratio for ELVs of 99.7% (actual value), at the same time reducing the amount of automotive shredder residue (ASR) related landfill and incineration disposal to zero based on the calculation method provided by the Japanese government.

This program consists of three phases: First, any Nissan ELVs entering the dismantling process are recycled, including flat steel, cast aluminum, bumpers, interior plastic parts, wire harnesses and precious rare earth metals. Second, specific items such as lithium-ion batteries are collected individually and directed to a dedicated recycling process. Third, residues from the dismantling process are shredded and collected at a dedicated facility.

Since 2004, Nissan and seven other Japanese auto manufacturers have promoted this facility to recycle ASR. Aligned with the Automobile Recycling Law in Japan, this serves as an integral part of a system to recycle ASR effectively, smoothly and efficiently. Nissan is a team leader of this alliance.

Another activity is Nissan's take-back system for ELVs in Europe. This network of Authorized Treatment Facilities was developed for individual countries in collaboration with contracted dismantlers, contracted service providers and governments to be aligned with the European ELV directive.

RESULTS OF NISSAN GREEN PROGRAM 2016

Targets set for four key initiatives under NGP2016 were fully achieved.

Key Focus Area	NGP2016 Target	NGP2016 Results
Zero-emission vehicle penetration	Achieve number-one global market share	Achieved number-one cumulative sales and market share
Fuel-efficient vehicle expansion	Improve CAFE by 35% from FY2005	Improved by 36.5% (achieved in FY2014)
Corporate carbon footprint minimization	Reduce CO ₂ emissions of global corporate activities by 20% (t-CO ₂ /vehicle, vs. FY2005)	Reduced by 22.3% (achieved in FY2014)
Natural resource use minimization	Increase recycled material usage ratio per new vehicle by 25%	Achieved rate of over 25%

Activities for Zero-emission Vehicle Penetration

In addition to promotional efforts to expand penetration of the 100% electric Nissan LEAF, Nissan has developed technologies, such as LEAF to Home and V2G (Vehicle to Grid), in order to realize a zero-emission society.

Activities for Expanding Fuel-efficient Vehicles

In addition to technological advances including variable compression ratio engine and CVT improvement and vehicle weight reduction, Nissan has introduced a broader lineup of hybrid vehicles, as well as promoting the penetration of the e-POWER powertrain that is equipped in the new Note.

Activities for Minimizing Corporate Carbon Footprint


Nissan has introduced higher-efficiency equipment and manufacturing processes, energy-saving measures, and the use of renewable energy such as that generated from biomass gas and wind power.

Activities for Minimizing Natural Resource Use

In collaboration with business partners, Nissan has collected steel and aluminum scrap generated during manufacturing and end-of-life aluminum wheel rims for reuse in new vehicles. In addition, Nissan developed a new electric motor that requires just 40% as much dysprosium as a conventional motor, and is currently implementing it in the Nissan LEAF.

THIRD-PARTY ASSURANCE

Third-Party Assurance



Independent Assurance Report

To Mr. Fumiaki Matsumoto, Director, Nissan Motor Co., Ltd.

We were engaged by Nissan Motor Co., Ltd. (the "Company") to undertake a limited assurance engagement of the environmental performance indicators listed in the table below for the period from April 1, 2016 to March 31, 2017 (the "Indicators") included in its Sustainability Report 2017 (the "Report") for the fiscal year ended March 31, 2017.

- Energy consumption in manufacturing processes
- CO₂ emissions from manufacturing processes
- CO₂ emissions from the commuting of employees in Japan, U.S. and Europe and the use of sold products
- Water input from the Company's production sites in Japan
- Waste generated from the Company's production sites in Japan

The Company's Responsibility
The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Report.

Our Responsibility
Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information', 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines for the Assurance of Sustainability Information' of the Japanese Association of Assurance Organizations for Sustainability Information. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical reviews of the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and also recalculating the Indicators.
- Visiting to the Company's Oppama plant selected on the basis of a risk analysis.
- Evaluating the overall statement in which the Indicators are expressed.

Conclusion
Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report.

Our Independence and Quality Control
We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.
KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
June 21, 2017

[Remarks] Basis of calculation for CO₂ emissions, waste generated and water input subject to third-party assurance

- CO₂ emissions from production sites: Calculated based on Nissan internal standards. The energy use data of each site is based on invoices from suppliers, which are multiplied by a CO₂ emissions coefficient publicly available for each production site.
- CO₂ emissions resulting from employees' commutes: Calculated based on the GHG Protocol Scope 3 Standard. Specifically, the annual CO₂ emissions resulting from each employee's commute are calculated using a standard unit of measurement announced by Japan's Ministry of Economy, Trade and Industry, Ministry of the Environment, and Ministry of Land, Infrastructure, Transport and Tourism. This figure is calculated on the basis that employees working at Global Headquarters commute by bus and other employees use cars that are vehicles designated by Nissan, based on the data they submit when applying for transportation allowances. This is multiplied by the number of employees at each facility or office.
- CO₂ emissions from the use of sold products: Calculated using the average regional CO₂ emissions per vehicle multiplied by estimated average lifecycle mileage and multiplied by fiscal 2016 sales volumes. The average CO₂ emissions for the use phase (including direct emissions only) per unit are calculated for each of our main regions (Japan, U.S., EU and China) and extrapolated from average emissions of these markets for other markets. The Sustainable Mobility Project (SMP) model issued by the International Energy Agency was used to determine estimated average lifecycle mileages.
- Scope 3 emissions figures are estimates subject to varying inherent uncertainties.
- Waste generated from production sites of Nissan Motor Co., Ltd. in Japan: Calculated based on Nissan internal standards. The discharged waste is based on data from truck scales at the sites or data reported by disposal contractors. All discharged waste within the sites concerned is targeted. However, nonsteady and irregular generated waste, waste generated in canteens, waste from permanently stationed companies at the sites, waste generated by external vendors and waste from construction are excluded. In addition, materials recycled in-house, used in reproduction (reused by Nissan) or recycled (as salable, valuable materials) are not categorized as generated waste.
- Water input from production sites of Nissan Motor Co., Ltd. in Japan: Calculated based on Nissan internal standards. Water input is the water withdrawal amount according to billing meters or company meters installed on site. The water withdrawal amount includes drinking water (tap water), industrial-use water, underground water (spring/well water) and rainwater or the like.

GRI index (Environment)

Section	Index	Reference
G4-EN1	Materials used by weight or volume	117, 138
G4-EN2	Percentage of materials used that are recycled input materials	138
G4-EN3	Energy consumption within the organization	117, 118
G4-EN4	Energy consumption outside of the organization	125, 126, 127
G4-EN5	Energy intensity	118
G4-EN6	Reduction of energy consumption	118
G4-EN7	Reductions in energy requirements of products and services	129, 130, 131
G4-EN8	Total water withdrawal by source	117, 120, 121
G4-EN9	Water sources significantly affected by withdrawal of water	-
G4-EN10	Percentage and total volume of water recycled and reused	-
G4-EN11	Location and size of protected areas	-
G4-EN12	Description of significant impacts in protected areas	-
G4-EN13	Habitats protected or restored	-
G4-EN14	Total number of IUCN Red List species in areas affected by operations	-
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	117, 119, 120
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	117, 119, 120
G4-EN17	Other relevant indirect greenhouse gas emissions	119, 125, 126, 127
G4-EN18	Greenhouse gas (GHG) emissions intensity	119, 120, 125
G4-EN19	Reduction of greenhouse gas (GHG) emissions	119, 125, 126
G4-EN20	Emissions of ozone-depleting substances (ODS)	-
G4-EN21	NOx, SOx and other significant air emissions	117, 122, 123
G4-EN22	Total water discharge by quality and destination	117, 120, 121
G4-EN23	Total weight of waste by type and disposal method	117, 123, 124
G4-EN24	Total number and volume of significant spills	128
G4-EN25	Weight of transported, imported, exported, or treated hazardous waste	-
G4-EN26	Areas affected by the reporting organization's discharges of water and runoff	-
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	129, 130, 131, 133, 134, 135, 136, 137, 139
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	138
G4-EN29	Significant fines and noncompliance with environmental laws and regulations	128
G4-EN30	Environmental impacts of transporting products, goods, materials, and members of the workforce	119, 124, 125, 126
G4-EN31	Total environmental protection expenditures and investments by type	127
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	23, 73
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	23
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	-