

Environmental Report 2017



Table of Contents

Greetings	3
Environmental Policy	4
Social Responsibilities	5
In-House Activities—Introduction of 5S Activities	7
Environmental Improvement Activities	8
Approach to Community Involvement	9
Contributing to the Environment through Technology	11

Greetings

Message from the President

Driven by our hopes and dreams, we will continue to take on even greater challenges.

This year, France and Britain successively announced policies to prohibit the sale of diesel and gasoline powered vehicles by 2040. Not only governments, but private companies are also setting policies promoting Electric Vehicles (EVs), such as Sweden's Volvo announcing that all of its new models after 2019 will be EV, and Germany's Porsche announcing that by 2023 half of vehicles sold will be EV. Although these policies are aimed at aggressive EV promotion in Europe, radical measures to promote EVs were successively announced in Japan at the Tokyo Motor Show, marking accelerating efforts this year towards global adoption of EVs. Even in emerging and developing countries with rapid economic growth, regulations are being strengthened due to concerns surrounding the effect on the environment from the growing use of automobiles.

As global concern for the environment increases, we at UNIVANCE, as a company participating in Japan's vital automobile industry, realize that our role and responsibility in improving

the environment is growing ever more important. There are many ways of fulfilling that role as a company, including through our products, the activities of our factories, our contributions to our communities, and our awareness as UNIVANCE employees.

Naturally, we have several challenges ahead of us. However, we can tackle even the most daunting challenges by focusing on our hopes and dreams, remembering our spirit of establishment, "Aim Even Higher," and committing to our corporate philosophy; with a belief in, and respect for the dignity of each individual, Univance hopes to contribute to the happiness of the world through our continual innovation.



Michiyasu Muramatsu

President, Representative Director

Message from the Environmental Management Administrator

We aim to be an environmentally friendly manufacturing company.

All business and production activities have aspects which contribute to society and aspects which, by continuing business operations, impact the environment. The strain on the environment, such as the large amounts of energy consumed by factories and the greenhouse gases and waste produced during manufacturing processes, is by no means small.

As a specialized manufacturer of drivetrain units and parts who strives to be environmentally friendly, we construct optimal lines and thoroughly

review the entire production process, from product development, procurement, production, transport and sales, to disposal and recycling.



Mitsunori Ikeya

Environmental Management Administrator

Environmental Policy

Environmental Philosophy

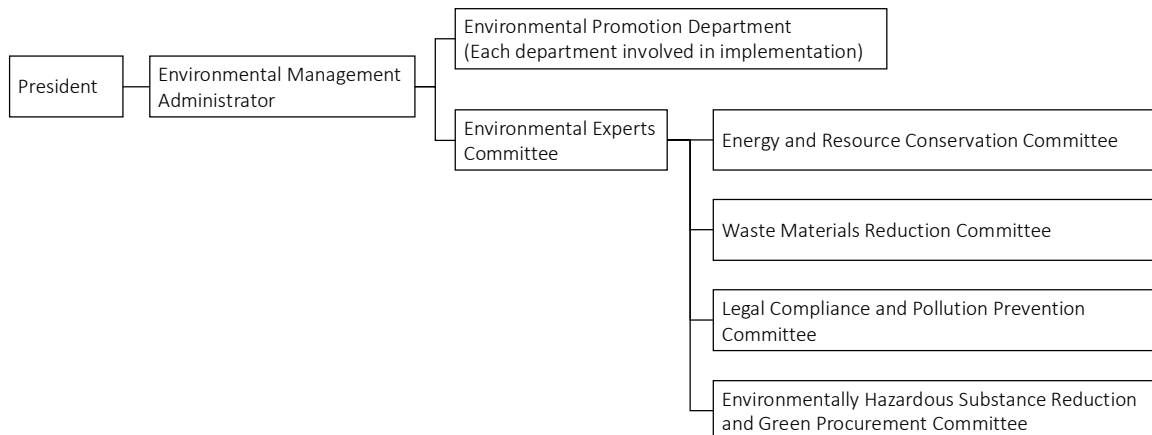
UNIVANCE CORPORATION recognizes that environmental protection is a critical global issue, and we carefully consider global environmental protection in all aspects of our corporate activities.

Environmental Policy

UNIVANCE CORPORATION shall promote environmental protection in all of its corporate activities through the following policy. We will:

- 1) Comply with environmental laws, regulations and regional agreements and strive to prevent environmental damage.
- 2) Accurately grasp our impact on the environmental, set objectives and targets, and strive to minimize our use of resources and energy.
- 3) Promote environmentally conscious product development, technological development and plant operation, and disclose the implementation status of these efforts as necessary.
- 4) Participate in environmental protection activities, which include the entire organization as well as all of its employees and affiliates, while focusing on continuous improvement.
- 5) Strive, as a good corporate citizen, to undertake corporate activities with full consideration of the local community.

Activity Organization



Social Responsibilities

Compliance with Environmental Laws and Regulations

As a good corporate citizen, the UNIVANCE group seeks to promote coexistence and the creation of safe, secure, and stable regional employment based on our *Environmental Policy*. As a citizen of Kosai, “the town where people and corporations connect our future,” we constantly engage in improvement activities focused on appropriate monitoring, intervention, and complying with the environmental laws and regulations applicable to the business activities shown in the table below.

In addition, last year we had no major violations or administrative directives cited during our evaluation of compliance with environmental laws and regulations, in our notifications to the government, in our reports, or during our on-site inspections.

Classification	Name of laws and regulations
General	Basic Environment Law Act
	Environmental Impact Assessment Act (Environmental Assessment Act)
	Act on Improvement of Pollution Prevention Systems in Specified Factories (Pollution Prevention Act)
	Act on the Promotion of Business Activities with Environmental Consideration by Specified Corporations, etc. by Facilitating Access to Environmental Information, and Other Measures (Environmental Consideration Promotion Act, Environmental Information Provision Promotion Act)
Global warming, Energy Conservation, Etc.	Act on Promotion of Global Warming Countermeasures (Global Warming Countermeasures Act, Promotion of Global Warming Countermeasures Act)
	Act on Rational Energy Use (Energy Conservation Act)
	Act Concerning Ensuring Implementation, etc. of Recovery and Destruction of Fluorocarbons related to Specific Products (Recovery and Destruction of Fluorocarbons Act)
	Act on Rational Use and Proper Management of Fluorocarbons (Fluorocarbons Emissions Control Act)
Pollution Prevention	Air Pollution Control Act
	Water Pollution Prevention Act
	Sewerage Act
	Purification Tank Act
	Soil Contamination Countermeasures Act
	Noise Regulation Law
	Vibration Regulation Law
Waste management	Offensive Odor Control Law
	Waste Management and Public Cleansing Act (Waste and Cleaning Act, Waste Management Act)
	Act on Special Measures concerning Promotion of Proper Treatment of PCB Waste (PCB Treatment Special Measures Act)

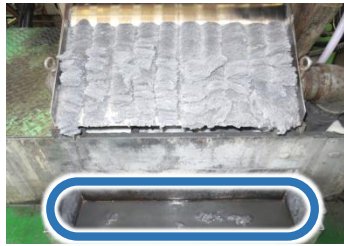
Classification	Name of laws and regulations
Recycling	Basic Act on Establishing a Sound Material-Cycle Society
	Act on the Promotion of Effective Utilization of Resources (Recycling Act)
	Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging (Recycling of Containers and Packaging Act)
	Act on Recycling of Specified Kinds of Home Appliances (Home Appliances Recycling Act)
	Green Purchasing Act (Act on Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities)
	Construction Material Recycling Act (Construction Recycling Act)
	Green Purchasing Act (Act on Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities)
Chemical substances, health and safety, and hazardous materials	Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Chemical Substances Management Act, PRTR Act)
	Act on Special Measures against Dioxins
	Poisonous and Deleterious Substances Control Act
	Industrial Safety and Health Act
	Fire Service Act
	High Pressure Gas Safety Act
Other regulations	Factory Location Act
	Building Standards Act
	Electricity Business Act
Ordinances and Agreements	Shizuoka Prefecture Global Warming Prevention Ordinance
	Shizuoka Prefecture Ordinance concerning Maintaining the Environment for Daily Life
	Shizuoka Prefecture Groundwater Collection Ordinance
	Shizuoka Prefecture Ordinance Concerning the Proper Processing of Industrial Waste
	Kosai City Basic Environment Ordinance
	Shizuoka Pollution Prevention Ordinance
	Ordinance concerning the Prevention of Noise and Vibration Pollution (Hamamatsu City and Kosai City)
	Hamamatsu City Fire Prevention Ordinance

In-house Activities—Introduction of 5S Activities

In the manufacturing department we are working on Sort (organize), Set in Order (tidy up), Shine (clean), Standardize (maintain cleanliness), and Sustain (develop discipline to continue these steps) activities (aka 5S activities) to maintain our working environment, detect machine breakdowns early, reduce waste of electricity and other resources, and improve work safety. We regularly hold presentations for all employees to report on their activities.

These activities not only contribute to environmental protection by reducing losses and the consumption of electricity, cutting oil, etc., they also lead to improved group communication, acquisition of knowledge and experience, the sharing of problems and improved motivation.

Before



Challenge

- 1) Grinding oil and grinding dust were getting mixed together and forming a dense substance, so we had to dispose of it twice per shift.
- 2) Disposing of grinding dust after disposing of grinding oil was creating double work.
- 3) Grinding oil contaminated with grinding dust was getting wasted.

Oil Disposal (Twice per shift)



Grinding Dust Disposal (Twice per shift)



After



Countermeasures

Created equipment to automatically collect grinding oil built up in tanks.

Effect

- 1) Reduced man hours by only having to dispose of grinding dust.
- 2) Less waste and more efficient utilization of grinding oil.
- 3) Disposal reduced to once per shift thanks to lighter loads created by dust/oil separation.

Grinding Dust Disposal (Once per shift)

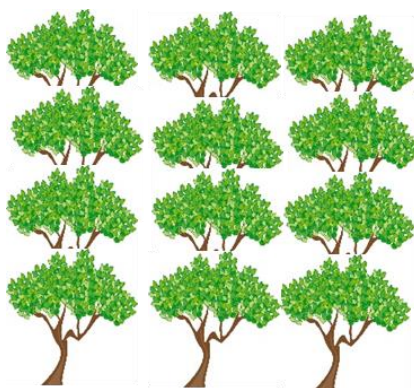
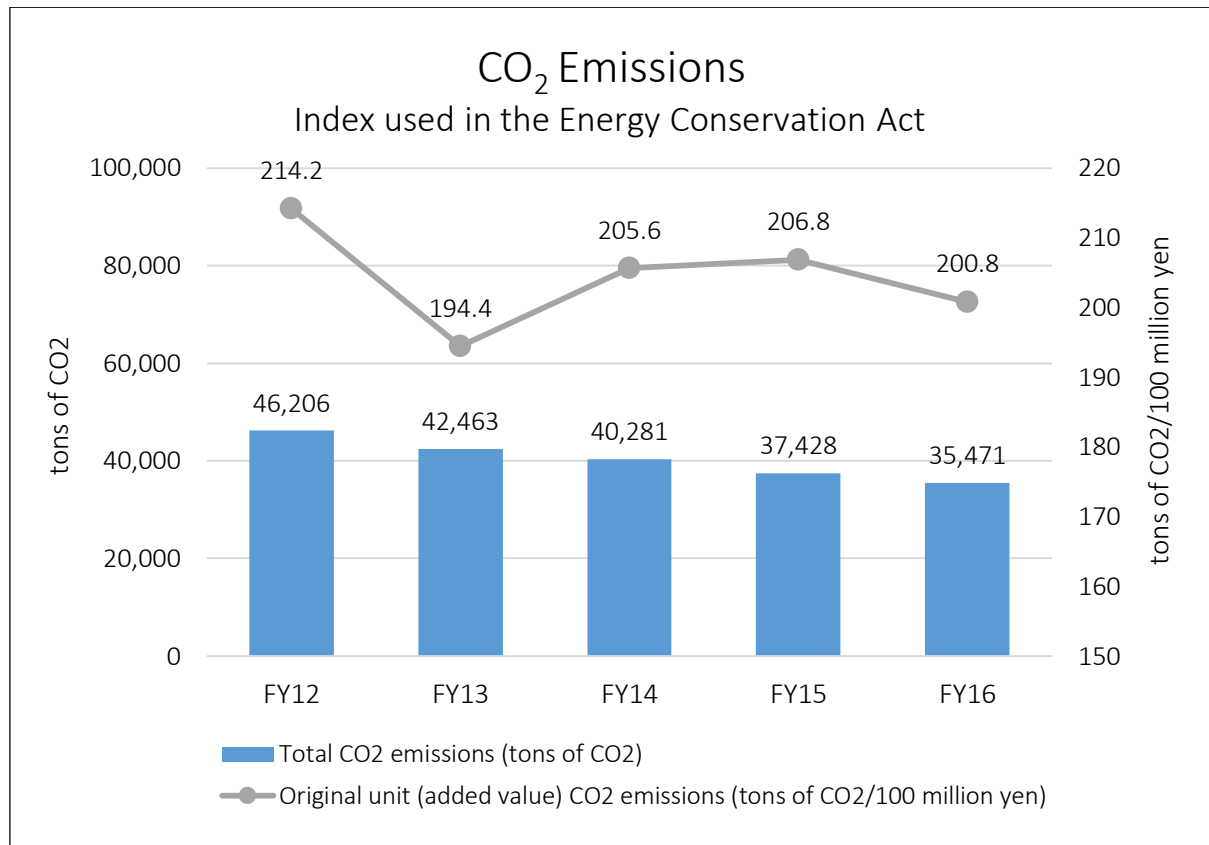


We were able to eliminate waste and extra work!

Environment Improvement Activities

CO₂ Emissions Reduction Activities

By reducing our production volume, and advancing both energy conservation activities and “Energy JIT” activities (consuming energy only to make what is needed when it is needed), we greatly reduced our CO₂ emissions in FY 2016 and also met our goal of reducing these emissions by 1% more than last year.



Reduced the CO₂ absorbing approx. 120,000 Sakhalin fir trees.
(15.8kg reduction per tree/year)

Approach to Community Involvement

In order to put our environment policies into practice, UNIVANCE participates in various community projects, and plans and holds events to make social contributions.

- The entire organization and all employees, including affiliated companies, shall seek continual improvement by participating in environmental protection activities.
- As a good corporate citizen, we will strive to undertake corporate activities with full consideration of the local community.

Hamanako Lake/Komikawa River Cleanup Projects

We are actively participating in the Hamanako Lake and Komikawa River cleanup projects.



Small Kindness Campaign

We participate in the Small Kindness Campaign, cooperating in efforts such as window cleaning for welfare facilities, the Tenryu River cleanup project, and the donation of old stamps.



Cleanup Project from the Station

We occasionally engage in trash pickup activities on the route from Washizu Station to our head office.



No Littering Campaign

Once every 2 months, all employees pick up garbage around our offices during lunch break.



UNIVANCE Festival

Held annually, the UNIVANCE Festival is becoming an important venue for meeting many new people. We donate a portion of the proceeds to the Kosai City Welfare Council, Hamana Gakuen, and other causes.



Kosai Full Flowers Campaign

We participate in the Full Flowers Campaign in Kosai City.



SAN-EN NEOPHOENIX

We serve as booster club members and support our local B league team, the SAN-EN NEOPHOENIX.



Food Bank

We donate food collected by employees to an NPO overseeing a food bank project.



Blood Donations

We hold blood drives 6 times a year, and encourage all of our employees to donate.



Bottle Cap and Pull-tab Collection

We installed collection boxes next to our vending machines and donate plastic bottle caps and pull tabs to the Kosai City Welfare Council and the Kosai International Communications Association.



Young Inventors Club

In addition to making contributions as a member of the Young Inventors Club, we provide lecturers for courses on IT robots and 3D printing.



Visiting schools

We provide lecturers to local high schools for courses with themes such as discipline, manners, and work attitudes.



Contributing to the Environment through Technology

We are working on developing units which are low friction, lightweight and compact while also developing subsystems which are suitable for electric drive systems as we move toward a more electric-driven society.

In addition, we showcase these technologies every year at exhibitions such as the “AUTOMOTIVE ENGINEERING EXPOSITION”, and engage in activities aiming to promote these technologies within society.



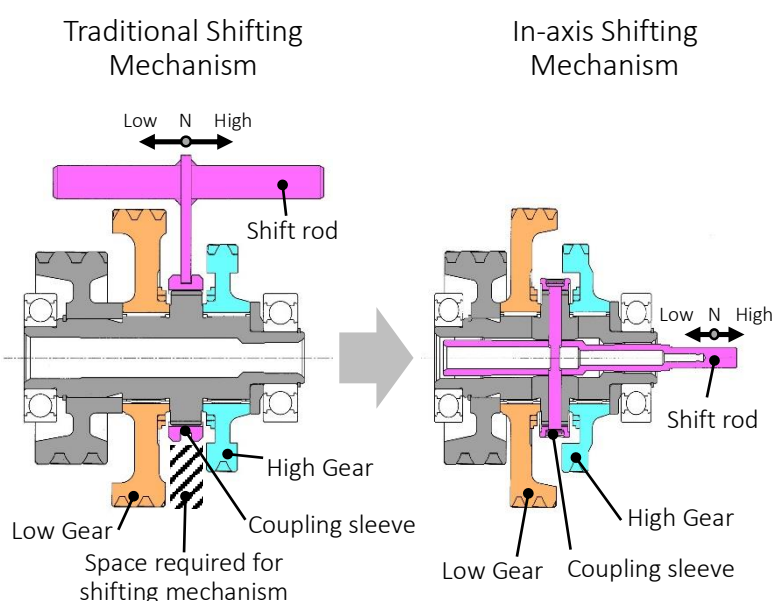
Our booth at the AUTOMOTIVE ENGINEERING EXPOSITION

Developing Lightweight Compact Mechanisms

By making transmissions smaller and lighter and thereby reducing the vehicle's overall weight, we help improve fuel economy.

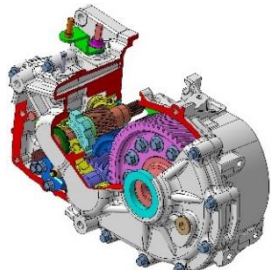
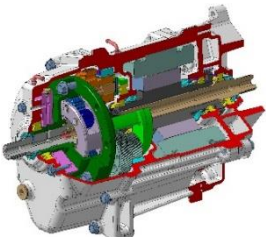
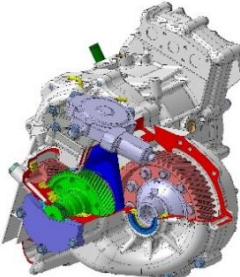
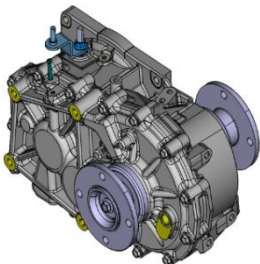


10% more compact than conventional transmission mechanisms



Gearbox development for next-generation automobiles

We develop reduction gears that can be installed in various EV models. In addition, we are improving EV effectiveness by developing mechanisms that can increase energy efficiency.

Proposals based on needs for vehicle installation		Proposals based on needs for additional features	
Parallel shaft type	Coaxial type	Motor disconnect included	Multi-step
			



Environmental Report 2017

Issued December 2017

UNIVANCE CORPORATION