

Initiatives to Disseminate Eco-friendly Products

Nippon Paint Holdings Group has selected "mitigation of environmental impact with products and services" as a materiality (crucial issue) in CSR management and set the promotion of development and dissemination of eco-friendly products as a CSR target to be achieved by 2020.

Key Initiatives for Environmentally Friendly Products

Reduction of hazardous materials

- Reduction of VOCs, heavy metals, and other hazardous materials

Energy saving

- Development and sales of products and services that help reduce CO₂ emissions



Development of environmentally friendly products that also meet customer demand

The origin of the Nippon Paint Holdings Group dates back to the year 1878 when we successfully produced zinc oxide as a pigment for the first time in Japan to replace the hazardous lead white in face powder and reduce the impact on human bodies.

While a paint business became our core thereafter, paints are also used to maintain the good appearance of ships, buildings, vehicles, etc. and protect the materials. Our Group recognized the importance of environmental preservation early and has been actively committed to the reduction of the environmental impact of our business activities as well as the diffusion of environmentally friendly products based on technological innovations.

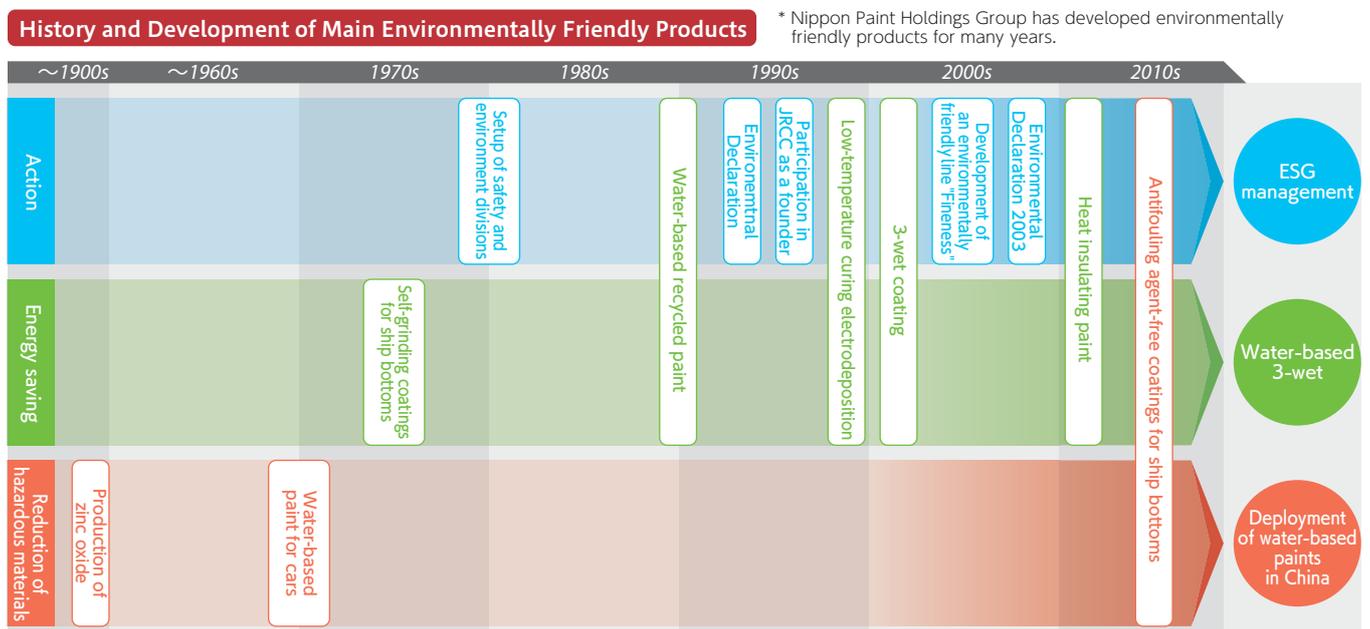
We announced "Global Environment Declaration" as our Basic Policy for Responsible Care in 1993 and joined the Japan Responsible Care Council (JRCC) as a founder in 1995. Thus, we have worked to develop and disseminate environmentally friendly products with focus on the reduction of hazardous materials, energy saving, and other aspects for many years.

While environmental regulations have been tightened worldwide in recent years, regulations on chemical substances contained in paints have been also enhanced. Our Group considers that development of new environmentally friendly products and painting processes in response to such regulations will strengthen our operations.

In our automotive and industrial-use paint businesses, we develop water-based paints and powder paints that reduce VOC emissions from the painting process of customers, as well as painting processes that help reduce CO₂ emissions, to meet customer demand and consider the environment at the same time.

In addition, we develop and market environmentally friendly products in a wide range of fields including thermal insulation paints for houses and road surfaces and hazardous material-free self-grinding fuel-saving antifouling coatings for ship bottoms.

Nippon Paint Holdings Group will continuously contribute to environmental preservation from various aspects through its paint business and enhance its competitiveness through such environmental activities.





Aiming to Expand Businesses and Profits by Creating Values through Environmental Preservation Activities

Reduction of hazardous materials



Deployment of products in compliance with global standards

Our China businesses are so important that we generate about 40% of the Group's consolidated net sales in the country. Among the China businesses, the housing interior paint business, which is growing at an especially high rate, is the most focused business domain in China.

Since its advance to China in 1992, the Nippon Paint Holding Group has continuously increased its share in the business domain, taking advantage of its brand and sales network.

A factor that supports the brand is the deployment of environmentally friendly products. In particular, housing interior paints are required to be safe and high quality because they are used in the environment where people live.

Our Group deploys water-based paints containing less VOCs and

formaldehyde so that customers can use them in various places including child's rooms with a sense of security. The products are popular among the customers who seek safety and quality.

In the meantime, there have been growing calls to tighten environmental regulations, including those on control of dangerous substances and air pollution, in China in recent years. It is therefore likely that the demand for environmentally friendly products keeps growing.

Nippon Paint Holdings Group will continue to deploy products that customers can use with a sense of security.



Energy saving



Commercialization of energy-saving paints for automobiles

Nippon Paint Holding Group conducts an automotive coating business worldwide including Japan, Asia, the Americas, and Europe.

In car production, coating is a process that occupies a large proportion of energy use and production time. Car manufacturers have therefore been committed to process saving and energy saving in the coating process in consideration of the environment.

Our Group also commercialized a 3-wet coating system of solvent-based paints and started to supply it to car manufacturers in 2002.

The 3-wet coating system can reduce VOC emissions and energy consumption in the coating process because this coating system requires a baking step to dry the coating only once while conventional coating systems require the step twice.

We have also commercialized a 3-wet coating system with water-based paints that can more significantly reduce VOC emissions, which has been adopted by car manufacturers that promote advanced environmental activities.

In comparison with solvent-based paints, the water-based 3-wet coating evaporates more slowly and is susceptible to humidity and temperature, which can affect the appearance. Accordingly, the coating system is extremely difficult to handle and also requires sophisticated skills in the design.

The car industry, which is a key sector, is required to address

environmental issues around the world. Demand for energy saving in the coating process is therefore expected to grow in a steady and continuous manner.

To achieve environmentally friendly technologies including those for the coating process and beautiful appearance at the same time, Nippon Paint Holdings is committed to the improvement of techniques for chipping prevention, scratch recovery, and other functions. We also work to develop products that play a key role in the future car industry including low-temperature curing paints for plastic.

In the automotive coating business, in addition to the water-based 3-wet coating system, our Group makes efforts to develop technologies that play a key role in the future car industry including low-temperature curing paints for plastic, which reduces energy use, and environmentally friendly technologies including those for the coating process.

