Nissan and Global Environmental Issues

Nissan’s Perspective

Providing Cleaner Vehicles to More Customers

Our mission is to provide safe and comfortable mobility. At the same time, we cannot deny that vehicles have an impact on the environment. Given this, we at Nissan believe that we must steer the vehicle itself in a direction that is in better balance with the environment.

After careful consideration of how to address the environmental impact of automobiles, we chose to make more than 80% of our gasoline passenger vehicles sold in Japan ultra-low emission vehicles (U-LEV).

U-LEV is a low-emission vehicle that by definition has achieved emissions 75% below year 2000 emissions standards for nitrogen oxide (NOx) and hydrocarbon (HC). Achieving the U-LEV standard for 80% of our gasoline passenger vehicles would have almost the same effect regarding NOx and HC reduction as selling 400,000 zero emission vehicles, such as fuel cell vehicles or electric vehicles, every year in Japan.

We believe that Nissan’s most effective means of solving environmental issues is through the rapid application of this highly effective technology, to provide more customers with clean energy vehicles at a more affordable price. Our continuous adoption of these types of realistic approaches is a dominant characteristic of Nissan’s environmental management.

Finding solutions to present-day global environmental issues is of course important, but also we must look ahead to the future. Nissan is putting effort into the research and development of fuel cell vehicles, electric vehicles, hybrid electric vehicles, and natural gas vehicles.

While we cannot predict what the major trends in mobility will be for the coming generations, we believe that the future will be multifaceted. Therefore, we are determined to make technological advancements while visualizing every possible future scenario.

Nissan’s Environmental Approach – From the Time of Rapid Growth and Onward

Nissan’s environmental efforts date back to the company’s period of rapid growth. It was during this time, from the 1960s to the 1970s, when pollution problems, the downside of rapid growth, began to come under close scrutiny.

In 1972, Nissan established an environmental management department at our head office and an environmental management division at each plant in order to manage the disposal of substances with an environmental impact.

In 1973, when the oil shocks swept across the globe, energy management and improvements in fuel economy inevitably became topics of concern. We made full use of our technological capabilities to improve the fuel efficiency of our cars and worked to improve the efficiency of our manufacturing systems.

In 1977, the US Environmental Protection Agency’s (EPA) introduction of the Muscle Car Act, which is a 1970 regulation announced in Japan in 1975. How would Nissan satisfy the regulations criteria without diminishing performance? To meet this challenge, improvements were gradually made to engine and oxidation catalyst technology.

Through the accumulation of technology over the years, Nissan’s clean exhaust technology has reached world-class levels. For instance, the 2000 Sentra CA sold in Japan in 1997 meets the U-LEV standard for 80% of our gasoline passenger vehicles sold in Japan ultra-low emission vehicles (U-LEV).

After the 1992 UN Conference on Environment and Development (Rio Summit), we established an Environment Management Committee in 1993 and created a Mid-term Environmental Action Plan. We then established an Energy Conservation Committee and a Waste Reduction Committee, putting increased efforts into finding ways to tackle environmental issues.

In 1994, the United Nations University (Tokyo, Japan) launched the Zero Emissions Research Initiative. Zero emissions is not limited to the recycling and reuse of waste produced through business activities. This concept also captures the idea of infinitely bringing the amount of waste produced closer to zero by creating cycles between corporate sectors. Nissan has since adopted the concept of life cycle assessment (LCA).

In 1997, Japan made a commitment to reduce greenhouse gas emissions by 6% through the Kyoto Protocol adopted at the Third Conference of Parties to the UN Convention on Climate Change (COP3). For Nissan, curbing carbon dioxide (CO2) emissions has become a top priority.

Within this history, a big challenge for Nissan came with the implementation of the exhaust emissions regulations that accompanied rapid motorization in the 1970s. Beginning in the US, followed by Japan, demands from society regarding exhaust emissions became increasingly strict.

In view of this major issue, Nissan gathered its technical capabilities and moved forward in developing technology to reduce exhaust emissions. In 1995, five years earlier than the government-mandated deadline, Nissan completed the production of a vehicle with an installed emissions reduction device.

Even more strict emissions regulations were established in the 1970 Muscle Car Act in the US and in the Japanese version of the Muscle Act, which is a 1976 regulation announced in Japan in 1975. How would Nissan satisfy the regulations criteria without diminishing performance? To meet this challenge, improvements were gradually made to engine and oxidation catalyst technology.

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Through the accumulation of technology over the years, Nissan’s clean exhaust technology has reached world-class levels. For instance, the 2000 Sentra CA sold in the US was the first gasoline vehicle to receive PZEV® certification by the California Air Resources Board (CARB).

Especially because social conditions are always changing, we have improved the technological capacities in the production of our vehicles and have continued to pursue voluntary initiatives in seeking the best road to take as an automobile manufacturer, while understanding the influence that our products have on society and the environment.

* PZEV: Partial Zero Emission Vehicle as established by CARB.
In addition, Nissan is a participant in the WBCSD Sustainable Mobility Project. Together with other member companies, we have been engaging in discussions regarding the future of mobility. The results of the discussions have been compiled into the report, "Mobility 2030: Meeting the Challenges to Sustainability," which proposes seven targets including the reduction of exhaust emissions and the control of greenhouse gas emissions.

Although sustainable mobility is beyond the scope of a single company, we realize that the role that technology plays is extremely important, and that one company also has a tremendous responsibility.

Nissan’s stance on environmental issues is not pessimistic. We are facing unprecedented hardships, but these are also new, valuable opportunities to take on challenges of an unprecedented scale.

As we face global environmental issues, we will act with a sense of volition. We will turn every issue we face into a motivating force for improvement as we aspire for a society with a symbiosis of people, vehicles, and nature.