

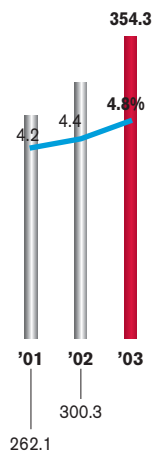
R&D Investment in the Future

NISSAN CONTINUES ITS INVESTMENT IN THE FUTURE BY ALLOCATING SIGNIFICANT NEW RESOURCES TO RESEARCH AND DEVELOPMENT. NEW TECHNOLOGIES ARE THE BASIS FOR TOMORROW'S SUCCESS; NISSAN SEES THE CONTINUED STRENGTHENING OF ITS R&D EFFORTS AS A NECESSARY PART OF CREATING LONG-TERM, PROFITABLE GROWTH.

Research and Development

(Billion Yen)

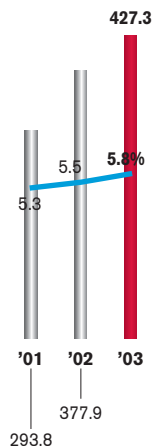
— Percent of net revenue



Capital Expenditure

(Billion Yen)

— Percent of net revenue



In fiscal year 2003, the second year of NISSAN 180, the company continued not only to streamline, but more importantly to make the investments need to ensure the company's future profitable growth. Always a leader in technological development, Nissan continued to increase R&D expenditures ahead of the growth of revenue. From ¥300.3 billion in fiscal year 2002, Nissan increased its R&D expenditures in fiscal year 2003 to ¥354.3 billion.

An interesting new R&D development is in an area of keen interest for Nissan today: China. Dongfeng Motor Co., Ltd., the joint venture of Nissan and Dongfeng Motor Corporation, is investing RMB330 million (US\$40 million, or ¥4.6 billion) in a new passenger vehicle R&D center in Guangzhou City. The center, which is

expected to begin operations at the end of 2005, will focus on the localization of Dongfeng's models for China, and on making use of Nissan's global R&D technologies. The aim is to reduce Dongfeng's costs while maintaining Nissan's global quality levels. In Taiwan, Nissan is also increasing its work with Yulon Nissan and its R&D center in Taiwan. And in Japan, operations began in 2003 at the new Nissan Advanced Technology Center.

A Focus on Practical, Pragmatic Technology

Nissan can boast the development of some of the most advanced technology in the automotive world. But its core concept is that the application of that technology



Intelligent Key



must be real-world, useful, pragmatic and easy for the customer to use.

The cutting-edge human-machine interfaces showcased on Nissan's Fuga concept car, first unveiled at the Tokyo Motor Show 2003, illustrate Nissan's ongoing development of interfaces that are safer, easier to see and simpler to use.

The side blind monitor, featured on the Presage in Japan and soon on additional upcoming models, helps reduce the blind spot on the front left side of the vehicle through the use of a monitor. This aids the driver when maneuvering in tight or congested areas.

The Intelligent Key allows doors and tailgate to be opened and closed without the key ever being removed from a pocket or handbag, through a sensor on the

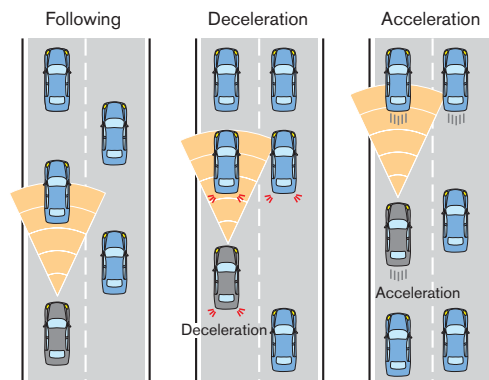
vehicle that can tell when the Intelligent Key is brought close to it. The engine can be turned on or off by a switch, without using the key. The Intelligent Key is now available on approximately one-third of all Nissan models, with an increasing number to be equipped in the future.

Another system designed to reduce driver workload in low-speed driving situations is the new Adaptive Cruise Control (ACC) system with low-speed following capability. Planned to be introduced in Japan in 2004, this new system can automatically keep a fixed distance from the car in front of the vehicle, even at speeds below 40 kph. This new low-speed feature helps to reduce driver fatigue and stress in a wide range of situations, from low to high speed.



Enhanced side vision with the side blind monitor

Adaptive Cruise Control (ACC) system





3.5-liter VQ V6 engine

High Technology Under the Hood

Not all practical technological developments are directly touched by human hands, of course. For example, Nissan has long been known as a leader in engine technology, a status confirmed in 2003 when the 3.5-liter VQ V6 engine was named to the annual Ward's Ten Best Engines list for the tenth straight year—

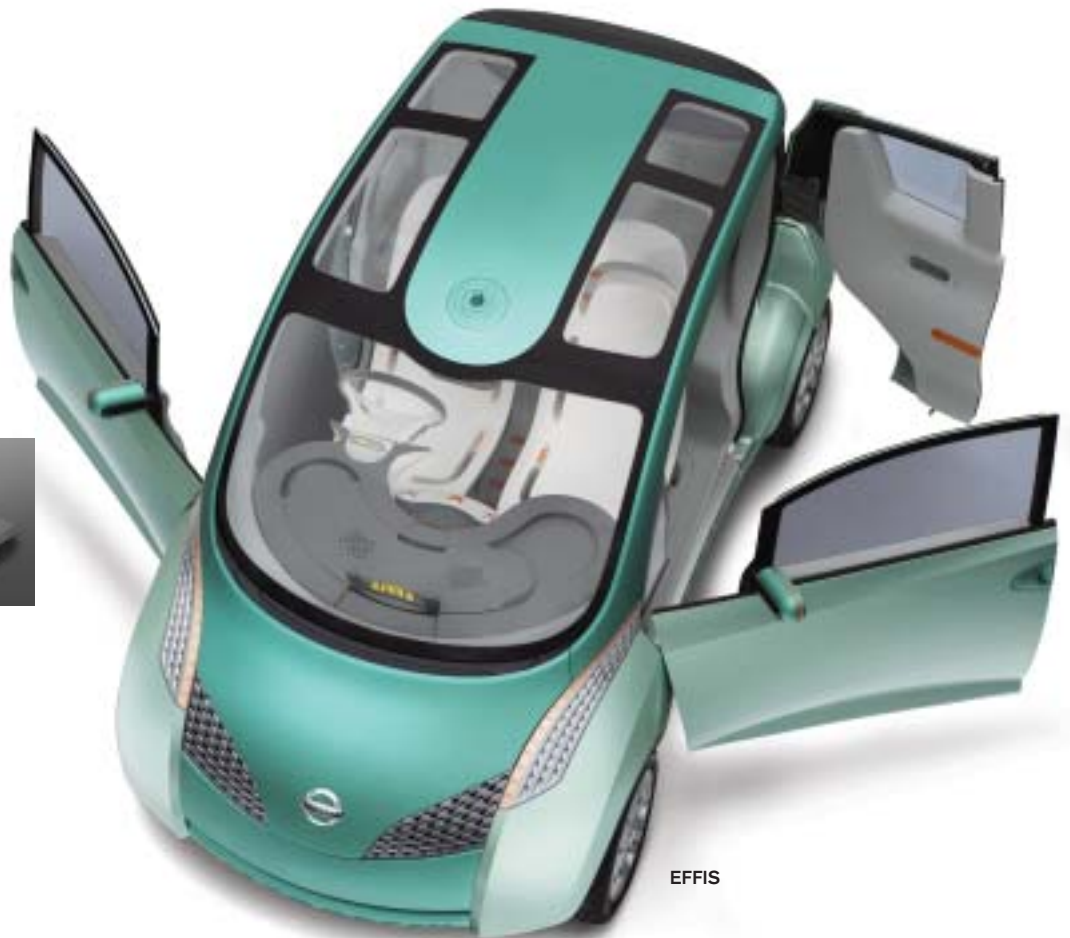
the only engine that has been on the list every year the award has been presented. The VQ powers a number of new Nissan and Infiniti vehicles in the United States, including the Altima and Maxima sedans, 350Z sports car, Murano crossover SUV, Quest minivan, Pathfinder SUV, and the Infiniti I35 sedan, Infiniti G35 Sedan and Coupe and the Infiniti FX35 crossover SUV.



Super Motor



Compact Lithium-Ion Battery



EFFIS



Nissan is also developing the powerplants of the future today—and not all are internal combustion engines. The Super Motor, introduced in the Effis concept car, is an electric motor with two rotors that rotate both within and around the motor's magnet. In traditional motors, the power is derived from a rotor revolving around a fixed magnet. This twin-rotor design allows for a far smaller motor, as well as for each shaft to be controlled separately, so that the left and right wheels can be driven independently. Energy for the motor comes from Nissan's advanced Compact Lithium-Ion Battery, a remarkably small and light battery unit. After years of research, Nissan succeeded in obtaining exceptionally high output in a laminated lithium-ion cell that reduces weight and volume by half compared to a conventional cylindrical battery. It is used in the X-TRAIL FCV fuel cell vehicle.

Nissan's use of common platform technologies also is being increasingly applied across a number of vehicles. For example, the new full-size Titan pickup,

full-size Armada SUV and Infiniti QX56 SUV all share the same F-Alpha platform, along with a common powerplant.

Telematics/IT

Nissan led the market when it created the CARWINGS system, Japan's first total telematics service. CARWINGS integrates human-assisted and automatic services, mobile phone and personal computer technologies; the driver can access real-time traffic and weather information, receive email, make hands-free telephone calls, inform others of the car's current location, and ask operators for navigation, search and request roadside assistance. First available on the March, CARWINGS can now be ordered on 12 different Nissan models in the Japanese market.



Displays from the CARWINGS system