Environment, Security & Safety

Reducing Environmental Burden and Traffic Accidents through Cutting-Edge Technological Development

Environment Field

In the environment field, DENSO will target "ultimate efficiency" and continue to promote the development of products that place less of a burden on the environment by focusing on fuel-saving technologies.

In the case of the internal combustion engine (ICE), we will develop combustion and exhaust gas technologies and work on overall improvements in thermal efficiency. We will also promote electrification by offering smaller and lighter hybrid products. Leveraging the technologies gained from internal combustion and hybrid vehicles, we will develop new powertrain products like those installed in fuel-cell vehicles, and realize not only improvements in reliability and efficiency but also significant reductions in cost.

At the same time, paying close attention to improvements in fuel economy, our target is to halve the gap between actual fuel economy and catalog fuel economy by 2025. To realize this, we will promote the development of technologies that increase air-conditioning efficiency—such as by detecting the driver's position and providing automatic optimization by means of "single-seat concentration air conditioning"—and heat-pump technology that recovers heat from the outside air.



Security & Safety Fields

In the fields of security and safety, DENSO will aim to realize a society that provides sophisticated safety and mobility and will step up efforts to develop technologies not only to minimize damage in the event of an accident but also to support drivers and prevent accidents.

We will promote the introduction and enhancement of the New Car Assessment Program (NCAP) as the vehicle safety assessment standard in major markets. In anticipation of the introduction and enhancement of NCAPs, we will continue undertaking technological developments to further advance driving support at night and in the prevention of collisions with bicycles, head-on collisions, or collisions when turning right. The resulting active safety products will be commercialized and mass produced in stages.

We will also continue conducting research to increase driver comfort—such as by supporting driver concentration, enhancing the field of vision, and utilizing control interfaces—and thereby enhance the security and safety of vehicles. To that end, we will conduct a basic study of human beings, conducted from the viewpoints of medical science and psychology, to simulate a variety of situations that a driver is likely to face. We also plan to develop system products that will help drivers concentrate on driving by the use of cold air and scents, ensure both driver comfort and a wide field of vision, and achieve intuitive operation with easily viewable interfaces.

