

# DENSO'S ENVIRONMENT TECHNOLOGIES

## Technology to preserve a sound planet

DENSO wants to help **reduce the burden cars can put on the environment**, and improving fuel efficiency is one way to do that. Most of the fuel energy used to power a vehicle is lost as heat or simply wasted. To better **manage energy**, DENSO is focused on improving a vehicle's energy efficiency, which also helps **improve fuel efficiency**. Moreover, DENSO is developing ITS-based traffic control technologies to **ease traffic congestion** and micro grid technologies to help manage energy use in all sectors of society.

Increasing vehicle energy efficiency (Energy Management)			Increasing energy efficiency in all sectors of society
<p><b>Increasing engine efficiency</b></p> <p>Increase the efficiency of engines to reduce wasteful use of fuel</p> <p>Reduce energy loss</p>	<p><b>Reducing engine load</b></p> <p>Reduce the workload on the engine by minimizing the amount of energy not used for driving vehicle, such as the energy used for air conditioner</p> <p>Minimize the amount of energy needed to run engine-driven devices</p>	<p><b>Recovering energy</b></p> <p>Use the energy dissipated as heat in the brakes, to generate electricity</p> <p>Effectively use the energy currently wasted</p>	<p><b>ITS-based traffic control</b></p> <p>Ease traffic congestion and allow drivers to avoid congested roads</p> <p>Reduce the frequency of acceleration and deceleration</p>
<p><b>Diesel Engine Management System</b></p> <ul style="list-style-type: none"> <li>• Common Rail System</li> <li>• Autonomous Injection Accuracy Compensation Technology (i-ART)</li> <li>• EGR Control System</li> <li>• Sensor Technology</li> </ul>	<p><b>High-efficiency SC Alternator</b></p> <p><b>Ejector Cycle Air Conditioner</b></p>	<p><b>Deceleration Energy Regeneration System</b></p> <p><b>Heat Storage System</b></p>	<p><b>Optimal energy management using a micro grid</b></p> <p>Generate electricity through natural energy sources and combine with the system power to better manage energy use</p> <p>Promote the use of natural energy sources</p>
<p><b>Gasoline Direct Injection Engine Management System</b></p> <ul style="list-style-type: none"> <li>• Direct Injection System</li> <li>• EGR Control System</li> <li>• Sensor Technology</li> </ul> <p><b>Stop/Start System</b></p>	<p><b>Cold Storage Air Conditioner</b></p> <p><b>Heat Pump Air Conditioner</b></p>	<p><b>Avoidance and Reduction of Traffic Congestion by Improving Traffic</b></p> <p><b>Convoy Driving</b></p> <p><b>Micro Grid and Home Energy Management Products</b></p>	
<p><b>Hybrid Vehicle, Electric Vehicle and Fuel Cell Vehicle Products</b></p>			