



100%

fossil resource-free

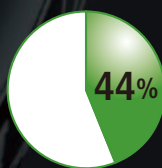
To replace the remaining 3% of fossil resource-based materials in the ENASAVE 97, namely, rubber antioxidants and vulcanization accelerators, Sumitomo Rubber Industries has developed a technology for synthesizing material compounds from biomass materials using a special catalyst. The Company also succeeded in adopting plant-based oil for the production of carbon black with a performance level equivalent to that of conventional carbon black.

What is a fossil resource-free tire?

A tire made using a technology that replaces such fossil resources as petroleum and coal with natural materials

- | | | |
|-----------------------------|---|--|
| • Synthetic rubber | → | • Natural rubber and modified natural rubber |
| • Mineral oil | → | • Plant oil |
| • Carbon black | → | • Silica |
| • Synthetic fiber | → | • Plant-based fiber |
| • Antioxidant | → | • Biomass-based material compounds |
| • Vulcanization accelerator | → | |

History of Fossil Resource-Free Tires (Changes in the Material Combination Ratio)



Standard tire (Digi-Tyre ECO EC201)

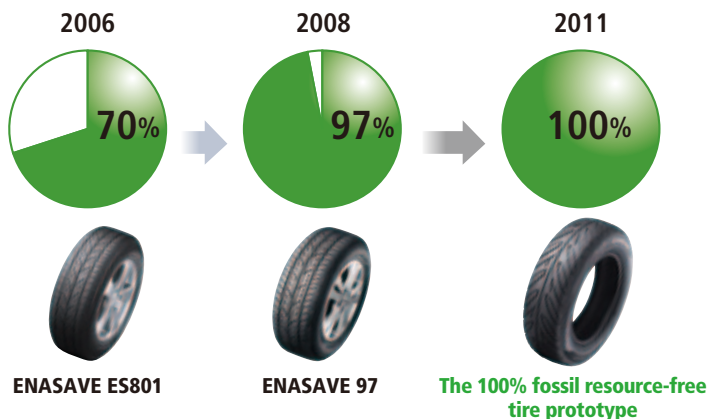
EXPANDING THE ECO-FRIENDLY TIRE LINEUP



On the back of rising environmental awareness and tightening environmental regulations for automobiles, it is anticipated that the use of eco-friendly tires will expand in the near future. In order to establish a competitive edge in this market, Sumitomo Rubber Industries is aggressively developing fossil resource-free and fuel-efficient tires.

100% Fossil Resource-Free Prototype Tires Completed

The ratio of fossil resource-based materials in general passenger car tires is nearly 60%. It has therefore been an important focus of environmental technology research to develop tires from fossil resource-free materials. To that end, in 2006 Sumitomo Rubber Industries introduced the ENASAVE ES801 tire, which featured a fossil resource-based materials ratio of 70%. In 2008, this ratio was further improved to 97% with the ENASAVE 97 tire. In its recent





Tokyo Motor Show 2011

At the 42nd Tokyo Motor Show 2011 held in December 2011, Sumitomo Rubber Industries presented the latest lineup of the ENASAVE fuel-efficient tire series as well as the prototype of the 100% fossil resource-free tire, demonstrating the Company's state-of-the-art rubber development technology.

efforts, the Company has focused on applying a bio material technology, and it has succeeded in replacing the remaining 3% of the fossil resource-based materials—namely rubber antioxidants, vulcanization accelerators and carbon black—with naturally sourced ingredients, creating a prototype tire that is 100% fossil resource-free. Sumitomo Rubber Industries is currently conducting reliability assessments to test various qualities, including durability, while developing appropriate mass production technology with the aim of launching 100% fossil resource-free tires by 2013.

Sumitomo Rubber Industries to Expand Its Fuel-Efficient Tire Lineup and Commence Overseas Sales

In parallel with the introduction of the official tire labeling system in Japan in January 2010, Sumitomo Rubber Industries enhanced its lineup of fuel-efficient tires, which are offered in various sizes. This helped the Company stay at the top of the list in terms of the sales volume of fuel-efficient tires for two consecutive years.* Aiming to secure this position, in February 2012 Sumitomo Rubber Industries launched the ENASAVE PREMIUM tire, which received an AAA classification** under the tire labeling system for its rolling resistance. The Company also expanded its lineup of ENASAVE brand tires for commercial vehicles with the release of the ENASAVE



ENASAVE PREMIUM



VAN01 tire for vans in February 2012 and the ENASAVE SP LT38 tire for light trucks in the following month.

With regard to the global development of fuel-efficient tires, Sumitomo Rubber Industries plans to start introducing the ENASAVE EC503 tire in Thailand, China, India and Indonesia from 2012. In Europe, the Company is preparing to release products that will meet environmental regulations scheduled to be introduced in 2012. In other areas, including North America, the Company is steadily developing products based on relevant environmental regulations and market trends.

* Survey conducted by JMA Research Institute Inc. regarding the sales volume of fuel-efficient tires by manufacturer by two top retailers in 2010 and 2011 in Japan

** Two sizes in the lineup received AA classification

Establishment of New "4D NANO DESIGN" Material Development Technology

For the first time, Sumitomo Rubber Industries applied "4D NANO DESIGN," a new material development technology, to the development of the fuel-efficient rubber used in the ENASAVE PREMIUM tire. 4D NANO DESIGN technology is used to develop materials in a scientific and rational manner by studying the movement of particles on the nano-level in the course of material simulation and analysis. This new technology enables material design and development through the manipulation of materials on the nano-level. Leveraging the 4D NANO DESIGN technology, Sumitomo Rubber Industries will strive to accelerate the development of high-performance tires that can embody both eco-friendliness and safety.

