Initiatives for Reducing Environmental Impact of Products

Based on item 2 of Fuji Electric's Basic Environmental Protection Policy —reduction of environmental burden throughout product life cycles—we are implementing initiatives to reduce the environmental impact of our products throughout their entire life cycle, spanning from the procurement of raw materials to disposal.

↓Efficient use of resources, Reduction of raw materials

↓Environmental Impact Reduction Across Entire Product Lifecycles

Effective Use of Resources and Conservation of Raw Materials

When designing products, Fuji Electric conducts product assessments to evaluate the effectiveness of resource usage. Efforts to effectively utilize resources through product designs include making products that are more compact, weigh less, and have longer lifespans and avoiding usage of regulated, harmful chemical substances. In regard to manufacturing, meanwhile, we focus on effectively utilizing materials, decreasing the number of defective products created, and reducing packaging.

Furthermore, we have defined waste volume per unit of sales at domestic production facilities as a management index for efforts to reduce the usage of raw materials and have set the target of realizing a 25% reduction in this index (versus fiscal 2006) by fiscal 2020. In fiscal 2017, we achieved our target of a reduction of 22% for this year.

Case Example of Initiatives to Reduce Waste Emissions and Save Resources Related to Products

We promote the 3Rs (reduce, reuse, recycle) in our vending machine products in an effort to reduce waste emissions. Specifically, other efforts include reducing the size and weight of products to save resources, and printing warning labels directly on the inside of container lids to reduce materials used in labels.

In addition, we have successfully realized smaller packages for SiC semiconductors with 75% less volume than that of conventional semiconductors. Also, our large-capacity UPSs, which employ new power devices, have been made 30% smaller. Through these efforts, we have succeeded in substantially reducing the resources and materials used in our products.

Environmental Impact Reduction Across Entire Product Lifecycles

Fuji Electric aims to reduce environment impacts across entire product lifecycles. To this end, we conduct product assessments and design reviews during the design phase to evaluate the environmental performance of products. These evaluations look at a wide range of environment factors, including energy- and resource-saving properties as well as the usage of harmful chemicals, ability to contribute to lower chemical usage during manufacturing processes, transportation concerns, and other factors related to the realization of a sustainable society. Through these evaluations, we are working to reduce environmental impacts.

■ Eco-Product Certification System

Fuji Electric is developing eco-friendly products, which enhance energy efficiency and reduce the use of chemical substances, and environmental contribution products, which help reduce society's overall impact on the environment. We are continuing to promote the spread of these products. In this initiative, Fuji Electric has established a common Fuji Electric Eco-Product Certification System. We evaluate the degree of product eco-friendliness on a Company-wide platform. Products meeting fixed criteria are certified as "eco-products," while those that are at the top of the industry for environmental benefit and contribution, and which are recognized outside the Company at the national level for environmental superiority are labeled "super eco-products."

Based on Environmental Vision 2020, we had been working to achieve the target of having certified eco-products represent more than 70.0% of all Fuji Electric products sold. We stopped tracking this ratio after the target was accomplished with a ratio of 75.5% in fiscal 2016.



Eco-Product Definitions	
Eco-Friendly Products	Products that have a reduced environmental impact over the entire product lifecycle. These products are superior to traditional products in at least four of six standard areas, including energy conservation, resource conservation, and recyclability.
Environmental Contribution Products	Products that contribute to environmental preservation during use. Products that contribute to the environment by utilizing natural energy or information and communication technology.