

Products for a Low Carbon Society

Polyvinyl Chloride (PVC)/PVC Window Frames

Compared with other plastics, PVC is far less dependent on petroleum resources, and coupled with progress in recycling technologies, it makes major contributions to the environment as well.

PVC window frames significantly reduce energy consumption for heating and cooling due to their superior thermal insulation. Based on a statistical study, conversion of all houses in Japan from aluminum frames to PVC window frames will reduce greenhouse gas emissions by 35 million tons annually.

The Ministry of the Environment and the University of Tokyo are conducting trial installation of PVC window frames because of the high evaluation they have received for reducing greenhouse gas emissions.



PVC Window Frames;
The office of the Japanese Minister of the Environment has windows that use PVC window frames.

Rare-Earth Magnets

Rare-earth magnets contribute to saving energy and reducing greenhouse gas emissions. With the use of rare-earth magnets for air-conditioner compressor motors, the coefficient of performance (COP) has improved between approximately 5 percent and 10 percent.

Moreover, automobile applications include use for driving the various motors in powertrains for hybrid and electric vehicles, as well as in generators and sensors. Rare-earth magnets reduce greenhouse gas emissions by up to about 50 percent compared with those of gasoline-powered vehicles.



Reducing greenhouse gas emissions by up to about 50%



The coefficient of performance has improved between approximately 5% and 10%

Silicones for LEDs

LEDs have rapidly gained share in the market for illuminants because they reduce environmental burden. If used for room lights, it is estimated that LEDs would reduce CO₂ emissions by 50 percent or more compared with conventional lighting.



Enable to reduce greenhouse gas emissions by 50% or more

Shin-Etsu makes a substantial contribution to the creation of an environmentally conscious society by manufacturing a variety of highly reliable silicone products. These include encapsulating materials to protect LED chips, die-bonding materials to fix LED chips and reflectors to prevent degradation of LED brightness.

LED Structure

