

# **Alternative Energy**

Plastics play an important role in the production of solar, wind, wave, biofuels, geothermal and hydrogen equipment components.

### **Applications**

- Films for solar collectors
- Solar array pivot bearings
- Thrust washers
- Electrical insulators
- Housings/shrouds
- Rotational bearings, bushings
- Equipment braces
- Storage tanks
- Pipe, valves, fittings
- Standoff heat insulators
- Tubing



- Lightweight for more efficient operations
- Ease of fabrication
- Easy to install/replace
- Recyclable
- Corrosion and chemical resistant
- Abrasion resistant
- Impact and fatigue resistant
- Stiffness
- Excellent bearing and wear performance
- Low moisture absorption
- Weatherability
- Low creep
- Low warpage
- Solid color, eliminating painting







#### **Materials**

- Acetal (POM)
- Acrylonitrile-Butadiene-Styrene (ABS)
- ABS/Polycarbonate
- Long Fiber Reinforced Thermoplastics (LFRT)
- Nylon (PA)
- Polyamideimide (PAI)
- Polybutylene (PBT)
- Polycarbonate (PC)
- Polyetheretherketone (PEEK)
- Polyethylene (PE)
- Polyethylene Terephthalate (PET)
- Polyphenylene Oxide (PPO)
- Polypropylene (PP)
- Polyurethane (PUR)

## Did you know?

Wood, the most renewable and available alternative energy source, emits roughly the same amount of carbon when burnt as it would if it decayed naturally.



## **Environmental and Safety**

Considering the total carbon footprint, including costs of raw materials, manufacture, transport, fabricate, install, maintain, plastics compare favorably with more traditional materials. Also, plastics are safer to handle and install. When you consider that most plastics are readily recyclable, they can become the most environmentally responsible and safest choice for many demanding alternative energy applications.



