Using corrugated to transport, protect and display products

A new U.S. corrugated industry life cycle assessment (LCA) study shows significant improvements in the environmental impacts of corrugated packaging between 2006 and 2010.

The study tracked the environmental impact of corrugated products through 4 life cycle phases:

- **CONVERTING**
  - Converting containerboard into corrugated boxes and displays

- **PULP AND PAPERMAKING OPERATIONS**
  - Planting, growing, harvesting trees, and/or using recycled containerboard

- **USE**
  - Using corrugated to transport, protect and display products

- **END-OF-LIFE**
  - Recovery for recycling and/or incineration, landfilling

**What were the Results between 2006 and 2010?**

- **132%**
  - Reduction in GHG Emissions

- **122%**
  - Reduction in Eutrophication from nutrient discharge

- **14%**
  - Reduction in Respiratory-related effects from particulate emissions

- **12%**
  - Reduction in Fossil Fuel Depletion

**What drove the improvements?**

1. Increased recovery of recycled fiber (OCR)
   - 72% (2006)
   - 65% (2010)
   - Reduced methane emissions from landfills

2. Increased energy generated from renewable biomass versus fossil fuels
   - Reduced greenhouse gas emissions
   - Reduced reliance on fossil fuels

3. Reduced usage of fossil fuels
   - Switch from oil/coal to natural gas
   - Reduced greenhouse gas emissions

**Is 100% Recycled better for the environment?**

In some areas, yes. In some areas, no. 100% recycled product uses and consumes less water and total energy. Industry average product, which contains 46% recycled content, however, has a lower environmental impact on greenhouse gases, acidification and non-renewable energy. Neither system acting alone is viable. The worldwide market needs a balance of both new and recycled fibers to produce quality products and to ensure a consistent and sustainable supply.

**Learn more about corrugated packaging at www.corrugated.org.**