

## Habitat for Humanity's Vinyl Siding Project

### Overview

Habitat for Humanity builds new houses for low-income clients in the Buncombe County area of Western North Carolina. Habitat has been recycling cardboard since 2004. In 2006, Habitat developed a program to recycle the scrap vinyl siding left over from new home construction.

### Implementation

**Collection:** Vinyl siding scrap is separated by the job site volunteers and placed in a utility trailer located at the construction site. The trailer is provided by the local plastics recycler, Smokey Mountain Resource Recovery. Smokey Mountain Resource Recovery picks up the trailer when notified by Habitat that the trailer is full. The trailer will hold 1500 pounds of material.

**Challenges:** The value of the vinyl scrap in the commodities market was \$0.01 to \$0.06 per pound when Smokey Mountain's source was buying. The economic slow-down greatly reduced the demand for the scrap. The scrap material is a mixture of colors, and could only be recycled into limited markets for black pipe. This economic condition, combined with Habitat's relatively low volume of material, led Smokey Mountain to the decision to place his trailer with another client that could generate higher volumes of plastic that had a higher value.

### Keys to Success

The key to success for this program is tied to the value that vinyl has in the recycling marketplace. Because the value of this material declined in 2007 and has not bounced back significantly, this program has been postponed. When the value for vinyl increases, Habitat for Humanity will try once again to send this material to a local recycler.

### Recycling Program Results

**Waste Reduction:** Habitat was able to fill one trailer every three to four months. This amounted to approximately 1000 to 1500 pounds worth of material that did not go to the landfill, when market conditions allowed for recycling.

**Economic Viability:** Recycling these quantities of vinyl siding scrap saved about \$25 to \$30 in tipping fees. For the local plastics recycler, when market conditions brought \$.05/ pound, the vinyl scrap recycle value would yield \$50 to \$60 while at \$.01 the yield would only be \$10 to \$15 and not cover transportation costs.

### Type of Facility:

*Non-profit, charitable home builder*



### Recycling Since:

2004

### Recycles:

Cardboard

*Vinyl siding (when market conditions are right)*

### Monthly Recycling Stats:

*200 lbs. of cardboard*

*300 lbs of vinyl siding  
(when market conditions are right)*

### Cost of Recycling Services vs. Disposal Costs:

*There was no cost to recycle vinyl siding, other than the labor time associated with loading vinyl in the trailer. Recycling quantities of vinyl siding scrap saved about \$25 to \$30 in tipping fees.*

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