

# RECYCLING ECONOMIC INFORMATION STUDY UPDATE HIGHLIGHTS

June 2009

## ***Industry Valued at \$35 Billion Five States, with Employment Topping 100,000***

Recycling and reuse fuel a \$35 billion annual industry in Delaware, Maine, Massachusetts, New York and Pennsylvania, according to the [Recycling Economic Information \(REI\) Study Update](#), completed in March 2009. The *Study* found that more than 11,000 recycling and reuse businesses employ over 100,000 individuals in the five-state region, and pay them wages that exceed \$4.2 billion.

### **Key Findings**

- 11,425 recycling and reuse establishments,
- Employing 105,146 individuals,
- With a \$4.2 billion in annual payroll, and
- \$3.5 billion in annual revenues.

Reuse and recycling businesses also yield significant environmental benefits. Each year, recycling operations in the five states save the amount of energy needed to power almost two million households, and avoid 6.4 million tons of greenhouse-gas emissions – equivalent to

taking close to 3 million cars off the road, according to an estimate by NERC based on the *Study* findings.

This *REI Study Update* was prepared by [DSM Environmental Services, Inc.](#) and [MSW Consultants](#) on behalf of NERC and the five participating states. The *Study* divides recycling into 26 categories. Six of the categories represent the supply chain that provides recycled raw materials to manufacturers—including municipal and commercial collection programs, sorting facilities, composting operations, scrap wholesalers, and plastics reclaimers. The *Study* found that businesses that utilize recycling raw materials do so in lieu of “virgin” products that are often mined and manufactured outside of the region. As a result, these businesses create jobs closer to home and have a smaller environmental footprint than companies that rely on raw material extraction. In the five states, the research showed that there were 7,313 establishments working in this sector. This is 43% more workers than mining operations there, paying wages that were approximately 62% higher than those offered by mining jobs, according to U.S. Census figures.

The *Study* identified 13 categories for businesses that manufacture new products with recycled materials. Seven additional categories are devoted to the reuse sector. This sector is comprised of 3,079 businesses that employ 17,765 individuals, and have annual gross revenues that exceed \$2 billion.

## Industry Overview

The *Study* demonstrated that the region's recycling and re-use industries are highly diverse in the recovered materials utilized, the technologies employed, and the size of the establishments.

**The Recycling Sector** was divided into 19 categories by type of establishment. These operations collect and process recovered materials and manufacture products using recycled materials. They include long-established sectors like paper and steel making, but also new entrepreneurial ventures such as composting, and plastic and rubber product manufacturing. There are over 8,000 recycling related establishments in the region. As Table 1 illustrates, the majority of establishments are involved in the early stages of the recycling loop, i.e., collection and processing. The manufacturers that use these recovered materials to produce finished products are fewer in number, but larger in size.



**Table 1**  
**RECYCLING ESTABLISHMENTS – 8,603**  
**Collectors: 5,123 total establishments**

- 2,665 Privately run residential collection
- 2,458 Government run residential collection

**Processors: 2,494 total establishments**

- 1,061 Recyclable materials wholesalers
- 107 Materials Recovery Facilities
- 59 Plastic reclaimers

- 963 Compost/organics processors

**Manufacturers: 938 total establishments**

- 89 Plastic product manufacturers
- 112 Iron and steel foundries
- 71 Steel mills
- 68 Paper/paperboard/deinked pulp producers
- 12 Paper-based product manufacturers
- 172 Nonferrous foundries
- 80 Nonferrous secondary smelting & refining mills
- 76 Nonferrous product producers
- 60 Rubber product manufacturers
- 178 Pavement mix producers
- 12 Glass product producers
- 8 Glass container manufacturers

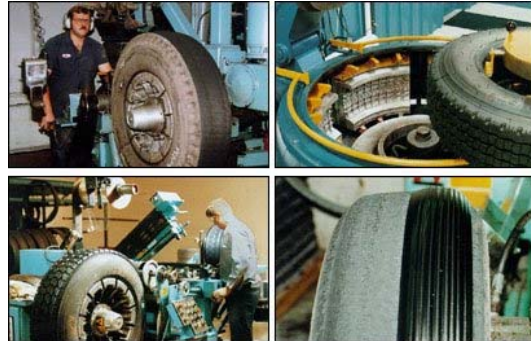
**Other**

- 48 Other recycling establishment

**The Reuse & Remanufacturing Sector** was divided into seven categories. These diverse establishments refurbish used, old, or broken equipment. In the *Study*, it is conservatively estimated that there are over 3,000 re-use and remanufacturing establishments in the region. This figure does not include large sectors such as industrial equipment manufacturing). As Table 2 shows, these categories include operations that sell a wide range of used merchandise, as well as burgeoning categories such as remanufacturing and marketing used computers and electronic appliances.

**Table 2**  
**REUSE & REMANUFACTURING ESTABLISHMENTS – 3,125**

- 29 Computer & electronic appliance demanufacturers
- 741 Motor vehicle parts – used
- 2,215 Retail used merchandise
- 118 Tire retreaders
- 47 Wood reuse
- 10 Materials Exchange services
- 55 Other reuse



### **The Region's *Big Four***

While the recycling and re-use industry is highly diversified, four types of establishments dominate in-terms of their contribution to the region's economy.

#### **Collection**

Whether privately operated or run by a community, collection of recyclables is the keystone of the reuse and recycling industries. These businesses:

- Employ almost 10,000 people,
- Generate annual payrolls of \$361 million, and
- Result in \$789 million in annual revenue in the region.



#### **Recyclable Material Wholesalers**

These are operations such as paper stock dealers, scrap metal processors, and other establishments that sort, remove contaminants, and densify recovered materials. Recycling activities at recyclable material wholesalers:

- Employ more than 14,000 people,
- Generate annual payrolls of \$500 million, and

- Result in \$ 1 billion in annual revenue.

### **Paper, Paperboard, & Deinked Market Pulp Mills**

These manufacturers produce paper and paperboard products from recovered paper or market pulp and/or deinked recovered paper and sell pulp. The mills use a wide range of waste paper to produce a variety of finished paper grades. Recycling activities at paper, paperboard and deinked market pulp mills:



- Employ almost 9,000 people,
- Generate annual payrolls of \$480 million, and
- Result in \$4.7 billion in annual revenues.

### **Steel Mills**

These companies produce iron and steel slabs, billets, bar, plate, and sheet from scrap and/or raw materials. By all measures used in this *Study*, among recycling and reuse establishments steel mills are the most significant contributor to the region's economy. Recycling activities at steel mills:

- Employ almost 14,000 people,
- Generate annual payrolls of \$8.5 million, and
- Result in \$9.2 billion in annual revenues.

Cumulatively, the big four account for approximately:

- 44 percent of all employees,
- 51 percent of total payroll, and
- 23% percent of total receipts

## **Conclusion**

*The Recycling Economic Information Study Update* demonstrates the significant contributions the recycling and re-use industry makes to the region's economy. The *Study* findings will be used by NERC and its member states as a baseline to track developments and changes in the industry in the future, and to effectively target economic and market development resources and programs to specific sectors of this expanding industry.

Download a copy of the report in PDF format here:

[Recycling Economic Information Study Report Update](#)

For more information, contact [Lynn Rubinstein](#), Executive Director.