

Recycling Works in Pennsylvania: The Economic Benefits

The collection, processing, and conversion of recycled waste into valuable products creates jobs, contributes feedstock to manufacturing, and adds significant value to the entire U.S. economy. A detailed study, *The Economic Contributions of Recycling to the Pennsylvania Economy*, prepared by IHS Markit and the Pennsylvania Recycling Markets Center (June 2017) provides detailed information on the importance of recycling to Pennsylvania's economy. Here are some key metrics:

Recycling Means Business in Pennsylvania	
Recycling and Reuse Establishments	6,373
Recycling and Reuse Employment	66,041 people
Annual Sales	\$30.0 billion
Annual Labor Income	\$4.8 billion

Recycling Adds Value to Pennsylvania's Economy

- **Collection and processing**, the first step in the recycling process, involves collecting, sorting and aggregating recyclable materials. It includes public and private hauling operations, material recovery facilities, scrap yards, recyclable material wholesalers, and compost and mulch facilities. About 1,837 of these operations employ 12,698 people in Pennsylvania, with a payroll of \$962 million and annual sales of \$4.7 billion.
- **Recycling manufacturing** further processes, refines, and converts recycled feedstocks into manufactured goods, which include glass container and beneficiation plants, paper and steel mills and converters, foundries, and plastic interim processors and manufacturers. This sector includes 579 operations that employ over 39,799 people with a payroll of \$3.3 billion and annual sales of over \$23.7 billion.
- **Reuse and remanufacturing** focuses on the refurbishing and repair of products to be reused in their original form. These activities include electronics, valuable used motor vehicle parts, furniture and clothing, wood reuse, and other types of remanufacturing or reuse. Approximately 3,957 operations in the reuse and manufacturing sector contribute over 13,544 jobs, a payroll of \$537 million and sales of over \$1.5 billion.

Downstream Economic Benefits

Indirect businesses that provide goods and services to the recycling and reuse establishments, as well as induced economic activity from direct and indirect employees, also contribute to the Commonwealth's economy. These supporting activities include recycling and reuse equipment manufacturers, service sector companies, and establishments that contribute an additional 109,545 jobs and over \$13.6 billion in sales activity.

Recycling Contributes to State Revenues

Pennsylvania tax revenues from the recycling marketplace are estimated at \$1.7 billion per year.

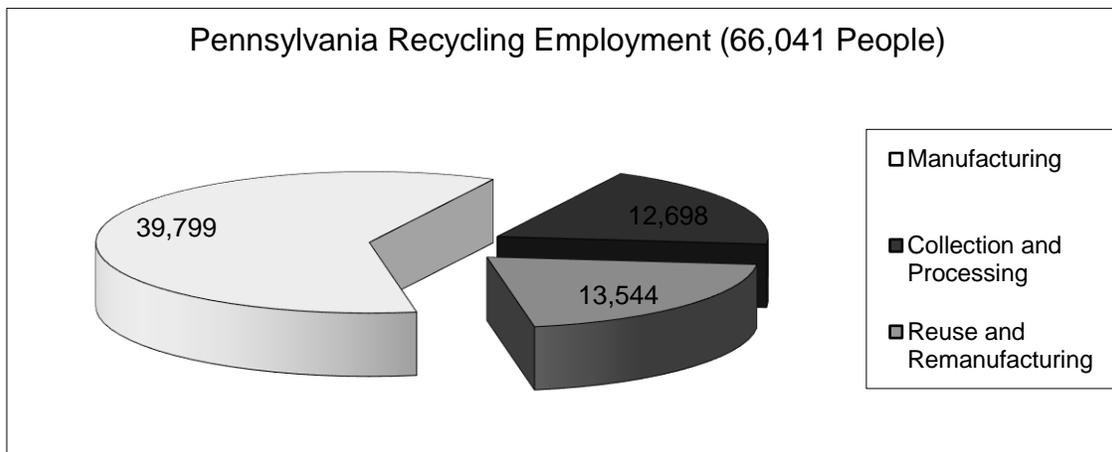
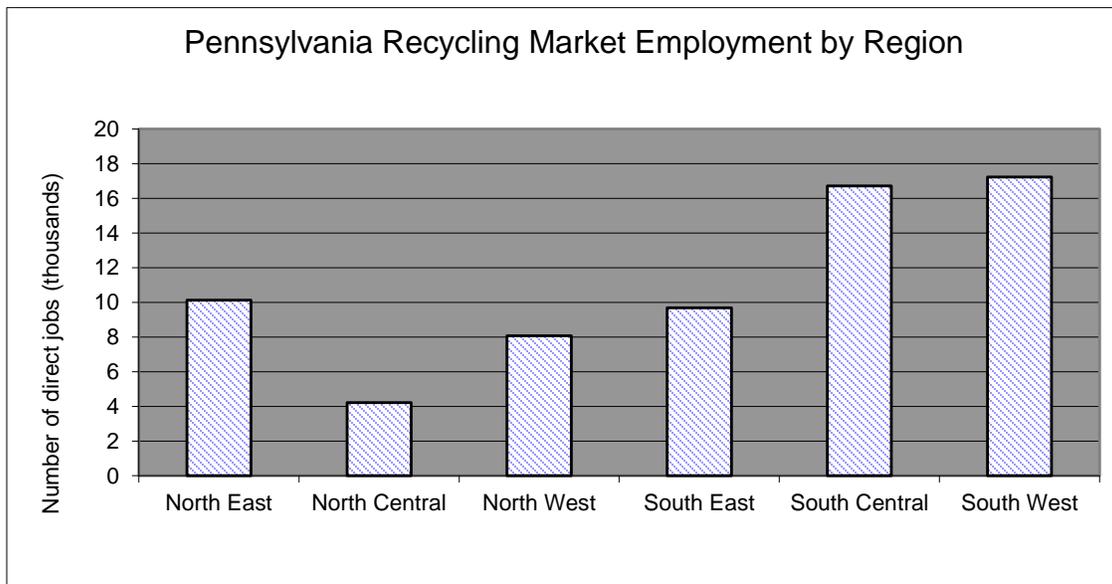
Effects of the Recycling Marketplace on Pennsylvania Revenues (in \$ Millions)	
Collection and Processing	285
Recycling Manufacturing	1,251
Reuse/Remanufacturing	114
TOTAL	1,650

Highlights from the Study (*The Economic Contributions of Recycling on the Pennsylvania Economy, June 2017*)

- IHS Markit estimates that the Pennsylvania Recycling Marketplace supported approximately 176,000 direct, indirect, and induced jobs across Pennsylvania in 2015. This represents 3% of the jobs in Pennsylvania. (p. 28)
- Recycling materials handling, processing, and manufacturing equipment have dramatically evolved during the 29 years of Act 101's existence. The advent of automated mixed recyclable material processing technologies, commonly known as "single stream," has been engineered to separate recycled materials. Private

multimillion-dollar investments (as much as \$20 million) have been made in several single-stream projects in Pennsylvania. These technologies can enhance efficiency and streamline other business costs... (p. 18)

- For every direct job within the Recycling Marketplace, an additional 1.7 jobs are supported in Pennsylvania. (p. 6)
- The average labor income per direct job within the Recycling Marketplace was almost \$73,000 in 2015. The average labor income across the direct, indirect, and induced categories was \$64,500, approximately 23% above the state average. (p. 6)
- In 2015, the Recycling Marketplace contributed \$22.6 billion to Pennsylvania's gross state product. Every dollar of direct activity was matched by another dollar of combined indirect and induced value added. (p. 6)



For More Information

For more information, visit www.dep.pa.gov, Businesses > Land > Waste > Recycling.