

RECYCLING is WORKING

The U.S. Recycling Economic Information Project

Documenting the economic impact of recycling
and reuse in the United States.

Talking Points

General Overview

- The *U.S. Recycling Economic Information (REI) Study* is a new, first-of-its-kind national study that documents the importance of recycling and reuse to the U.S. economy. The study, commissioned by the U.S. Environmental Protection Agency (EPA) and a number of states through a cooperative agreement with the National Recycling Coalition (NRC) in association with R.W. Beck, Inc, demonstrates what many have known for a long time—that “Recycling is Working.”

II. Significance of the Study

- Comprehensive, national data on the economic impact of recycling and reuse is critical to the continued growth and success of the industry. With the release of the study, for the first time, public and private sector decision-makers now have a clear picture of the significant contribution recycling makes to our nation’s economy. This information also provides a range of benefits to other audiences:
 - Demonstrates to the investment community that recycling is a viable, established industry with a proven track record.
 - Assists government agencies with strategic planning and policy decisions to ensure the continued growth of the industry.

- Identifies business opportunities for entrepreneurs based on emerging commodity areas and industry sectors.
- Provides recycling and reuse advocates with an important tool to help promote awareness and build support.

III. Key Findings of the Study

The study highlights a number of important findings:

- **Recycling and reuse create jobs and add value to the economy.** The recycling and reuse industry is a significant force in the U.S. economy. The U.S. is home to more than 56,000 recycling and reuse establishments that employ over 1.1 million people, generate an annual payroll of nearly \$37 billion, and gross over \$236 billion in annual revenues.
- **Recycling and reuse stack up against other major industries.** As a driver of economic activity, the recycling and reuse industry compares favorably to other key industries, such as automobile manufacturing and mining. Of particular significance is that recycling far outpaces the waste management industry because recycling adds value to materials, which creates jobs. Recycling also provides a large number of jobs that generally pay above the average national wage. The average wage for recycling employees is \$36,000, approximately \$3,000 above the national average.

- **Recycling represents a diverse industry.** The recycling industry is an elaborate and diverse network of public sector institutions and private companies. Recycling is an integrated system that starts with curbside collection of materials by municipalities, includes processing of recycled materials, and leads to manufacturing of new products with recycled content. More than half of the economic activity is supported by four “core” manufacturing industries—paper mills, steel mills, plastics converters, and iron and steel foundries. However, the recycling industry also includes such diverse companies as tire retreaders, organics composters, and plastic lumber manufacturers.
- **Choose to reuse.** The reuse industry is also widespread and ranges from more traditional establishments such as local thrift stores and antique shops to more recent, dynamic operations such as computer demanufacturers, pallet rebuilders, and materials exchanges. As a whole, the reuse industry employs nearly 170,000 workers in more than 26,000 establishments nationwide. The reuse industry also supports an annual payroll of \$2.7 billion and generates revenues of approximately \$14.1 billion.
- **Recycling and reuse spur “downstream” economic impacts.** Investment in local recycling collection and processing, as well as policies and programs that encourage recycling and reuse, spurs significant downstream investment in recycling manufacturing by the private sector and promotes economic growth. In addition to the direct impact of recycling and reuse on the economy, an additional 1.4 million jobs are indirectly supported by the recycling and reuse industry—such as office supply companies, accounting and legal firms, and building and landscape maintenance companies. These jobs have a payroll of \$52 billion and produce \$173 billion in receipts. As well, spending by employees of the recycling and

reuse industry leads to another 1.5 million jobs with a payroll of \$41 billion and produces receipts of \$146 billion.

IV. Other Important Benefits of Recycling and Reuse

There are a number of other important benefits of recycling and reuse that reinforce and complement the findings of the REI study.

- **Recycling is a strong, vibrant, growing industry.** More people recycle household waste than vote in today’s elections. According to EPA, recycling, including composting, diverted 50.8 million tons of material away from landfills and incinerators in 1999, up from 34 million tons in 1990—a 50 percent increase in just 9 years.
- **Recycling cuts pollution and conserves natural resources.** By using recycled rather than “virgin” raw materials in manufacturing, recycling reduces pollution and saves natural resources. Recovered materials have already been refined and processed once, so manufacturing the second time around is usually much cleaner than the first.
- **Recycling saves energy.** By reducing the need to extract and process virgin raw materials into manufacturing feedstock, recycling helps achieve significant energy savings. Recycling of aluminum cans, for example, saves 95 percent of the energy required to make the same amount of aluminum from its virgin source, bauxite.
- **Recycling reduces greenhouse gas emissions.** Recycling, including composting, helps reduce greenhouse gas emissions—such as carbon dioxide, methane, nitrous oxide, and chlorofluorocarbons—that contribute to global climate change. This is achieved by decreasing the energy needed to make products from virgin materials (reducing the burning of fossil fuels), reducing emissions from incinerators and landfills

(which are major sources of methane gas emissions), and slowing the harvest of trees (maintaining the carbon dioxide storage benefit provided by forests).

- **Recycling stimulates the development of greener technologies.** Recycling is innovation, with growth being driven by new, innovative technologies. The vast supply of low-cost materials from local collection programs has spurred many businesses to develop cutting-edge technologies and products. In addition, existing technologies can be adapted to use collected recyclables to manufacture new products.
- **Other benefits of recycling and reuse—** Recycling and reuse also avoid the costs of disposing of waste in landfills or incinerators. More and more local communities—large and small—are demonstrating that recycling and reuse programs can be cost-competitive with solid waste disposal. This is especially true if communities consider the “full costs” of solid waste disposal and account for the environmental and other negative impacts of waste generation.
- **There is room for sustainable growth in recycling.** While recycling has enjoyed tremendous growth over the past few decades, there remain significant opportunities for improvement. Currently, numerous resources—from debris at construction and demolition sites to the byproducts of industrial processes—are thrown away rather than being recovered for recycling. Many recycling business still face significant hurdles when trying to secure financing from the investment community. And from the grocery store to the hardware store, products with “virgin” content far outweigh those containing recycled materials. Nevertheless, with the continued support from both the public and private sector, recycling will continue to yield strong, positive results far into the future.

V. About the REI Study

- The multi-year REI project utilizes the best available data from 1997–1999. The national study was accomplished through a comprehensive analysis of both existing economic data and reasonable estimates based on targeted surveys of recycling businesses and sophisticated economic modeling.
- The study measured the following:
 - **“Direct” economic impacts of the recycling and reuse industry.** The study evaluated economic data for 26 different types of reuse and recycling establishments—from local thrift stores to major paper recycling companies. The study measured several different industry characteristics including the number of establishments, total jobs, annual payroll, annual receipts, and annual throughput (amount of materials collected and processed).
 - **“Indirect” and “induced” economic benefits.** This included the professional services (e.g., accounting firms, office supply companies) used by recycling and reuse organizations (or “indirect” impacts) and the money spent by the people who work in the recycling and reuse industry (or “induced” impacts).
 - **Federal, state, and local tax revenues produced by the recycling and reuse industry.** This included both those directly paid by recycling and reuse establishments and an estimate of those resulting from “indirect” sources.
- In addition to its national sponsors, the study has enjoyed widespread support from numerous states across the country. In fact, the following states either commissioned a state-specific REI study or used the methodology to conduct their own analyses: California, Delaware, Florida, Illinois, Indiana, Iowa, Massachusetts, Minnesota,

Missouri, Nebraska, New Jersey, New York, Ohio, Pennsylvania, Vermont, and Wisconsin.

- The study builds upon other regional and state-specific studies produced in the past, including a groundbreaking assessment of the economic impact of recycling in the northeast in 1994. While informative, previous studies used different, inconsistent methodologies, which made it difficult to compare data from state to state. By using

one methodology, for the first time, the national study allows for sound comparisons across different regions and states in the U.S.

- The study establishes an important benchmark of the economic impact of recycling and reuse. It lays the groundwork for future studies that could be conducted on a regular (i.e., 3 to 5 year basis) to track industry growth and trends.

