Recycling and Product Take-Back Programs: An Economic and Financial Benefits Overview

The Nebraska Product Stewardship Coalition was formed by Keep Nebraska Beautiful, WasteCap Nebraska, the Nebraska League of Municipalities, the cities of Lincoln and Omaha and the Product Stewardship Institute in 2010. The mission of the Coalition is to shift Nebraska's product waste management system from one focused on government funded and ratepayer financed waste diversion to one that relies on producer responsibility in order to reduce public costs and drive improvements in product design that promote environmental sustainability. The Nebraska Product Stewardship Coalition works to integrate the principles of product stewardship into the policy and economic structures of Nebraska.

An Economic Force

Recycling is a job intensive industry that transforms materials often classified as waste into valuable commodities and high-quality feedstock that supplies manufacturers in the U.S. and worldwide. Recycling is a method for Product Stewardship and a tool for job creation.

The Recycling industry is already a formidable force on the US economic stage. In 2010 the industry supported:

- 459,131 jobs
- 137,635 direct, local, well-paying jobs in collection, processing, brokering, sales and exporting
- $26.1 billion in wages
- $10.3 billion in taxes to federal, state and local governments
- $90.6 billion in output, comparable to the poultry & egg, toy, book publishing & coal mining industries[1]

Recycling is now one of the top 10 fastest growing industries in the U.S.[2] and is projected to grow 11% by 2016.[3]

Job Creation

On a per ton basis, recycling creates an average of 10 times as many jobs as traditional disposal or incineration.[4] Where waste disposal creates just .1 jobs per 1,000 tons,

- recycling creates 2 jobs
- composting creates .5 jobs
- manufacturing with recycled materials creates between 4 and 10 jobs depending on the material
- reuse and remanufacturing of used electronics, textiles, C&D materials creates up to 20 jobs[5]

Furthermore, recycling is a NET job creator. North Carolina found that for every 100 jobs created in the recycling sector, just 10 jobs were lost in traditional disposal.[6]

Increasing the U.S. recycling rate from the current 33% to 75% would **add 1.5 million more jobs by 2030 than in 2008.**[1]

Nebraska Product Stewardship Coalition

Product Stewardship Institute

Sustainable Solutions to Protect Our Environment

Recycling has been creating jobs across the country

In North Carolina, recycling supports **15,200 local private sector jobs** and accounts for **$395 million** in wages. The industry grew 4.8% adding 328 jobs between 2008 and 2010 and expected growth will add 4,000 jobs by 2012.[7]

In the northeast region, recycling supports **104,885 jobs** across 5 states and accounts for **$4.2 billion** in annual payroll. Each collection job supports 2 higher paying jobs in a recycling-reliant manufacturing industry.

Across the Midwest, the recycling industry provides **53,720 jobs** and **$2.94 million in wages**. The industry has a **$10.15 billion** economic impact across Illinois, Indiana, Iowa, Missouri, Kansas, Nebraska and Oklahoma.

In Nebraska alone, the recycling industry provides **1,620 jobs**, **$74.57 million in wages** and has a $**274.82 million economic impact**. It contributes **$14.68 million in federal** business taxes and **$10.36 million in state and local taxes.**

Investment and Business Development

High commodity prices, environmental concern and corporate sustainability initiatives have increased demand for recycled materials and the downstream effects have a big economic impact.

In the southeastern U.S., recycling collection and processing activities support more than **206 recycling-reliant manufacturers**, over **47,525 jobs** and contribute more than **$29.4 billion** in annual revenues to their local economies.

In state after state, the contribution of business, residents, manufacturers and consumers to the stream of recycled material feeds a local job growth machine that benefits community, industry and the environment.

What could this mean for Jobs in Nebraska?

A 2008 SustainLane Study ranked Omaha 39th among 49 U.S. cities for waste diversion, labeling them "Sustainably Challenged".[8] While in 1996, Nebraska was recycling 25% of its waste stream, with goals of 50% diversion by 2002, by 2004 the state was diverting between 15.4% and 25% of its waste stream.[9]

If Nebraska increased its diversion rates to the national average, they could support 1,307 local recycling jobs.[10]

An increase in plastics recycling to the national diversion rate could increase recycled plastics volumes to 29,300 tons annually and boost plastics manufacturing jobs in Nebraska by 946, reversing the expected 5.68% decline to an increase of 18% by 2018.[11]

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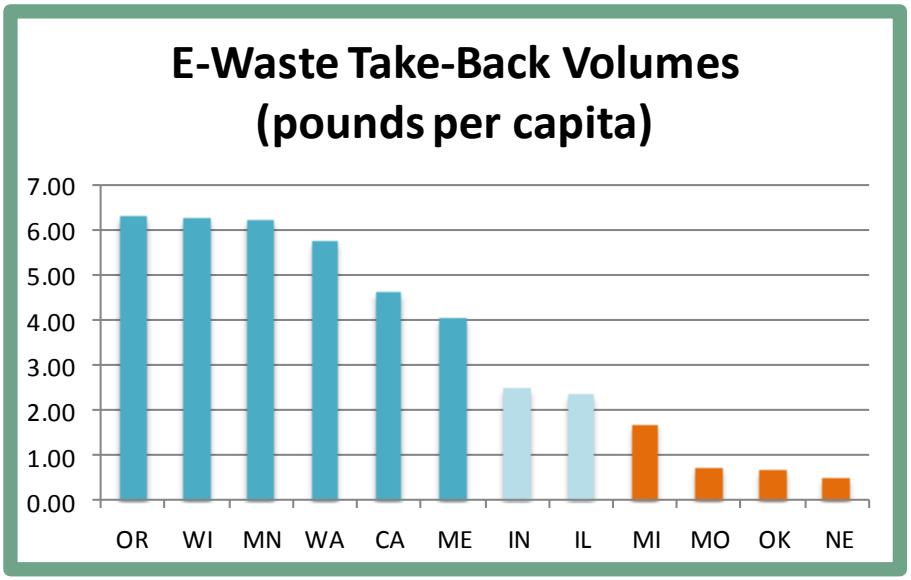
Take-Back Programs

Take-back programs for difficult and expensive to manage products, like paint and electronics, can help reduce municipal waste management costs and foster the recycling industry in Nebraska.



Many states have implemented electronics and/or paint take-back programs and more continue to implement such programs each year. The best performing e-waste take-back programs can be found in Oregon, Wisconsin, Minnesota, Washington, California, and Maine. Midwestern states like Indiana, Missouri and Illinois have relatively new e-waste programs.

The best performing programs incorporate at least three of these five best practices into their program: accept all consumer electronics, institute a disposal ban, set binding collection targets, set convenience requirements, require third-party certification for recyclers.

Missouri, Michigan and Oklahoma do not follow at least three of these best practices. Nebraska does not currently have an electronics take-back program. Indiana and Illinois have relatively new programs or have only recently implemented one or more the best practices into their program.

Financial Savings Case Studies: Wisconsin

First year analysis of Wisconsin's E-waste take-back program shows increased collection and financial benefits. Statewide, at least 2 new companies were created. Existing companies expanded, adding shifts and employees and hiring local haulers to support growth. At least two local governments reported saving over $100,000. The number of collection sites increased to 344. The number of counties served increased from 30 to 61 serving 98% of Wisconsin residents. Electronics collections totaled 35.47 million pounds in the second year of the program.[12]

Wisconsin's program results highlight the positive effects producer and retailer involvement can have. Though retailers accounted for just 9% of registered collectors, they accounted for nearly half of all collections because they were able to leverage their existing multi-location network and consumer relationships.[15]

Waukesha County, WI increased collection levels 75% in just 6 months. They lowered their e-waste processing costs, too. Before the program, they were paying 22 cents per pound, but are now earning 4 cents per pound and generated an additional $21,320 in the first 6 months. They saved over $65,000 over the previous system. Expected total savings plus new revenues will total $90,000.

Milwaukee, WI increased collection levels 150% from 200 tons to over 500 tons per year. The number of collection sites grew from 2 to 24. While Milwaukee used to pay $100,000 to properly dispose of its e-waste, it now takes in a net $40,000 through its e-waste take-back program.

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Washington & Oregon States

Though there are small differences between the e-waste take-back programs in Washington and Oregon, they are co-branded and both provide services for residential disposal of T.V. sets, computers and monitors. They have been successful at creating new businesses, new jobs and increasing collection levels.

Since the E-Cycle program was started, three new processing and recycling facilities have opened in Washington and Oregon. Oregon added 61 new jobs and Washington added 79 new jobs, representing 64% employment growth. The program in the two states supports 360 jobs or 12.6 jobs per 1,000 tons of electronics processed. Collection rates rose to 38.5 million pounds in Washington and 19 million pounds in Oregon. Together they have recycled 5 million pounds of lead.[14]

States with similar E-waste take-back programs have seen comparable success, achieving per capita e-waste recycling rates of between 4 and 6 pounds per capita, increasing jobs and establishing wider networks for recycling which have reduced costs.

What could an electronics take-back program mean for Nebraska?

Take-back programs are designed to meet the needs of individual states. But if Nebraska were to model its take-back program on other high performers, it could increase collection to 5.5 pounds per capita, save $190,891 in tipping fees and add 163 jobs to the Nebraska economy.[15]

A Paint Take-Back Program Case Study: MetroPaint

Under Oregon's paint stewardship program, paint manufacturers pay 75 cents per gallon of paint sold in the state to the industry-run PaintCare Program. This cost is passed on to consumers. The program was supported and backed by the National Paint & Coatings Association. MetroPaint and Amazon Environmental Inc., paint recyclers who sell recycled paint and PLP, have both benefited from increased supply. Since the program began

- Paint sales have been unaffected; 73% of surveyed consumers thought the fee was reasonable.
- 4,696,650 gallons of paint were recycled or remanufactured
- Collection sites increased from 15 to 95 and serve 74% of the population
- Taxpayers and government saved $1 million in the first year of the program
- MetroPaint acquired a new contract to distribute their paint to 33 Miller Paint stores in Oregon[16]

Since Oregon implemented its take-back program, California and Connecticut have both implemented programs and programs have been considered in Maine, Minnesota, New York and Vermont.

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