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United States
Environmental Protection
Agency
Region 4

The Economics of Recycling in the Southeast: Understanding the Whole Picture

You've heard it all before: recycling reduces energy consumption, decreases pollution, and preserves natural resources. But have you considered how recyclable materials provide valuable resources for your community's manufacturers and yield significant economic benefits to your state? Sure, recycling is about the environment and it can have significant indirect benefits such as strengthening communities and reducing greenhouse gas emissions. But recycling is also about economic development, creating jobs, and building competitive industries. The opportunities are literally in our hands.

That recycling is beneficial for the environment is probably an uncontested proposition. What is becoming increasingly more obvious is that recycling contributes to the economic health of a state's economy.

- Frank Hefner & Calvin Blackwell

Department of Economics and Finance, College of Charleston
The Economic Impact of the Recycling Industry in South Carolina

Community leaders are beginning to see recycling not just as a public works operation, but as a sound investment in a community, a town, a state, and a region. Elected officials and city employees alike now recognize that recycling is:

- **Creating Jobs** - Small investments in recycling collection can produce real benefits for a community in the form of well-paying jobs in the recycling industry, in the vast array of businesses that support the recycling industry, and in the manufacturing facilities that rely on recycled feedstock.
- **Saving Money** - By diverting recyclable materials from the landfill, immediate economic benefits are produced through reduced disposal fees and the sale of recyclable materials.
- **Retaining Local Employers** - Industries that need recyclable commodities and can obtain them from the surrounding region tend to remain in this region, and may even expand their operations.
- **Generating Tax Revenue** - Support of a vibrant recycling industry in the Southeast ensures continued receipt of sizable tax revenues that can be used to further improve communities.
- **Producing Economic Development Opportunities** - Increased collection of materials attracts businesses that are interested in processing or using the materials. Recycling helps U.S. manufacturers compete in a high-pressure global economy.



South Carolina tests the water

In August 2006, the **South Carolina** Department of Commerce released a report by the College of Charleston's Department of Economics and Finance on the recycling industry's role in the economy. The findings are astounding. In 2005, South Carolina's recycling industry produced the following tangible benefits¹:

- **Jobs** - Directly and indirectly supported 37,440 jobs with \$1.5 billion in personal income impact.
- **Revenue** - Produced an estimated \$69 million in state tax revenue.
- **Economic Impact** - Generated an estimated total economic impact of \$6.5 billion.

The report further estimates that if all of the common recyclables available in the municipal solid waste stream were recycled, South Carolina would see an immediate cost savings of as much as \$30 million in disposal costs. In addition, at current growth rates, **South Carolina's recycling industry promises a total economic impact of more than \$11 billion by 2010.** The South Carolina study powerfully demonstrates the economic impact of the simple act of recycling. As demonstrated in the breakout boxes throughout this fact sheet, many states are finding that recycling is an under-appreciated job engine. In 2001, the *U.S. Recycling Economic Information (REI) Study*, an unprecedented national study that demonstrated the importance of recycling and reuse to the U.S. economy, was commissioned by the U.S. Environmental Protection Agency (EPA), the National Recycling Coalition, and numerous states across the country. **According to the REI study, the U.S. recycling and reuse industry grosses approximately \$236 billion per year and is competitive with other major industries (e.g., food manufacturing) in employment and annual salaries.** The study clearly shows that recycling is profitable for local governments and businesses alike.²

According to the *REI Study* commissioned by EPA, "[E]specially significant is the finding that recycling far outpaces the waste management industry because recycling adds value to materials, contributing to a growing labor force. Recycling also provides a large number of jobs that generally pay above the average national wage."

Recycling jobs stack up against other major industries

The demand for recyclable materials moves beyond the basic reuse of resources. To a community, it can boil down to a central need—jobs. **The South Carolina report points out that these recycling jobs pay above the state average.** And with an estimated 12 percent growth over the next five years, the number of good South Carolina jobs is expected to grow. In terms of employment and wages, the recycling and reuse industry compares very well to industries often targeted for recruitment and support by economic developers. Often times, the needs of the recycling industry are simple—specifically, they desire access to materials that are currently disposed.

Coca-Cola to Open World's Largest Polyethylene Terephthalate (PET) Recycling Plant

Spartanburg, South Carolina will soon become home to the world's largest PET recycling plant. At full capacity, the facility is expected to produce approximately 100 million pounds of food-grade recycled PET annually. This production rate will help Coca-Cola meet their goal to recycle or reuse all the plastic bottles used in the U.S., but is also expected to put a strain on the currently tight recycling market. While the primary beverage container materials (i.e., aluminum and PET) have high value as recyclables in the marketplace, not enough material is recovered to meet the increasing demand for them. The plant will also be adding a significant number of jobs to the area.

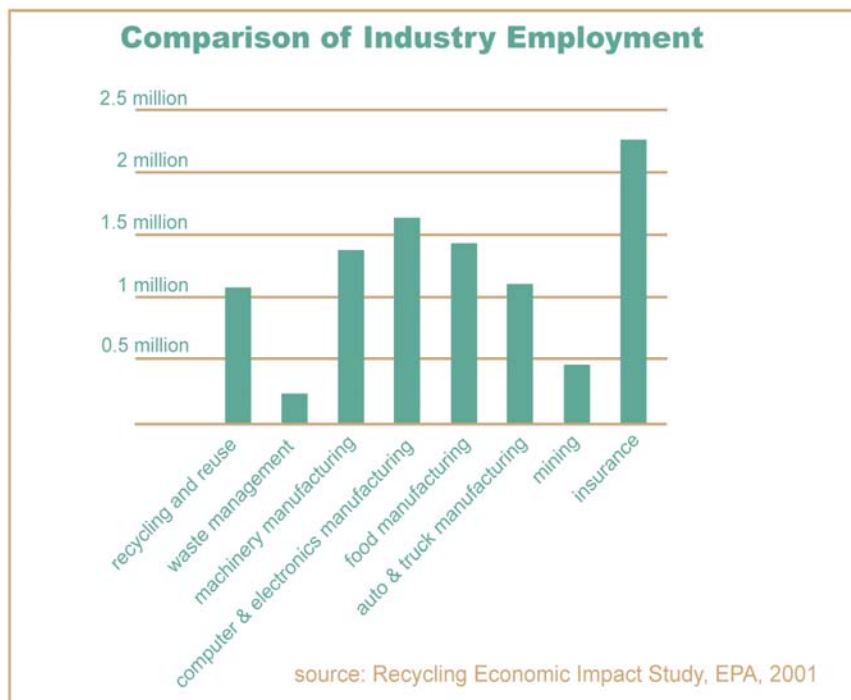
Recycling spurs downstream job and economic growth

The recycling industry is an elaborate and diverse network of public sector institutions and private companies. Investments in local recycling and processing, as well as policies and programs that encourage recycling and reuse, spur significant downstream investment in recycling manufacturing by the private sector. All of these actions promote economic growth. As illustrated in the figure below, the REI study indicates that beyond the **1.1 million people directly employed by recycling, there are an additional 1.4 million jobs with a \$52 billion payroll in businesses that support the recycling and reuse industry.** That is a total of 2.5 million people whose wages are tied to the recycling industry; consider the impact of those 2.5 million employees when they spend their wages in the economy.

Alabama Hosts High-Density Polyethylene (HDPE) Plastic Recycler

With more than 300 employees, KW Plastics in Alabama is among the largest HDPE plastics (#2 plastics such as milk and detergent containers) recyclers in the country. In order to run at full steam, they must pull recycled materials from across the country and even from overseas. From their home state of Alabama, they are only able to collect approximately 370,000 pounds of recycled plastic annually—enough to run the plant for approximately one day. KW Plastics is just one of many Southeastern recycling business that would benefit and potentially grow if regional recycling collection totals increased.

Economic modeling cited by the REI study shows that in 2001, recycling industry employee personal spending supported 1.5 million additional jobs. **Those jobs generated a payroll of \$41 billion and produced receipts of \$146 billion.** By harnessing the far-reaching economic power of recycling, communities can prosper. Community leaders can congratulate themselves in recognizing that small investments in the collection of recyclables at the local level can result in well-paid jobs in the recycling industry, in the manufacturing companies that rely on recycling for feedstocks, and in the wide array of organizations that support the recycling industry. Indirect benefits such as reducing greenhouse gas emissions, conserving energy, and eliminating waste disposal costs will also be realized.



Gauging impact on a national level

It is clear from the REI study that recycling and reuse industries are a significant force in the U.S. economy. The REI numbers show that ***the United States is home to more than 56,000 recycling and reuse establishments that generate an annual payroll of nearly \$37 billion and gross over \$236 billion in annual receipts.*** The table below shows the direct impact of recycling and reuse industries on the U.S. economy.

Summary of Estimates of Direct Economic Activity, REI Study Annual Payroll and Estimate Receipts are in \$1,000

data type	industry sector				industry total
	recycling collection	recycling processing	recycling manufacturing	reuse and remanufacturing	
establishments	9,247	12,051	8,047	26,716	56,061
employment	32,010	160,865	759,746	169,183	1,121,804
annual payroll	956,875	3,826,360	29,181,749	2,747,498	36,712,482
estimated receipts	1,974,516	41,753,902	178,390,423	14,182,531	236,301,371

source: Recycling Economic Impact Study, EPA, 2001

SP Newsprint Company

With recyclable material recovery facilities in six of the eight Region 4 states, *SP Newsprint Company* is a supporter of recycling and an example of strong manufacturing in the Southeast. The company's website boasts that each year their manufacturing operations recycle over one million tons of old newspapers to produce newsprint used at many of the major newspaper publishers in the United States. Specifically, the S.P. Newsprint paper mill in Dublin, Georgia consumes more than 750,000 tons of recycled fiber each year in making 100 percent recycled newsprint.

However, the Southeast domestic demand for old newsprint exceeds the available supply. If SP Newsprint recovered all the used newspapers and publishers' production scrap in the State of Georgia, they would still have to purchase quality tonnage from other Southeast market areas and beyond to meet their production needs.

Pay-As-You-Throw Programs: An option for greater participation in recycling

Traditionally, residents pay for waste collection through property taxes or a fixed fee, regardless of how much—or how little—trash they generate. In communities with pay-as-you-throw programs (PAYT), residents are charged for the collection of municipal solid waste—ordinary household trash—based on the amount they actually throw away, after reduction and recycling efforts. This creates a direct economic incentive to recycle more and to generate less waste. Most communities with PAYT charge residents a fee for each bag or can of waste they generate. In a small number of communities, residents are billed based on the weight of their trash. Either way, these programs are direct: reduced disposal results in reduced cost for the individual.

Research indicates that PAYT can be a very effective tool to increase recycling and waste diversion, and can also be one of the most cost-effective. The program of “paying as you go” shows diversion rates of about 17%. Impacts can be even larger, as a survey in Iowa found that recycling increased an average of 50% after PAYT was implemented. Other benefits are that the program is flexible, quick to implement, and works well in communities of all sizes.

PAYT programs in the US have grown from about 100 in the late 1980s to over 7,000 in 2006, representing about 25% of US communities. Collectively, these program are annually keeping 4.6-8.3 million of tons of MSW out of the landfill, and saving 61-109 million MBTU³.

Athens-Clarke County in Georgia utilizes a pay-as-you-throw program for its downtown businesses and residents. Businesses pay \$1 for each county-issued trash bag, while recycling bags are free. As an added step, all bags are clear and labeled either “trash” or “recycle.” Thus, identification of noncompliance is easier, and enforcement and education can occur simultaneously.⁴

EPA WasteWise Program Award Winners

WasteWise is a free, voluntary, EPA program which targets the reduction of municipal solid waste and select industrial wastes. It helps organizations eliminate these wastes, benefiting their bottom line and the environment. WasteWise is a flexible program that allows partners to design their own waste reduction programs tailored to their needs. The program offers assistance, in addition to recognition and awards. As of early 2008, WasteWise has 1889 partners (including alumni) spanning more than 54 industry sectors. Partners include large corporations, small and medium-sized businesses, schools, colleges, universities, hospitals, state and local governments, tribes, and other institutions. In addition, WasteWise has 182 endorsers, mainly membership-based organizations, from more than 15 industry sectors. Visit www.epa.gov/wastewise.

Winners of the 2007 Waste Wise Partnership Awards in the Southeast include:

Federal Government: U.S. Postal Service- Alabama District

For the past ten years, the Alabama District of the U.S. Postal Service has engaged all 710 postal facilities in their “Discarded Lobby Mail” recycling program. As a part of this voluntary program, postmasters and managers are trained in recycling practices and how to promote recycling in their community. As a result of this training and implementation, the Alabama District has recycled over 5,624 tons of mail and materials, resulting in a disposal cost avoidance of approximately \$5,000,000 in 2006.

State Government: Tennessee Department of Environment & Conservation, Office of Environmental Assistance

The Tennessee Department of Environment and Conservation promotes many recycling programs throughout state office buildings. Thanks to its efforts, the department, a partner since 1998, sees increased waste reduction numbers every year. In particular, the department was able to reach its goal of increasing the amount of mixed office paper it recycles by 10 percent over last year by involving 132 office buildings. This resulted in 620 tons of paper being recycled and an avoided landfill cost of \$18,627.

Factoring in the ripple effect

How can states expect this activity to benefit their local economy? As South Carolina's economic report points out, much like tourism or retirement, there is no one economic development category that covers all of the activities that fall under recycling. The report stresses that when communities evaluate the economic impacts of their local recycling programs and the businesses those programs support, they must include the indirect and induced impacts that are produced from recycling's ripple effect. This ripple effect is demonstrated in South Carolina where, **"the total income impact of recycling is estimated to be \$1.5 billion in 2005, which the State estimates will generate \$30,604,726 in sales taxes and \$38,674,883 in income taxes."**¹ Other indirect impacts such as cost avoidance from eliminated disposal costs, reduced energy consumption, and minimizing greenhouse gas emissions are also part of the ripple effect that benefit the community.

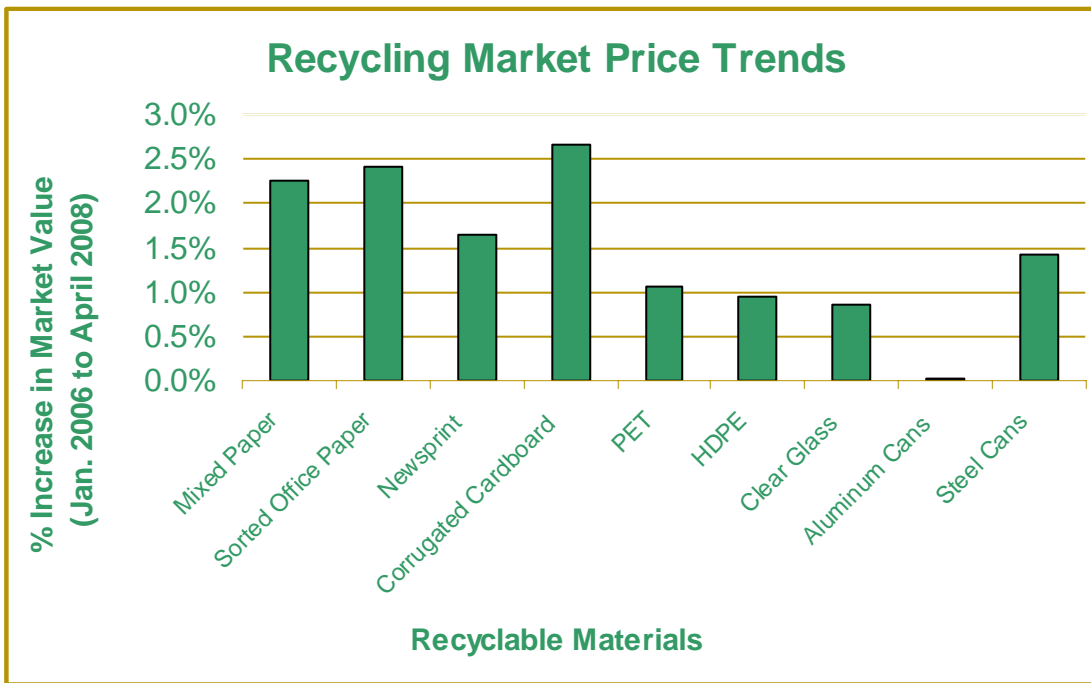
Recycling Means Business in North Carolina

In March 2005, the North Carolina Division of Pollution Prevention and Environmental Assistance released a report titled *Recycling Means Business* in order to express to elected officials that, "North Carolina's recycling economy is one of the fastest growing job engines in the state." The report quickly garnered attention when lawmakers learned that:

- There are more than 500 recycling businesses in North Carolina employing 14,000 people.
- Recycling employs more people in the state than either the bio-tech or the agricultural livestock industries.
- Fifty-four percent of the recycling businesses surveyed forecast creating more recycling-related positions in the next two years.

Potential for easy growth

Heard any good urban legends lately? How about this one: there are no good markets for recyclable materials. The past few years have seen steady, strong market prices for materials and there is no forecast of a crash. In fact, as China continues to import massive quantities of recyclable material from this country, U.S.-based manufacturers are scrambling to ensure that there will be enough supply of recyclable material to meet demand. Manufacturing companies don't just make products with recycled content solely in an attempt to "green" their image. Recycled materials are established as valuable commodities that provide an economic opportunity for both new and existing markets. As shown in the figure below, market prices for commonly recyclable materials have generally increased over the past few years, suggesting that the recycling industry is strong and will remain a key contributor to local economies in the future. As market prices increase, the opportunity for new business to enter the economy and create jobs also increases.



Source: Kentucky Department of Environmental Management, Division of Waste Management, The Marketplace Newsletter.⁵

For example, the August 2006 edition of *Resource Recycling* points out that **"as the paper industry's most important raw material, collecting and processing recovered paper is becoming a global priority."** With the Southeast's strength in pulp and paper products production, this is an important point to note. The American Forest and Paper Association certainly has taken notice. That is why they have set a goal to recover 55 percent of all paper consumed in the United States by 2012. Why the interest? In 2005, 78 percent of the U.S. paper and paperboard mills used some recovered paper and 149 paper mills used only recovered paper.

The Southeast is also home to many companies that manufacture goods from recycled plastic. Mohawk Industries in Georgia is a prime example. Roland Jones, Procurement Manager for Mohawk Industries, Inc., reports that, **"Mohawk Industries purchases and transports over 4 million pounds of recycled PET bottles and food containers each week to our recycling facility in North Georgia for the purpose of processing this material into carpet fiber and fiberfill for home furnishings.** We

Recycling Marketing Cooperative of Tennessee, Inc.

Rural communities often have a more difficult time collecting the volume of recyclables needed for program viability. The Recycling Marketing Cooperative of Tennessee (RMCT) was created to solve this problem. RMCT is a statewide recycling cooperative that provides assistance to communities of less than 10,000 people. In addition to providing program development, grant writing, and outreach assistance, RMCT provides full-scale marketing development and facilitates the combination of materials from smaller communities for increased revenue potential.

RMCT has been highly successful in generating revenue and diverting landfill costs and is a prime candidate for replication in other states in the Southeast. In 2005, RMCT partner communities saw economic successes totaling:

- An average of 600 tons per month of materials diverted from landfills and marketed for recycling
- An average of \$42,000 of revenue generated for most participating recycling programs
- An average of \$18,000 of landfill tipping fees saved for each participating recycling program.

For more information, visit www.rmct.org.

currently purchase from over 40 states, some as far away as the west coast. If more material was collected and recycled from sources located in the southeastern United States and closer to our recycling facility, we could reduce our transportation cost tremendously.”

A wealth of material

Today's strong markets depend upon a steady supply of recyclable materials for feedstock. ***In the Southeast, the recovery rate of recyclables is estimated to be less than 25 percent.*** If communities could reroute more cans, paper, and bottles from the landfill into the recycle bin, the region's economy would benefit directly, producing significant income and growth for businesses that depend on recovered commodities.

In fact, Curbside Value Partnership estimates that the eight states that make up EPA Region 4 dispose of \$1.2 billion worth of recyclables each year. Add the avoided cost of landfill disposal to that and the potential economic benefits of recycling grow further.

According to the Southeast Region Installation Management Command (INCOM-SE), Army bases located in the southeast recycled 32 percent of their material solid waste stream and 82 percent of their construction and demolition debris in 2007. This resulted in \$12.8 million in revenue and \$66.8 million in disposal fees that year. Wood was recycled the most, with 77,764 tons diverted from landfills.⁶

Georgia estimates that each year the State spends \$100 million to throw away \$300 million worth of recyclables.⁷ That is part of the reason why, in 2005, the Georgia Department of Community Affairs released a Georgia Statewide Waste Characterization Study. The study ran from the fall of 2003 through the fall of 2004 and found that approximately 36 percent of municipal solid waste disposed of in Georgia is composed of commonly recyclable materials that could have been utilized in manufacturing new products. This includes more than:

- 1.8 million tons of recyclable paper products
- 160,000 tons of recyclable plastic bottles
- 220,000 tons of recyclable glass
- 360,000 tons of recyclable metals.

The study showed that these valuable materials are going to landfills in Georgia, yet the recycling market infrastructure in Georgia makes it one of the most prominent recycling states in the nation:

- One-third of all the polyethylene terephthalate (PET)

There are enough plastic bottles going into the landfills of the Carolinas to run our plastic recycling plant 24 hours per day, 7 days per week. But due to low recycling rates, we must ship plastic from all over the US including the West Coast, the Upper Midwest, and New England, as well as Canada, Mexico, and Puerto Rico. Although we are located in the Southeastern US, less than 50% of our supply comes from this region.

Dwight Ensley, 2006
President, Ensley Corporation
Reidsville, North Carolina

Kentucky: Rural Recycling Saves Big

Washington County, Kentucky first implemented recycling in 2002. Fast forward a few years later, add in 15 more employees to the recycling program, expand the program to five other neighboring counties, and use inmate labor as part of recycling efforts and what do you get? Not only has the county received one of the first Kentucky recycling grants ever, but they have also experienced tremendous economic success through recycling in their community. In 2004, the rural county pulled in 353 thousand pounds of recyclables and a profit of \$2,464. In 2006 with Marion County as its first partner, Washington brought in over 1.3 million pounds of materials and generated a profit of \$10,919. Halfway into 2008, more than 1 million pounds have already been collected with an expectation to more than double profits from 2006.

plastic, including beverage containers, recovered in North America is used by Georgia's carpet industry.⁸

- Mohawk Industries in Summerville, Georgia is one of the largest end users of PET in the nation.⁹
- Georgia is the second largest pulp and paper producing state in the nation, with 15 paper mills in the state using recycled fiber in their production and nine of them relying completely on recycled content for their operations.¹⁰
- Atlanta is home to the largest aluminum recycler in the world, Novelis, which recently relocated its North American headquarters to Atlanta. Aluminum cans are processed at their Greensboro, Georgia facility.¹¹

During the summer of 2006, the Georgia Recycling Coalition and Department of Community Affairs conducted a study to determine the substantial economic impact of recycling in Georgia. Preliminary findings show that:

- **General Recycling** – Georgia is home to more than 900 recycling-related companies handling a vast range of recyclable materials from compost to electronics to tires.
- **Plastic Recycling** - The recycling plastic industry in Georgia accounts for \$1.5 billion in annual sales and employs 36,000 Georgians with an annual payroll of almost \$875 million.
- **Paper Recycling** - The paper industry in Georgia, which utilizes a significant amount of recycled paper, represents \$10 billion of annual shipments of pulp, paper, and paperboard and employs 25,000 Georgians with an annual payroll of more than \$1 billion.

The information obtained from the *Georgia Waste Characterization Study*, combined with the strength of the recycling markets in the state, has renewed Georgia's commitment to assist local governments in promoting recycling. In an attempt to increase recycling participation rates, the state has committed to helping community recycling programs convert to single-stream collection operations by funding a series of regional recycling collection hubs.

Legislative action effective for supporting recycling

Mississippi also understands the value of supporting recycling. That is why the Mississippi Legislature adopted recycling legislation in 2006 that, among other things, requires the Mississippi Department of Environmental Quality to:

It Pay\$ to Recycle in Jackson County

As a rural community, Jackson County, FL collects recycling with drop-off centers, not curbside collection. To increase participation, the County implemented an incentive-based project and succeeded in achieving a 64% increase in material recovery (392 tons) in one year.

To achieve this goal, the County utilized a three-pronged approach:

1. Partner with community groups, local sports teams, schools, state parks, and churches interested in sponsoring mobile recycling collection trailers or stationary recycling drop-off locations. Partners were entitled to a revenue share of the materials recycled.
2. Five new permanent drop-off locations were established and four additional sites are being considered.
3. Develop and implement a comprehensive education and marketing campaign titled "It Pay\$ to Recycle in Jackson County."

The County operates its own materials processing facility and revenue received from the increased collection resulted in a project payback period of less than one year. This project, funded in part by a Florida DEP Innovative Grant, proved that with the right incentives and public education, recycling participation rates can be cost-effectively increased in rural counties.

- Give priority to recycling projects in awarding solid waste assistance grants.
- Develop a publicly available report on the amount of products in the state that are not recycled, and a report to the Legislature on the status of recycling in the state.
- Work with the Mississippi Development Authority to recruit and promote recycling industries in the state, including active promotion of potential markets of recyclable materials.
- Reconvene the state's Recycling Task Force to conduct an assessment of the recycling industry and recyclable materials markets in the state. This task force partnered with the Institutions of Higher Learning to survey recycling business and extrapolate an estimated economic impact from recycling. The estimated total labor income and state general fund revenues for those participating in the survey exceeded \$140 million. The Recycling Task Force notes that this figure is estimated to be very low compared to the actual economic benefits to Mississippi.¹²

Mississippi isn't the only state to adopt legislation to support recycling. Thanks to the **North Carolina House Bill 1518**, 8,000 Alcohol Beverage Control permit holders must ensure that their recyclable beverage containers are separated, stored, and recycled starting in 2008. ***An increase of approximately 50,000 tons of recycled glass is expected per year.***¹³

It all starts with the community collection program

A greater commitment to increasing recycling totals would translate to a huge economic return at both the community and state level. **The Aluminum Association reports that \$1.2 billion worth of aluminum cans went into landfills last year.**¹⁴ At the same time, large aluminum manufacturing plants in the Southeast had difficulty sourcing adequate supplies and incurred higher energy costs to run their operation because they had to turn to using virgin materials. In early 2008, aluminum recyclers enjoyed strong market prices. North Carolina's end users paid approximately \$.83 per pound¹⁵ of loose aluminum in January 2008, while Kentucky's end users paid approximately \$1.03 per pound¹⁶ of aluminum. In general, mixed metal markets experienced record prices in the spring of 2008.¹⁷ In 2008, Alcoa, an international leader in aluminum recycling and manufacturing, announced that it had established a goal to raise the industry's used beverage can recycling rate in North America from its current 52 percent rate to 75 percent by 2015.

Conclusions

By collecting more recyclable commodities from homes and businesses, the Southeast can help set the stage for the future expansion of current manufacturing operations that demand recycled material. That expansion will result in more jobs, increased tax revenue, and an overall brighter economic picture for the region. Recycling is a sustainable investment, one that reaps benefits for both your local community and the Southeast region as a whole.

More EPA Region 4 Resources

EPA has developed the Region 4 ***Municipal Government Toolkit*** (MGTK) to help state and local leaders initiate and improve community recycling programs. Several other fact sheets and resources are available online. Economic development is just one positive aspect of adopting efficient recycling programs. Recycling also plays a role in addressing climate change through reducing energy and greenhouse gas emissions. In addition to the environmental benefits of recycling, communities can improve their communities by implementing recycling programs. To learn more about how your community can reap the benefits of recycling, check out the MGTK online at:

<http://www.epa.gov/region4/recycle>

Follow the link to the Toolkit



Check out other EPA fact sheets from the Toolkit

[Source Reduction and Recycling: A Role in Preventing Global Climate Change](#)

[Recycling: A Component of Strong Community Development](#)

¹ S.C. Department of Commerce, *Economic Impact of Recycling Study in South Carolina*, 2006

² EPA U.S. Recycling Economic Information Study, 2001, <http://www.epa.gov/jtr/econ/rei-rw/rei-rw.htm>

³ Skumatz, Lisa A., PhD. And David J. Freeman, "Pay as you Throw (PAYT) in the US: 2006 Update and Analysis", prepared for US EPA and SERA, by Skumatz Economic Research Associates, Superior, CO, December 2006. <http://www.epa.gov/payt>

⁴ Athens-Clarke County Solid Waste Department, <http://www.acc-recycle.org/ccsb.htm>

⁵ <http://www.waste.ky.gov/branches/rla/The+Marketplace.htm>

⁶ Southeast Region Installation Management Command, *Recycling, Sustainability, and Green Building*, April 2008

⁷ Georgia Department of Community Affairs, *2005 Georgia Statewide Waste Characterization Study*

⁸ Georgia Department of Community Affairs Office of Environmental Management

⁹ Mohawk, Inc.

¹⁰ Georgia Recycling Coalition

¹¹ Novelis, Inc., <http://www.novelis.com/Internet/en-US>

¹² Mississippi Task Force on Recycling, http://www.deq.state.ms.us/MDEQ.nsf/page/SW_MississippiTaskForceonRecycling?OpenDocument

¹³ North Carolina Recycling Business Assistance Center, *Recycling Works*, Winter 2008

¹⁴ Aluminum Association, www.aluminum.org

¹⁵ North Carolina Recycling Business Assistance Center, Market, *North Carolina Price Trends*, http://www.p2pays.org/rbac/commodity_markets.html

¹⁶ Kentucky Marketplace Spring 2008 Newsletter

¹⁷ Newell Recycling Representative