Status of Recycling and Recycling Markets in North Carolina

Environmental Review Commission 6/11/2007

What is the goal?

Solid Waste Management

Versus

Materials Management

Which of these things are "waste?"

























Which of these materials are "waste?"

























Recycling Essential to NC Manufacturers –

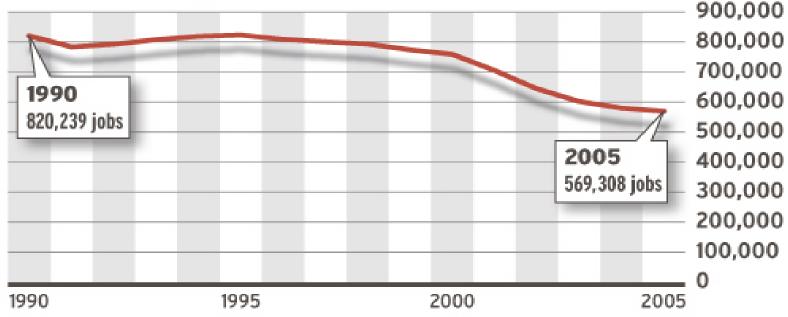


Jobs

MANUFACTURING DECLINE

North Carolina's manufacturing sector has declined as businesses look overseas for cheaper labor. Although many jobs have gone to countries such as Mexico and Vietnam, China has come to symbolize the state's job losses.

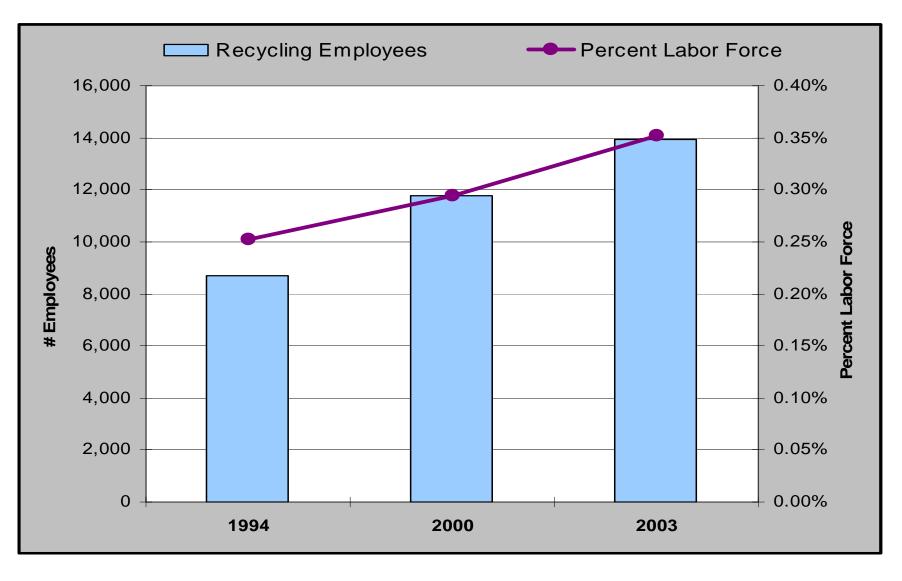
N.C. manufacturing jobs, 1990 to 2005



Source: N.C. Employment Security Commission

The News & Observer

Growth in Recycling Jobs in NC



Examples of Recyclers in NC

- Nucor largest recycler in the U.S.
- Envision Plastics second largest HDPE recycler in the U.S.
- Union Gypsum recycler of wallboard into soil products
- Brooks Contractors turns food wastes and other organics into compost
- Synergy recycler of wide range of electronics
- Curbside Management fast growing small company providing curbside services in western NC
- Owens-Illinois uses recycled glass to make new bottles

What's going to the landfill in NC?

- 87,000 tons of plastic bottles
- 50,000 tons of electronics
- 700,000 tons of wood and pallets
- 1.26 million tons of recyclable paper
- 200,000 tons of glass bottles
- 95,000 tons of aluminum and steel cans
- 300,000 tons of wallboard
- 1.2 million tons of food waste
- Etc.

Market value of disposed materials

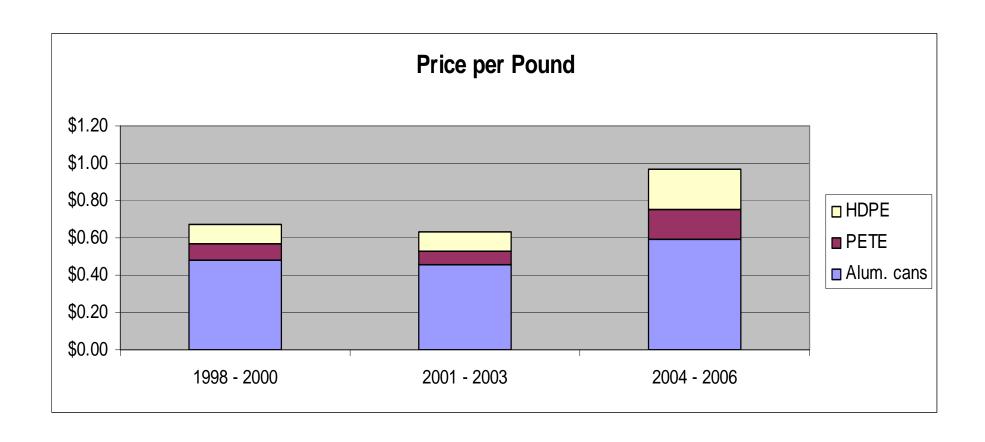
- Aluminum cans over 25,000 tons disposed at a market value of \$30 million/year.
- Plastic bottles 87,000 tons disposed at a market value of **\$40 million/year**.
- Paper over 1.2 million tons disposed at a market value of \$50 million/year.

Glass recycling in NC



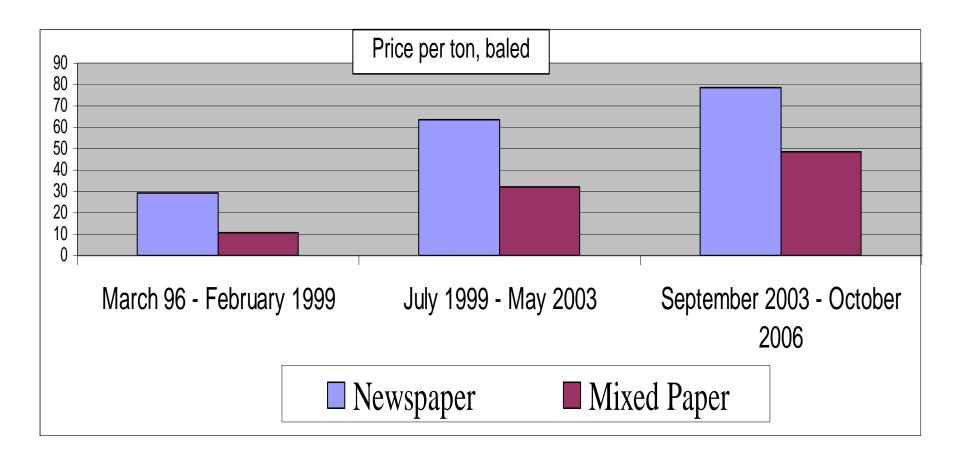
- Three glass plants in NC.
- Manufacturer containers used to bottle Anheuser-Busch and Miller products.
- Plants could use twice as much "cullet" as currently receiving.
- ABC Commission recycling requirements will increase cullet supply.
- Increase curbside and drop-off recovery will also increase supply.

Historical Prices on Container Materials



Recycling Market Prices since March 1996

Prices per ton received by major processors in NC from mills



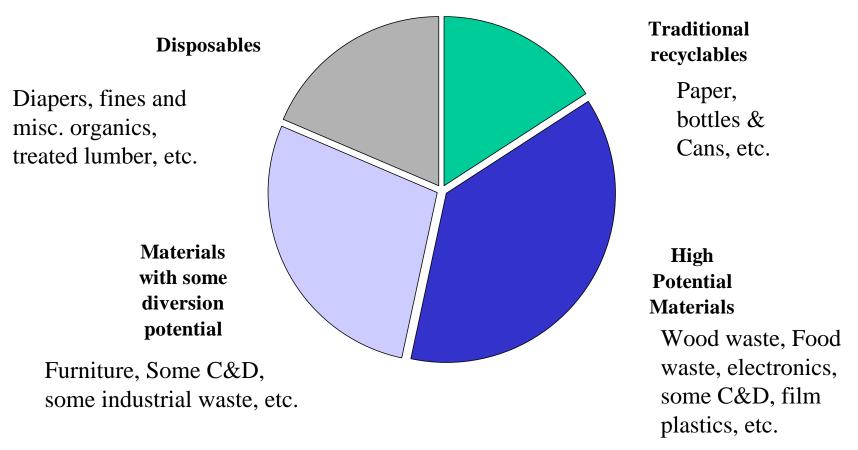
Local recycling programs

- Recycling rates growing slowly, huge potential.
- Communities that modernize programs see results:
 - Kernersville tonnage up 45%
 - Brevard recycling program cheaper than garbage collection and disposal
 - Wake Forest participation rates up to 97%
 - Raleigh tonnage up 30% in two years.
 - Chowan/Perquimans/Gates counties enjoying a \$79/ton benefit for every additional ton recycled
- Local governments need motivation/incentives to improve programs.

Private recycling efforts

- Tremendous growth in private recycling sector.
- Commercial, industrial and C&D waste streams still contain large amounts of recyclables, for example.:
 - Over 150,000 tons per year of office paper
 - 300,000 tons per year of metal in the C&D waste stream
 - 60,000 to 100,000 tons of glass in bars and restaurants
 - 150,000 tons of compostable food waste in supermarkets per year.
- Generators, haulers, and recyclers need motivation/incentives to increase recycling.

North Carolina Waste Diversion Potential



With the right programs, incentives, and funding in place, over half of North Carolina's waste stream is divertable from disposal.

Best kind of policy approach for waste reduction

Mandates

+

Incentives/Funding

+

Enforcement