

The Recycling & Waste Management Business

In environmental terms, waste is America's dirty little secret. America represents 5% of the world's population but 20% of the world's waste. In business terms, this represents a growth industry. There are dominant companies in the waste management industry but there are lots of opportunities for small companies to grow a business. Let's first understand waste, by the numbers:

About The Industry

Source: www.cleanair.org

Waste Production

1. In the U.S., 4.39 pounds of trash per day and up to 56 tons of trash per year are created by the average person.
2. Only about one-tenth of all solid garbage in the United States gets recycled.
3. Each day the United States throws away enough trash to fill 63,000 garbage trucks.
- 4. Almost 1/3 of the waste generated the U.S. is packaging.**
5. Diapers: An average child will use between 8,000 -10,000 disposable diapers (\$2,000 worth) before being potty trained. Each year, parents and babysitters dispose of about 18 billion of these items. In the United States alone these single-use items consume nearly 100,000 tons of plastic and 800,000 tons of tree pulp. We will pay an average of \$350 million annually to deal with their disposal and, to top it off, these diapers will still be in the landfill 300 years from now. Americans throw away 570 diapers per second. That's 49 million diapers per day.
- 6. Americans throw away 2.5 million plastic bottles every hour.**
7. Throwing away one aluminum can wastes as much energy as if that can were 1/2 full of gasoline.
8. In the U.S., an additional 5 million tons of waste is generated during the holidays. Four million tons of this is wrapping paper and shopping bags.
9. Americans receive almost 4 million tons of junk mail every year. Most of it winds up in landfills.
10. The average American uses 650 pounds of paper a year.
11. The average American office worker goes through around 500 disposable cups every year.
12. Americans make nearly 400 billion photocopies a year - about 750,000 copies every minute of every day.
13. U.S. fax machines sent 30 billion faxes in 1990.
- 14. U.S. businesses now use about 21 million tons of paper every year. That's about 175 pounds of paper for each American.**
15. In one day, Americans get rid of 20,000 cars and 4,000 trucks and buses.
16. As of 1992, 14 billion pounds of trash were dumped into ocean annually around the world.
- 17. Forty-three thousand tons of food is thrown out in the United States each day.**
18. Americans throw out about 270 million tires every year.
19. Sixty-five billion aluminum soda cans are used each year.

Landfills

- In 1979, there were an estimated 18,500 landfills in the nation. In 1990 there were only about 6,300, and by 1995 it was estimated that only about 3,000 would still be open. In just 16 years the number of landfills dropped by 84%. During that same time there was an 80% increase in the amount of trash generated.
- Seventy percent of U.S. municipal solid waste gets buried in landfills.
- U.S. landfills are closing at the rate of 1 per day.

Recycling

- 1,500 aluminum cans are recycled every second in the U.S.
- Recycling an aluminum soda can saves 96% of the energy used to make a can from ore, and produces 95% less air pollution and 97% less water pollution.
- In 1986, 48.7% of all aluminum cans were being recycled. In 1990, that percentage increased to 63.6% and, in 1996, 63.5% were being recycled.
- The amount of paper recycled annually by the average American in 1995 was 301.8 lbs., increasing in 1996 to 329 lbs.
- Recycling one ton of cardboard saves over 9 cubic yards of landfill space.
- One ton of paper from recycled pulp saves 17 trees, 3 cubic yards of landfill space, 7,000 gallons of water, 4,200 kilowatt hours (enough to heat your home for half year), 390 gallons of oil, and prevents 60 pounds of air pollutants.
- Producing recycled white paper creates 74% less air pollutants, 35% less water pollutants, and 75% less process energy than producing paper from virgin fibers.
- Sixty percent of the world's lead supply comes from recycled batteries.
- It takes 90% less energy to recycle an aluminum can than to make a new one.

Primary Recycling & Waste Management Strategies

From Waste & Recycling to Business Start-Up

Today, there is considerable creativity and innovation in assessing the array of waste goods and translating them into a business revenue stream. Large companies like Waste Management are translating raw landfill waste into energy and electricity. Restaurants are selling french-fry grease for automobile fuel. There are fashion companies recycling plastic water bottles into apparel. Increased awareness about America's consumption of 100 billion plastic shopping bags has launched a new industry for reusable shopping bags. Small companies have options to choose from in waste management, recycling, and product development. Most of these businesses require the same equipment: **a compactor, warehouse space, transportation, and insurance.**

- **Recycling Center** – Determined by city's Health Department regulations, business can recycle paper, plastics, glass and metal.
- **Paper Recycling** – Primary tasks include negotiating with schools and businesses to collect their paper and negotiating with "end users for recycled paper".
- **Trash/waste management** – determine the proper permits required, guidelines for local landfills, and containers/dumpsters.
- **Construction waste** – 3 primary waste components, cardboard, wood and drywall. They are all fully recyclable.
- **Upcycling** – using recycled materials to manufacture new products.
- **Electronics recycling** – EPA has comprehensive guidelines for recycling electronics. More information from the Consumer Electronics Association and www.digitaltips.org

Green Business Start-up: Major Steps

Permits, Codes & Regulations – These will vary widely for each city and county. List applicable permits, codes and regulations:

Insurance Requirements

Equipment, storage, and transportation.

Short-Cuts – There are some challenges for small business start-ups in recycling and the best resource is **EPA Business Assistance**, <http://www.epa.gov/wastes/conserve/rrr/rmd/bizasst/>

Business Assistance

From small startup efforts to large scale operations, recycling companies are on the forefront of technical innovation and materials recovery. Recycling businesses face a number of challenges, however, including changing market dynamics and difficulties in business planning.

To help address these challenges, the following pages provide links to a variety of resources to assist in the startup and expansion of recycling businesses.

- [Business Directories and Market Studies](#)
Directories listing end user, recycling collectors, brokers, processors, and product manufacturers.
- [Business Planning](#)
Several **business plans** for a variety of recycling businesses including glass, wood, and building waste. Guides to recycling market potential and risks, marketing strategies, and capital and operating requirements.
- [Tax Incentives](#)
A summary of available state credits and incentives for recycling.
- [Resources](#)
Publications, Web sites, industry associations, and periodicals.

Resources

1. **Georgia Air Conservation Resources** for Residents, **Business Owners**, ... Poor air quality hurts all of us but with **small** steps you can help protect the air quality in **Georgia**. ... Provides **Georgia** school systems and fleet owners with **clean** diesel ... The **Georgia Green** and Healthy Schools Program assists and supports ... www.conservegeorgia.org/air-conservation-in-georgia -
2. **Georgia Recycling Coalition**. The **Georgia Recycling Coalition (GRC)** is a 501(c)(3) non-profit organization. Our mission is to compliment and coordinate activities relative to recycling, to foster communications among professionals, organizations, government agencies and individuals, and to promote and enhance reduction and recycling programs throughout the state. www.georgiarecycles.org
3. **Keep Georgia Beautiful** – Through our network of local affiliates, Keep America Beautiful supports and sustains recycling and waste reduction initiatives in many forms. From comprehensive community-wide solutions to awareness-building events, KAB and our affiliates are devoted to reducing waste in our communities and our society. www.keepgeorgiabeautiful.org
4. **Recycle4Georgia** is a technical assistance and reporting portal for recycling industry professionals, both in the public sector and private industry. The site provides statewide and regional recycling information and links to help recycling professionals implement and manage recycling programs. <http://www.recycle4georgia.org/>
5. **U.S. Environmental Protection Agency (EPA)**
6. **U.S. EPA, Office of Solid Waste and Emergency Response**
7. **Georgia Environmental Protection Division**
8. **Georgia Pollution Prevention Assistance Division**
9. **Georgia Department of Community Affairs**