

“In 1987, New Jersey became the first state in the country to require residents to recycle, a milestone in the environmental movement that set off a massive surge in recycling around the country. For years in the Garden State, never perceived as the most environmentally pristine of places, recycling rates grew and grew.” Although recycling rates have continued to grow, we need to ask the question; “Is recycling really good for the US, and the environment?”

The matter of waste in America has been a problem at debate for a while. Many will argue on the best way to manage this enormous problem. The largest amounts of waste can be found in landfills, incinerators, recycling centers, and even in the ocean. People will argue that there are positives to all these so-called “solutions,” but are any of these really good for the US or the environment? I have decided to specifically focus on the positives and negatives of recycling to find out if it is truly good for the US and the environment.

Recycling has many positive benefits. When people recycle, they prevent the material being recycled from ending up in landfills. It may or may not be obvious to the average person how horrible landfills are, but there are many reasons why they are. Landfills leak gases that pollute the air with toxins that are known to cause cancer, asthma and other serious illnesses. Landfills also contribute to climate change. They are one of the largest producers of man-made methane emissions. Finally, landfills often leak leachate, a toxic substance, that often contaminates underground water. The worst part about landfills is the fact

that a very large percentage of the materials found in landfills is paper and food waste, which can be recycled or composted.

Similarly, recycling keeps materials out of incinerators. Incinerators are arguably just as bad or worse than landfills. Incinerators are known to pollute our environments, food supply, and even our bodies. They produce toxins that are released into the air, ground, and water. They will eventually end up in the food supply and climb through the food chain to end up in our bodies. These incinerators also produce toxic ash which is impossible to reuse and often ends up in landfills. Climate change is also a large issue due to the various greenhouse gases emitted during the incineration process. Incinerators produce more greenhouse gases than produced by all the cars in the world. Finally, incinerators are extremely expensive. They take money from the local economies to import expensive technology, and provide far fewer jobs than that of zero waste programs, leading into our next topic.

Recycling helps create many jobs, while helping out the environment. Some jobs that are created by recycling are made through collecting, processing, and preparing materials. In this process discarded materials are picked up and then brought to processing facilities where they are sorted and prepared to sell to markets. Another way jobs are made is through the production of new goods from recycled materials. In this process the recycled materials are distributed to facilities that use these recycled materials, such as paper mills, metal smelters, and plastic manufacturers. Finally, new jobs are created through reuse and

remanufacturing. This includes things that are fixed and reused such as thrift store products, auto salvage yards, and computer refurbishers.

Recycling helps to conserve energy in a few ways. One way recycling helps to conserve energy is through the production of recycled materials. The steps in supplying recycled materials to industry (including collection, processing and transportation) typically use less energy than the steps in supplying virgin materials to industry (including extraction, refining, transporting and processing). Another example of how recycling saves energy is through the manufacturing of new products. It takes substantially less energy to produce products with recycled material rather than from raw materials. Finally, to show how much recycling a little can do; recycling just one aluminum can saves enough electricity to light a 100-watt bulb for 3 1/2 hours!

Finally, recycling saves money. Recycling is a big business, comparable to California's movie and video industry. It is a mainstream industry of statewide importance, comprised of 5,300 establishments. Recycling now accounts for 85,000 jobs, generates \$4 billion in salaries and wages, and produces \$10 billion worth of goods and services annually.

Recycling often causes contamination. One example given by Listverse explains, "Contamination is one of the biggest obstacles in the recycling industry right now. If there are impurities or toxins on the original material—say lead paint from an aluminum spray can—they'll usually make it through the recycling process and end up buried in the new product, which might turn out to be, say, a

soda can. The worst part is that sometimes we don't know when something's contaminated—until it's too late. For example, we're just realizing that hundreds of buildings in Taiwan made from recycled steel have been giving people gamma radiation poisoning—and not the good kind—for the past twelve years.” This is a very good example of how recycling can cause contamination and harm others.

Recycling also has many negative sides. Although recycling is thought to help reduce air pollution it often is a producer of air pollution. All machinery causes some sort of pollution, but many will argue that although recycling does cause some pollution it is much less than that of factories manufacturing new products. Recycling companies are working to have more precautions to make sure they are recycling safely and reducing the amount of pollution they produce.

Similar to air pollution, the recycling of paper creates its own type of pollution. All the materials that cannot be recycled into new paper, such as inks, paper fibers, cleaning chemicals, and dyes are filtered out into one giant pudding known as paper sludge. This paper sludge is just more trash that will be incinerated or thrown into landfills. Although some Indian scientists have thought of an ingenious way to use this paper sludge for good. They took the paper sludge back to their lab and created a mixture that made the sludge solid. They were able to use this new mixture to create bricks that could be used as building blocks at half the cost of normal bricks and much lighter.