

# FreshkillsPark / Reduce, Reuse, Recycle



Fresh Kills Landfill was active between 1948 and 2001. For much of that time, it was the largest landfill in the world, accepting 29,000 tons of waste daily at its peak. The landfill's transformation into Freshkills Park marks the closure and environmental reclamation of New York City's last remaining landfill. However, New York City's consumption and waste management practices still impact ecosystems, communities, and the global environment. Knowing more about these negative impacts can spur greater incentive to reduce, reuse, and recycle!

## How do Landfills Impact the Environment?

Landfills are currently the primary method of waste disposal. Although the world is not running out of space for landfills, they do have a notable impact on the environment and on surrounding communities.

### Greenhouse Gas Emissions

The anaerobic decomposition of organic matter in landfills, like food waste, releases a mix of gases, including the greenhouse gas methane. Over a 100-year period, methane is 20 times more impactful in terms of climate change than carbon dioxide. Landfills are the third largest emitter of methane in the United States. In 1995, a study conducted by the US Environmental Protection Agency (EPA) showed that Fresh Kills Landfill, alone, was responsible for almost 2% of the world's methane production.

### Decrease of Surrounding Property Values

The four garbage mounds at Freshkills Park reach up to 200 ft and take up 990 acres. When it was open, Fresh Kills Landfill was infamous for its potent smell, particularly at the neighboring Staten Island Mall. Because of the undesirable sights, smells, and truck traffic that accompany landfills, they can be responsible for a 7% decrease in property value in residential areas surrounding them.

### Toxic Contents

Landfills contain a mix of products and materials, some of which (such as batteries, electronics, and cleaning materials) contain toxic chemicals. Because of this, landfills have the potential for contaminating surrounding groundwater, surface water, and sediment, and can emit toxic fumes. The infrastructure at Freshkills is a good example of how these landfill by-products can be harnessed, purified, and reused.



## How does Consumption Impact the Environment?

Consumption creates waste, and thus also creates the need for landfills. Take a minute to read over the other impacts that consumption patterns have on our waste system, our environment, and our society.

### Costly Waste Streams

The average American creates over 4 pounds of waste a day. New Yorkers only recycle 17% of their current waste stream, or about half of what can be recycled in NYC. This means potentially useful materials are being buried in landfills, rather than recycled or reused. It is very expensive to bury these materials. Since Fresh Kills Landfill was closed in 2001, all of New York City's garbage is dumped in other states such as South Carolina, Pennsylvania, Virginia, and Ohio. This costs NYC over \$300 million a year in tax dollars to send its trash elsewhere.

### Resource and Energy Use

Creating new products often means the extraction of raw materials from the earth. The processes of resource mining, as well as product manufacturing and distribution, all require time, energy (electricity), and often much travel (which uses fuel and causes pollution). Recycling can reduce the energy used and pollution caused by many of these processes, making product creation cheaper, easier, and less taxing on the earth. As an example- making soda cans with recycled aluminum uses 95% less energy than using new bauxite ore that must be mined and refined in order to make cans.

### Growing Waste Streams

Food waste is a huge waste stream, as 40% of food produced in the US is never even consumed. Not only does food waste often leave edible food uneaten, but it also renders useless the time, energy, and resources used to grow crops and feed livestock. The anaerobic decomposition of food and other organic matter in landfills also contributes to the greenhouse gas methane. New York City has been piloting residential food scrap pick-ups for composting in targeted neighborhoods and schools. Food scraps can also be dropped off at local greenmarkets.

Electronics usage has grown exponentially in the last several decades. As of 2009, only 25% of electronics in the US ready for "end-of-life" management were recycled. Many electronics contain lead, mercury, and other toxic heavy metals, as well as materials that are difficult to mine from the earth. As of January 1st 2015, New York City has made it illegal to dump most electronics in the trash.

Non-biodegradable materials, including glass, plastics, and Styrofoam also comprise a sizable portion of the waste stream. Fortunately, many of these materials can be recycled, but some such as Styrofoam cannot be recycled and also never decompose. As of July 1, 2015, Styrofoam is banned in New York City, and the law will be strictly enforced for businesses by January 1, 2016.



# How to Limit our Environmental Impact through Reducing, Reusing, and Recycling!

Both personal habits as well as large-scale initiatives can help to limit our environmental impact. Read below for some tips for Reducing, Reusing, and Recycling, as well as for places to go for more information.

## City-Wide Initiatives



### Recycling

Recycling is the law in New York City. Paper, plastic, glass, and metal should all be recycled under New York City's program (paper is sorted into one bag, and plastic, glass, and metal into another). See [DSNY's recycling webpage](#) for a comprehensive list of what to recycle.



### Organics Collection:

Food scraps can be dropped off at local greenmarkets. In addition, some neighborhoods are participating in a residential food scrap program, where food scraps are placed in a bin for pick-up, like trash and recycling. Christmas trees and other wood debris are also collected for mulching by DSNY. Check [DSNY's Organics Collection](#) page for a more comprehensive list of how to deal with organic waste.



### Textile Recycling:

You can enroll your building in the reFashion NYC program for textiles pickups, or drop them off at a participating greenmarket.



### Electronics Recycling/ Disposal

As of January 1st, 2015, it is illegal in to throw electronics away. Rather than being disposed, or many electronics can be fixed and reused either in your own household, or in someone else's. In order to properly dispose of electronic waste you can: enroll your building in the convenient E-Cycle Pick-up Program, drop off at a recycling event put on by the Lower East Side Ecology Center or five days a week at the Gowanus E-waste Warehouse, or send the item back to be recycled (if a participating company).



## Personal Habits

Help make our city, state, and nation-wide waste-reduction efforts successful by being an active participant, promoting waste reduction to friends and neighbors, and supporting legislation that will make these efforts stronger.

### Reduce Food Waste

Buy only the food you need. Dispose of food scraps via residential DSNY pick-up or at a local greenmarket rather than putting them in the trash. You can also compost leftover food scraps in your own garden.



### Reduce Textile Waste

Mend clothes that need fixing. Donate clean, wearable clothes to second-hand stores, or bring other clothes to a local greenmarket.



### Shop Smart

Buy a few reusable bags and a reusable water bottle that can be taken with you everywhere, and last for years to come. (They can save you money, too!)



### Host or Attend a Swap

Rather than buying new, trade clothes and household items you don't want any more with friends and neighbors. GrowNYC also facilitates Stop N' Swap events which do the same.



## For More Information

### New York City Department of Sanitation:

[www.nyc.gov/html/nycwasteless/html/home/home.shtml](http://www.nyc.gov/html/nycwasteless/html/home/home.shtml)

The Department of Sanitation is a great resource for learning what to do with every form of waste. Check out the webpage above to learn more about recycling codes and laws in NYC, how to dispose of toxic products, where to compost, how to recycle electronics and textiles, and how to recycle as a business or apartment building.

### Grow NYC Office of Recycling and Outreach Education:

[www.grownyc.org/oroe](http://www.grownyc.org/oroe)

GrowNYC is a non-profit and an amazing resource for learning how to dispose of waste responsibly. At this webpage you can read more about general recycling, as well as recycling of electronics and textiles, food scraps drop-off locations, Stop 'N' Swap dates and locations, and where and how to dispose of toxic materials such as CFL light bulbs and batteries.

### Lower East Side Ecology Center:

[www.lesecologycenter.org](http://www.lesecologycenter.org)

The Lower East Side Ecology Center lists upcoming E-Waste drop-offs and runs the Gowanus E-Waste Warehouse and Reuse Store that sells refurbished electronics. It also offers environmental education workshops and stewardship of the local environment.