## **Massachusetts Limits Food Waste**

Alex Risley Schroeder

In October 2014, Massachusetts will require large institutions like colleges, prisons, and hospitals to stop throwing away leftover food. The state hopes that by 2020 when the ban is fully implemented, there will be 450,000 fewer tons of food waste going into the garbage. Massachusetts companies generating more than one ton of food waste per week will be required to separate food waste from other garbage. The graphic below illustrates the six ways that companies can reduce their food waste.

## A Hierarchy of Strategies

The best way to reduce waste is at the top of this upside down triangle: make less food. Making less food saves food, energy resources, and time. If, however, food is made but not served at a restaurant or banquet hall, or put on the store shelves and not bought, the next best way to reduce waste is to re-distribute this food to people who need it. Although food safety can make this strategy seem





challenging, there are organizations that make it possible to re-distribute food safely.

Food waste, which includes food scraps (like apple cores and carrot peelings) as well as the half-eaten piece of pie, can be fed to livestock. This strategy turns food waste into feed for hogs and other animals.

The fourth strategy, called "industrial uses" in the EPA's Food Recovery Hierarchy, moves food waste to energy generation facilities. These include anaerobic "digesters" that create electricity from combinations of food and agricultural waste like plant material and animal manure. This food waste comes from large-scale food processing companies (like hot dog manufacturers) and places that throw out a lot of food, like hospitals and big schools. The Massachusetts Department of Environmental Protection describes anaerobic digestion as "a process that puts organic wastes into an enclosed chamber where microbes break down the material, producing an energy-creating biogas. The bio-gas...can be put to a variety of uses. It can be used to create heat for industrial processes or fed into a generator to create electricity, or used in a combined heat and power system to produce both electricity and heat simultaneously. Bio-gas



can also be converted to compressed natural gas and used to fuel vehicles like buses or trucks."

Composting, the next strategy, turns food waste into rich soil that farmers and gardeners can use to fertilize their crops. The goal of these food waste recovery strategies is to significantly reduce the need for the final strategy of landfilling or incineration.

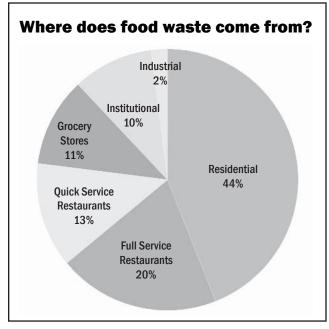
## Food Waste is a Big Deal

Reducing food waste is important, not only in Massachusetts, but across the United States. According to research by the National Resources Defense Council (NRDC), "an estimated 40% of all food gets thrown away in the United States each year...[and] leftover food is the single largest component of U.S. landfill waste, which makes it one of the country's largest sources of waste methane." And methane gas is a significant contributor to global warming.

In addition, NRDC research indicates that "food production...

accounts for 10% of the U.S. energy budget, 50% of its land use, and 80% of its freshwater use." In other words, when we waste food, we are also wasting all the environmental resources (water, energy, and land) that were used to get it to our plates.

Alex Risley Schroeder has 25 years of experience in adult basic education and workforce development. Through her work with the MA Workforce Alliance, she helps coordinate the development of the MA Food System Plan. Her business, Finding Earth Works, consults with ABE programs about the sustainable economy. She has four laying hens in her backyard.



Work together with others to think of ways you can reduce food waste. Look for ideas on the Internet.



Make several true statements about the data you see in this inforgraphic. Based on the data in the chart, write two sentences about the connection between food waste and other environmental issues. Source: <www.treehugger.com>

