

Renewable Energy

Energy-from-waste projects are a source of renewable energy



As Detroit continues its resurgence, demand for energy by its residents and businesses will grow, as will the need to reduce the city's carbon footprint. Meeting these competing needs in a safe, environmentally friendly manner is our mission at Detroit Renewable Energy. By converting Detroit's solid waste into electricity and steam we're delivering a solution to two of Detroit's most pressing needs: a renewable, non-depletable source of clean energy and a responsible method of waste management.



Energy-from-waste is a renewable energy source because its fuel – municipal solid waste (pictured above) – is sustainable and non-depletable.

What is renewable energy?

Renewable energy is defined by the U.S. Energy Information Administration as **an energy source that is regenerative or virtually inexhaustible**². In just a single week, the City of Detroit collects about 1,500 fully loaded garbage trucks worth of trash. Our facility's refuse-derived fuel technology not only squeezes energy from up to 3,300 tons of this waste every day, it reduces the city's dependence on landfills and provides a resource for clean, renewable energy. After waste is combusted, the **waste volume has been reduced by almost 90%** to an inert ash residue, safely and dramatically reducing Detroit's dependence on traditional landfill capacity.

Municipal solid waste has long been established as a renewable fuel and energy-from-waste has full renewable status under a number of U.S. statutes, regulations, and federal Executive Orders³.

The U.S. EPA and Department of Energy both recognize energy-from-waste as a renewable energy source along with the Energy Policy Act of 2005, the Federal Power Act, the Public Utility Regulatory Policies Act, Federal Energy regulatory Commission regulations, and the Biomass Research and Development Act of 2000, along with 24 states in the U.S., including Michigan and the District of Columbia.

WHAT IS BIOMASS?

- About **85% of household trash** is material that will burn, and most of that material is made from biomass¹.
- Municipal solid waste contains biomass materials like paper, cardboard, food scraps, grass clippings, leaves, wood, and leather products, and other non-biomass combustible material.
- Biomass is a renewable energy source because we can always grow more trees and crops, and waste will always exist¹.

¹ US Energy Information Administration http://www.eia.doe.gov/energyexplained/index.cfm?page=biomass_home

² US Environmental Protection Agency <http://www.epa.gov/osw/hazard/wastemin/minimize/energyrec/renew.htm>

³ Michaels, Ted, "The 2010 ERC Directory of Waste-to-Energy Plants" Energy Recovery Council. December 2010. http://www.wte.org/userfiles/file/ERC_2010_Directory.pdf

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