

Waste-to-Energy and the Production Tax Credit:

A tax credit for new, waste-to-energy facilities or new generating units at existing facilities continues the federal government's policy to encourage clean, renewable electricity, and promotes energy diversity while helping cities meet the challenge of trash disposal. Here is why the tax credit deserves your support.

- Waste-to-energy facilities produce electricity “with less environmental impact than almost any other source of electricity,” according to the U.S. Environmental Protection Agency. The “outstanding performance” of waste-to-energy enables America “to continue to rely on municipal solid waste as a clean, reliable, renewable source of energy.”
- Waste-to-energy facilities generate electricity and steam using municipal solid waste (garbage) as fuel. The garbage burns in specially designed boilers to ensure complete combustion, and facilities employ the most modern pollution control equipment available to scrub emissions. The result is clean, renewable energy.
- Nationwide, 89 waste-to-energy plants supply about 2700 megawatts of electricity to the grid. Plants operate 365-days-a-year, 24-hours a day. Facilities average greater than 90% availability of installed capacity. Waste-to-energy plants generally operate in or near an urban area, easing transmission to the customer.
- Facility revenues come from fees paid to dispose of the garbage and the price paid for electricity generated by waste-to-energy plants. New facilities or new generating units built at existing facilities require significant capital investment. The capital, and the operation and maintenance (O&M) costs at a facility equal about \$100 for each ton of garbage processed at a facility. On an energy revenue basis, about 20 cents per kWh would be required for capital and O&M. For example, a facility that processes 2000 tons of trash each day into 60 MW of electricity would require about \$200,000 in revenues daily, coming from either disposal fees or electricity revenues, or both.
- Waste-to-energy power must be sold as “base load” electricity and cannot be operated to supply “peak load” power simply because there is a constant need for trash disposal by combustion that keeps power generation steady and reliable.
- Similar to other alternative energy sources, waste-to-energy plants are qualified facilities (QFs) eligible under PURPA for mandatory power purchase at avoided cost. Most existing facilities have been financed based, in part, on long-term PURPA contracts that run commensurate with the facility debt.
- The biomass content of waste-to-energy's fuel, municipal solid waste, is about 75% on a Btu-output basis.
- The market price and disposal fee will, on average, not be sufficient to cover the cost of a new waste-to-energy unit. A tax credit is needed to encourage this form of clean, renewable electricity.