



# Waste-to-Energy Expands Biomass Industry Growth

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Traditionally, biomass power plants have produced energy from the combustion of organic materials including wood remnants, forest slash and mill waste. These plants can be a cost effective means of generating electricity, but the long-term viability of any biomass plant hinges on continued access to fuel that can be found within a reasonable drive time from the plant at a reasonable price. Financial institutions typically want to see a feedstock agreement that matches the term of the loan (usually 20 years or longer). Securing these long-term feedstock agreements represents a significant challenge, and project developers also often find that the infrastructure needed to transport fuel to the plant is inadequate. These factors diminish the financial feasibility of a biomass plant, and make it difficult to imagine that these plants will continue to be built unless they are serving a purpose beyond generating electricity.

As an alternative, what if the waste Americans produce every day were more widely used as the fuel for biomass projects? This waste-to-energy approach has the potential to resolve the issues that arise due to limited access to feedstock, the difficulty in transporting the feedstock in a cost-effective manner and securing project funding. Utilizing fuel sources that also help control local municipal waste turns biomass projects into a financially and socially responsible solution to regional energy needs.

The use of common household trash or municipal solid waste (MSW), as a fuel source for energy production is not a new concept; it is simply not being used to its highest potential. In 2009, the EPA calculated America's MSW at more than 240 million tons. This includes packaging waste, grass clippings, clothing, furniture, bottles, food remnants and appliances; the waste that is overflowing the limited space in public landfills. Currently, only about 12 percent of that garbage is being utilized for energy production.

The fuel source – garbage – is already controlled by municipalities throughout the nation. Cost-effective means of transporting this waste are already in place, and this feedstock could easily be routed to a biomass plant instead of the local landfill. This provides the foundation for a financially sound project. This type of facility could be owned and operated by the municipality, or could be designed, built, owned and operated by a third party.

Opponents of waste-to-energy facilities claim that they are not truly “green,” but the technology used for biomass plants fueled by MSW has been changing rapidly. The EPA notes that significant advancements have been made in emissions controls for waste-to-energy facilities. The equipment and systems utilized in the process have dramatically improved, making the facilities viable options that meet rigorous environmental standards.

This waste-to-energy approach for biomass power production is a sustainable energy option. It takes a product that is already (and overwhelmingly) being produced and turns it into an essential resource. As the American population grows, this method will provide a practical solution for a social and environmental problem of increasing garbage production while meeting a growing need for energy production. Taking advantage of MSW as a fuel source is a significant opportunity for the future development of biomass facilities that are financially sound, environmentally conscious and socially responsible.