

GARDEN STATE IS WASTING ITS WASTE, SHOULD BETTER UTILIZE BIOMASS, REPORT SAYS
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Tapping into 4 million tons of organic trash NJ produces each year could help state reduce reliance on fossil fuels, curb greenhouse-gas emissions.

More than 4 million tons of New Jersey's biomass -- fuel derived from organic materials like plants and waste -- could be used to produce electricity or propel transportation each year.

The bulk of the biomass (72 percent) is produced directly by the state's population, typically in the form of municipal garbage, according to an assessment by Rutgers University's New Jersey Agricultural Experiment Station.

The resource, largely underutilized, could help the state achieve important policy goals, including reducing dependence on fossil fuels, improving air quality by eliminating harmful pollution from fossil fuels, and curbing greenhouse-gas emissions that contribute to global climate change.

The assessment is an update of a 2007 study looking at the potential of biomass as a renewable-energy resource and will be discussed today by a working group set up by the New Jersey Board of Public Utilities. The state is planning on spending about \$3 million to promote biomass this year.

The state has long recognized the potential of biomass both as a provider of power and as a source of fuel in the transportation sector, but has yet to significantly tap the resource. The state has set a goal of having 22.5 percent of its electricity come from renewable-energy sources by the end of 2020.

If the appropriate technologies and infrastructure were in place, New Jersey's biomass could deliver up to 654 megawatts of power (approximately 6.4 percent of the electricity consumed in the state) or 230 million gallons of gasoline-equivalent (4.3 percent of the transportation fuel consumed), according to the latest assessment.

Besides municipal solid waste, the potential biomass resources include a range of materials and waste products: landfill gas, agricultural and forest residues, wastewater sludge, manure, and food waste.

There are numerous barriers to using biomass, including the lack of collection and transport infrastructure for many of the materials, particularly food waste and construction and wood debris. Changes in behavior on the part of businesses and residents may be difficult to achieve, the assessment said.

In addition, much of the state's urban biomass is currently recycled or used in alternative markets. These markets for newspaper and other paper products are well established and may offer a higher value than present energy costs.

To promote biomass, the assessment recommends a number of steps with two caveats -- don't overpromise and set realistic targets. Otherwise, it urges the state to look into ways to obtain energy crops and waste biomass, encourage investment, and improve immature biomass technology.

New Jersey should strive to be a leader in supporting new technologies, according to the assessment. To do so, it recommended establishing a state agency with primary responsibility for developing the bioenergy industry and creating an innovation fund to support ongoing research and development.