Cities Give Waste-to-Energy Plants a Second Look
Higher U.S. Landfill Costs and Uncertain Oil Prices Drive an Expansion of Existing Trash Incinerators, Plans for New Ones
By ILAN BRAT

Turning refuse into energy, first seen as a kind of environmental alchemy, fell out of favor in the 1990s as protests mounted against trash-burning plants.

But spurred by growing landfill costs and demand for energy, local governments have been spending hundreds of millions of dollars expanding existing waste-to-energy plants, and proposing new ones.

Of the 87 U.S. incinerators that currently convert trash into electricity, one in Florida completed a $120 million project to expand by 50% last year. Another expansion in the Sunshine State and two others in Pennsylvania and Minnesota are in the works.

Trash to Burn

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The loading bay at the Covanta waste-to-energy plant in Westbury, New York, was full on a recent day.

Most incinerators feed garbage into a chamber, where natural gas is used to set it afire. The heat creates steam that turns a turbine to produce electricity. The burned trash shrinks to a tenth in volume, leaving ash.
A big incinerating company restarted a burner last month in Oklahoma -- it had been shut for a year -- to take advantage of higher electricity prices. New plants are being considered in Maryland, California and Florida. In all, proposals for at least a dozen expansions or new plants are in the works across the U.S., from Hawaii to New York.

"Where we were even four years ago and where we are today is a big sea change," said Ted Michaels, president of the waste-to-energy industry group Integrated Waste Services Association. "Municipalities are starting to look at waste-to-energy as a solution again."

So far, neither the financial crisis nor sharply declining prices of energy commodities has scuttled or delayed incinerator proposals, according to industry consultants. Typically, trash-burning projects include long-term supplier and energy contracts, making them more resistant to downturns and energy-price swings than other alternative-energy projects, said Dave Traeger, a solid-waste consultant at HDR Inc., Omaha, Neb.

The plants took off in the late 1980s as municipalities began to close local dumps. The facilities handled city garbage with a small physical footprint and an opportunity to make money through electricity sales.

But by the mid-1990s, interest in the plants fizzled as environmentalists condemned the plants' emissions and the waste business changed. Back then, the cost of dumping trash was relatively low, and giant, regional landfills were being created amid garbage-industry consolidation and low gasoline prices.

Incinerators saw their share of the trash-disposal market slip away; for a decade growth came to a halt, said industry observers.

The business began to change in the past few years as higher gasoline prices pushed up the cost of trucking garbage to distant landfills. At the same time, rising electricity
rates and tax and renewable-energy credits in many states made the power generated at the plants more valuable.

"People recognize that waste to energy has worked, and the waste stream is growing," said Dave Vollero, executive director of Pennsylvania's York County Solid Waste Authority. He's planning a $175 million project that will boost capacity at his facility by 50%.

The first burner to expand in recent years was in Fort Myers in southwest Florida. Sited in a fast-growing area, the plant was charring its full capacity of 1,200 tons of trash a day by 2000, says Lindsey Sampson, director of the Lee County Solid Waste Division.

Local politicians opposed sending additional trash to landfills because they viewed dumping garbage as a waste of a potential energy source.

The $120 million expansion opened in late 2007, mostly financed by UBS AG and other banks.

"You're actually using the material as a resource for energy as opposed to throwing it away," Mr. Sampson says. He figures the facility makes about $15 million annually from electricity sales, which help pay for the plant's operations.

Incinerators long have been controversial with environmentalists and neighbors because of concerns about mercury and other toxic emissions in the ash.

Opposition has cropped up against proposals in California, Maryland and elsewhere.

Jane Williams, director of California Communities Against Toxics, recently helped defeat a proposal in Santa Cruz County. Active proposals for several plants have appeared in Los Angeles and elsewhere in her state in the last two years, she says.

She fears that additional burning will detract from recycling as debt-laden municipalities try to stuff as much garbage into the plants as they can.

Environmentalists also say incinerators contribute to greenhouse-gas emissions by destroying material that could be turned into new products. Making products with raw materials generally uses more energy. They also say the Environmental Protection Agency's rules, from the mid-1990s, are in need of an upgrade.

"Even if [incinerators are] meeting EPA standards, those standards are way less protective than the Clean Air Act mandates," says Jim Pew, an attorney with the environmental advocacy group Earthjustice who has successfully sued the federal agency on the issue. "There's really a toxic soup that comes out of incinerators."

The EPA says it is in the early stages of reviewing its 1995 standards covering waste-to-energy plants.
Supporters say incinerators now have more stringent scrubbing mechanisms, steeply curtailing release of toxic compounds that can be stored in body fat.

"Environmental organizations act as if it were 1990, when these emissions were not taken care of," says Nickolas Themelis, director of the Earth Engineering Center at Columbia University and an incinerator supporter.

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