

# Is biogas the way to San Jose's energy independence?

Updated 8/3/2009 9:11 PM | Comments 61 | Recommend 15 | E-mail | Save | Print | Reprints & Permissions | RSS



Enlarge By Marcio Jose Sanchez, AP

San Jose has given the go-ahead to negotiate the building of a \$20 million biogas plant to turn waste into electricity.

By Danny Chaitin, USA TODAY

San Jose is moving closer to becoming the nation's first totally energy independent city.

The California city is pushing forward with its "Green Vision" of getting all its electrical power from clean, renewable sources, as well as diverting 100% of its waste from landfills and converting it into energy.

**NATIONWIDE:** [Beach pollution remains problem](#)

**INTERNATIONAL:** [Sweden helps S. Korea convert food waste into biogas](#)

**IN-DEPTH:** [Get your eco-score, see latest environmental headlines](#)

Share

Yahoo! Buzz

Add to Mixx

Facebook

Twitter

More

Subscribe

myYahoo

iGoogle

More

In mid-June, the City Council gave the green light to start negotiating plans that could lead to the nation's only organics-to-energy biogas facility.

Renewable biogas, which contains methane, will help power the nation's 10th-largest city, which hopes to reduce its per capita energy use by 50% and get the remaining 50% from renewable sources, says Jennifer Garnett, spokeswoman for San Jose Environmental Services Department.

"This project not only demonstrates San Jose's leadership in the production of renewable energy but will help us meet the economic development, zero waste and energy goals of our city's Green Vision," Mayor [Chuck Reed](#) said in a statement.

After three years, the Zanker Road Biogas facility would start processing up to 150,000 tons of organic waste that would otherwise be destined for a landfill to create biogas in addition to high-quality compost that could be used to enrich local soils, says Richard Cristina, president of GreenWaste Recovery. The company is partnering with Zanker Road Resource Management to develop the biogas facility.

The biogas will be produced by the biological breakdown of food waste, as well as the organic share of the municipal solid-waste system, in a process called dry anaerobic fermentation.

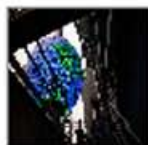
The dry process, done in the absence of oxygen, is new to the USA, says Michele Young, organics manager of San Jose's

## GOING GREEN

- **Latest news:** On environment | **Quiz:** What's your eco-score? | **Your home:** Click a room to see how to save energy, cash



- **Photos:** A global Earth Day | **Your photos:** Show what you do to 'go green'



- **Growing:** Farming with the 'natural patterns' | **Video:** Organic garden success | **Video**



- **Carbon 'food-print':** Eating can be energy efficient



- **Cleaning:** Some families skip commercial chemicals | **Readers' homemade tests**



▪ **Children's books:** Help kids go green with 'Old Red Shoe' | Get 'Lost in Yellowstone'



What polls, activists reveal ▼

Environmental Services Department.

There are similar operations nationwide, but they involve "wet waste," which is easier to recycle than dry waste, Young says. Dry waste is what usually ends up in landfills.

The proposed new technology is already in use in 12 facilities in Germany and Italy. Thirteen more are planned for this year, Young says.

The plant will be built on a 40-acre site near the San Jose/Santa Clara Water Pollution Control Plant.

The energy produced could be used to feed power to the water pollution plant, as well as sold as energy for the utility power grid.

The facility will be located between two solid-waste recovery and recycling facilities owned and operated by Zanker Road Resource Management.

The company, together with GreenWaste Recovery, plans to create a "fully integrated waste management system ecopark," Barnett says. Young says she can think of no drawbacks to the project — not even a NIMBY (not in my backyard) argument.

"A running joke we have here is that if we had a bed-and-breakfast, you're not really going to want to do that" between two waste-management plants, she says.

Zanker Road Biogas' plans will be reviewed to determine that they adhere to the California Environmental Quality Act, Young says.

The operation's impact on the habitat and neighborhood will be examined to make sure there is no imminent environmental threat.

With any project that might seem too good to be true, there are often pitfalls, says Nathanael Greene, director of renewable energy policy at the [Natural Resources Defense Council](#).

"One challenge is dealing with leftovers with concentrated sludge containing pathogens, intact nutrients and antibiotics," Greene says.

Poorly handled byproducts could lead to leaks and runoffs that could be devastating to local plant and wildlife, he says.

"This is exciting technology," he says. "But we should not assume (it's a) technological panacea."

One of San Jose's Green Vision program goals is to create 25,000 clean tech jobs.

About 30 to 40 people would be needed to develop the biogas facility. Once the plant is fully operational, another 50 to 60 positions would need to be filled, Barnett says.