

Sweden helps SKorea convert food waste into biogas

May 21 2009, By KELLY OLSEN , AP Business Writer

(AP) -- The South Korean city of Ulsan lets water generated from processing food waste run off into the ocean, which can generate methane gas harmful to the environment.

Now, with the help of a Swedish company, it is going to start converting that waste water into biogas, a type of clean fuel that can be used as power to heat buildings and even power vehicles.

[South Korea](#) is looking for ways to increase the use of biogas and other clean energy alternatives amid a push by the government of President Lee Myung-bak to embark on a new development model that emphasizes so-called green growth.

Ulsan, a brawny industrial center of about 1 million people on the country's southeastern coast, saw biogas as an attractive way to deal with a burgeoning waste problem as well as coming tighter government regulations.

"Ulsan is running out of waste disposal sites to cover all the garbage that comes out from the city," municipal official Park In-muk said Thursday. "When garbage is processed into compost, it creates waste water," he said, which the city has been letting it flow into the ocean.

The dumping of waste water generated by the processing of leftover food into the sea, however, will be banned from 2013, according to the Ministry of Land, Transport, and Maritime affairs.

The Ministry of Environment, meanwhile, has increased its budget this year for waste energy, including biogas plants, by five times to 178 billion won (\$143 million), according to ministry official Choi Byung-chul.

The government's impending ban on the practice spurred Ulsan, home to big corporations Hyundai Motor Corp. and Hyundai Heavy Industries Co., helped push Ulsan to look for alternatives. It found a partner in Scandinavian Biogas Fuels AB.

The company is based in Sweden, which has been a pioneer in biogas development.

Scandinavian Biogas is investing about 10 million euros to upgrade a wastewater treatment plant in Ulsan and will soon start accepting food and other waste for processing into biogas, said Scandinavian Biogas President and CEO Thomas Davidsson.

"Producing biogas is a very effective way of taking care of the waste" as it can be used for heat, electricity and vehicle fuel, Davidsson said in an interview Wednesday. He was in Seoul to participate in the Seoul Climate Change Expo held in conjunction with the third C40 Large Cities Climate Summit.

Turning food waste into biogas can also contribute to efforts to stop global warming.

"If you dump it into the sea, [methane](#) will be produced," he said. "And methane released into the air is 21 times more aggressive than carbon dioxide. So it has a great impact on the greenhouse effect."

Ulsan is not alone in looking to Sweden for help. Seoul, South Korea's largest city with a population of over 10 million people, also sees

potential in biogas and has teamed up with Swedish Biogas International AB on a pilot project.

"There is a lot of potential," Kjell Enstrom, who heads the company's operations in South Korea, said Thursday in an interview.

South Korea has the ability to produce biogas, Enstrom said, though not of a clean enough level to be used as fuel. That gives companies from Sweden, which has championed the technology, an advantage.

"Within 10 years I think it will be the main fuel in Sweden," he said.

Davidsson, of Scandinavian Biogas, said his company plans to initially sell the biogas to an industrial user in Ulsan for internal heating. The company has an agreement to run the facility for at least 15 years, he said.

Ulsan's Park said that as a long-term goal, the city wants to adopt the biogas system to all its public buses.

Davidsson said that among the advantages of biogas is that is a technology that, unlike ethanol, does not draw resources away from food production.

"Here you get energy out of something that you need to do something with: waste," he said. "So it's very effective."

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Associated Press Writer Ji Youn Oh contributed to this report.

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