



Waste Management and Genomatica Announce Strategic Agreement

Feb 9, 2011

Aims to turn municipal solid waste into higher-value chemicals

HOUSTON and SAN DIEGO, Feb. 9, 2011 /PRNewswire via COMTEX/ --

Waste Management (NYSE: WM) and Genomatica today announced a strategic joint development agreement to research and advance Genomatica's technology and manufacturing processes to enable production of intermediate and basic chemicals from syngas made from municipal solid waste.

(Logo: <http://photos.prnewswire.com/prnh/20090219/WMLOGO>)

(Photo: <http://photos.prnewswire.com/prnh/20110209/DA44559>)

Under the agreement, Genomatica will create proprietary, specially-designed organisms and complete manufacturing processes to efficiently and economically convert syngas into chemical products. Genomatica's patents, intellectual property and technology platform should facilitate further refinement of organisms and processes to allow chemical production from syngas produced from locally-available waste with varying characteristics. Biological production of chemicals would provide another potential use for any syngas produced by or for Waste Management through anaerobic digestion, gasification and landfill gas.

"Waste Management wants to maximize the value of the materials it manages," said Tim Cesarek, managing director of Organic Growth at Waste Management. "Genomatica's technology complements Waste Management's advancement of thermo-chemical conversion and fermentation technology platforms."

"Genomatica is already on a path to deliver sustainable, lower-cost, smaller-footprint chemicals made from renewable feedstocks, including various commercially-available sugars, rather than from oil or natural gas," said Christophe Schilling, chief executive officer of Genomatica. "This agreement accelerates our initiatives to provide greater feedstock flexibility, by enabling the use of syngas to produce a range of chemicals, and in particular, syngas derived from waste materials. Together with Waste Management we are seeking to create greater value from waste material, while adding to Genomatica's ability to deliver more sustainable, lower-cost manufacturing to the chemical industry."

Syngas is produced throughout the world from natural gas or liquid hydrocarbons, and through the gasification of coal, biomass, and waste materials. Syngas is a low-cost input material often used to generate electricity, and can also be converted into liquid fuels. Prior to Genomatica, converting syngas to chemicals was primarily done through chemical processing techniques, which were generally energy-intensive and limited in their ability to produce specific chemical products. Supported by the new joint development agreement, Genomatica is working to enable the conversion of syngas into desired, major-market intermediate and basic chemicals.

This announcement follows a successful move by Genomatica to advance the company's first commercial product, a green Bio-BDO (1,4-butanediol), made from renewable feedstocks rather than oil or natural gas. BDO, an intermediate chemical with a \$4 billion market worldwide, is used to make spandex, automotive plastics, running shoes and more. Genomatica's platform technology could be applied to create a range of high-volume intermediate and basic chemicals, from a range of renewable feedstocks.

The joint development agreement with Genomatica complements Waste Management's comprehensive waste services in the areas of recycling, landfill, waste-to-energy and landfill gas-to-energy. This agreement will also help move Waste Management toward meeting three of its sustainability goals: doubling its renewable energy production and tripling the amount of recyclables processed by 2020, and investing in emerging technologies for managing waste.

About Waste Management

Waste Management, Inc., based in Houston, Texas, is the leading provider of comprehensive waste management services in North America. Through its subsidiaries, the company provides collection, transfer, recycling and resource recovery, and disposal services. It is the largest recycler in North America and a leading developer, operator and owner of waste-to-energy and landfill gas-to-energy facilities in the United States. The company's customers include residential, commercial, industrial, and municipal customers throughout North America. To learn more information about Waste Management visit www.wm.com or www.thinkgreen.com.

About Genomatica

[Genomatica](http://www.genomatica.com) is the emerging leader in sustainable chemicals: 'greener' intermediate and basic chemicals made from renewable

feedstocks, rather than oil and gas. The company aims to transform the chemical industry through cost-advantaged, smaller-footprint products as direct replacements in a trillion-dollar market. Genomatica was named one of '10 Big Green Ideas' by [Newsweek](#), and was featured on [Forbes.com](#). Genomatica has been successfully producing its first product, Bio-BDO, at pilot-scale since the first half of 2010. BDO, an intermediate chemical with a \$4 billion market worldwide, is used to make spandex, automotive plastics, running shoes and more.

Genomatica's unique integrated bio-process engineering [platform](#) and extensive [intellectual property](#) allow it to rapidly develop organisms and processes for dozens of the most significant intermediate and basic chemicals. [Waste Management signed a strategic joint development agreement](#) where Genomatica will use its technology to create methods to turn syngas from municipal solid waste into high-value chemicals.

Genomatica has raised \$40 million from Alloy Ventures, Draper Fisher Jurvetson, Mohr Davidow Ventures, and TPG Biotech. See www.genomatica.com for more info.

This press release contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. Forward-looking statements are information of a non-historical nature or which relate to future events and are subject to risks and uncertainties. In many cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," or "continue," or the negative of these terms and other comparable terminology. These statements are only predictions. Actual results could differ materially from those anticipated in these forward-looking statements as a result of a number of factors. The forward-looking statements made in this press release relate only to events as of the date of this release. We undertake no ongoing obligation to update these statements.

FOR MORE INFORMATION

Media

Waste Management

Wes Muir

713.328.7053

wmuir@wm.com

Genomatica

Emily Douglas

Edelman for Genomatica

650.762.2945

emily.douglas@edelman.com

SOURCE Waste Management