

## **Japanese Beer Brewer Ferments Brazil's Biomass to Produce Hydrogen**

*by Patrick Stelmach, PATH intern*

Sapporo Breweries Ltd. plans to collaborate with Brazil's state-owned oil company, Petrobras, to test a process for making hydrogen fuel from sugar cane dregs and other biomass. Sapporo is testing a technology in Japan that generates hydrogen from the fermentation of bakery waste. Petrobras will use this technique to produce hydrogen fuel from the plentiful biomass available in Brazil.

Sapporo, Petroleo Brasileiro SA, and Ergostech Renewable Energy Solutions will start production at a pilot plant near Sao Paulo and begin production in October, with the aim of bringing down the manufacturing cost of the hydrogen to around 40 yen per cu. meter within 10 years. The pilot program will cost an estimated \$2.5 million and will run for four years. If it gets on track, Petrobras plans to commercialize the business and Sapporo Breweries will sell production equipment based on the technology.

Sapporo, faced with a declining market for beer in Japan, wants to diversify through licensing its technologies to various industries including energy. Petrobras plans \$2.8 billion capital spending in the next few years to boost production of alternative fuels including ethanol and hydrogen derived from agricultural waste. Japan's trade ministry has identified hydrogen as a clean fuel it wants to promote for running cars and for heating water and houses.

Sources:

“Sapporo Breweries, Petrobras To Tap Biomass For Hydrogen Fuel”. AsiaPulse via COMTEX. 24 March 2009. <http://www.tradingmarkets.com/.site/news/Stock%20News/2239395/>

“Sapporo, Petrobras to Produce Hydrogen From Sugarcane”. Bloomberg L.P. 24 March 2009. <http://www.bloomberg.com/apps/news?pid=conewsstory&refer=conews&tkr=PBR%3AUS&sid=aO8pQE6nKyT8>