Maersk Leads Shipping Industry Developing Fuels From Waste

By Louise Downing - Feb 15, 2012 11:31 AM GMT+0100

A.P. Moeller Maersk (MAERSKB) A/S, the world's biggest container ship owner, is leading its industry in developing biofuels made from organic waste that could cut its carbon emissions and reduce a $6 billion-a-year fuel bill.

Maersk (MAERSKB) is conducting tests with companies including Man Diesel & Turbo SE and two Danish universities to develop clean fuels tailored for ships and has worked with the U.S. Navy to run vessels using fuel produced from algae, encountering "very few problems," said Jacob Sterling, head of climate and environment at Maersk, which is based in Copenhagen.

"The beauty of biofuels is that they work with the engines as they are today," Sterling said in an interview. "There is a very, very strong link between reducing emissions and reducing costs."

The efforts represent some of the most advanced work in the shipping industry to restrain greenhouse gases as the European Union works to broaden its carbon cap-and-trade system. Shipping accounts for about 3.3 percent of CO2 emissions, said Drewry Shipping Consultants Ltd. That's more than the 2 percent to 3 percent produced by airlines, now included in the EU rules.

Maersk is a "frontrunner" among companies seeking to drive down pollution, said Ana Davila Martinez, consultant for corporate distribution and logistics at Heineken NV. (HEIA) The Dutch brewer is among brands including Adidas AG (ADS), Wal-Mart Stores Inc. (WMT) and Volkswagen AG (VOW) that select their shipping supplier based on sustainability, Sterling said.

'Pioneered by Maersk'

Lloyd's Register, which checks ships' compliance with maritime rules, has given technical advice and independent verification to the projects. Maersk is "one of the leading companies seeking new and innovative approaches" to fuel supplies, said Timothy Wilson, product manager for Lloyd's specialist fuel oil service known as FOBAS.

Mediterranean Shipping Co., the No. 2 container shipping line, said it's implementing "new technological systems" on its ships as well as alternative fuels. Carnival Corp. (CCL), the biggest cruise line and owner of the Costa Concordia that ran aground off Italy on Jan. 13, said it always looks at efficiency measures including biofuels, though it gave no details.

Maersk shares rose as much as 2.5 percent today to an eight-month high in Copenhagen trading, increasing their gains to 23 percent this year. Carnival shares in comparison have declined 6.7 percent since Jan. 1.

Shipping, Airlines

Efforts by shipping companies to cut emissions follow those of airlines that this year joined the EU's carbon cap-and-trade program. Airlines in July won approval to start flying passenger planes with fuel made from organic waste and non-food plants, prompting Thai Airways International PCL (THAI), Deutsche Lufthansa AG (LHA) and Air France-KLM Group to start biofuel flights.

The problem facing both aviation and shipping is producing the fuels in sufficient quantities and at prices competitive with traditional fossil fuels. Airplanes use kerosene and ships a heavier fuel typically low in grade and high in sulfur.

Alternative fuels made from feedstocks such as algae give the U.S. Navy "increased insulation from a volatile petroleum market," said Pamela Kunze, special assistant in public affairs in the Navy secretary's office. Solazyme Inc (SZYM). supplied fuel for the test Maersk did with the U.S. Navy.

"The use of alternative fuels in our ships provides increased energy security and mitigates the operational risks," Kunze said in an e-mail.

'More Expensive'

Biofuels "are often more expensive, and that is what we are trying to change, so that's why it's a bit more longer term," Sterling said, adding that he could "easily imagine" a process that makes biofuels both for airlines and ships.

The International Maritime Organization, the United Nations' shipping agency, is considering two proposals to spur the shipping industry to slash emissions by 20 percent by 2020. One would create a cap-and-trade system like the EU Emissions Trading Scheme. The second would tax ship fuel in what would be known as a "bunker compensation fund."

The IMO reached agreement in July on new energy-efficiency regulations that take effect next January. The rules aim to promote the use of more energy-efficient equipment and engines and apply to new and existing ships.

Funds raised from the industry could contribute to the $100 billion a year in aid pledged by industrial countries to help developing nations cope with climate change. Shipping could raise at least 10 percent of that target, said Jonathan Grant, assistant director for sustainability at PricewaterhouseCoopers LLP.

Pollution Curb

Maersk's Sterling said biofuels could both cut pollution and make the company more attractive to customers concerned about the carbon footprints of their products.

"What we do on the environmental side we hope will both help us secure the big clients who have a focus on sustainability and also reduce our costs by lowering the fuel bill," he said.

Maersk supports the compensation fund because it puts a predictable fixed fee on the fuel, Sterling said. It's also interested in biofuels because of the potential cost savings. Fuel represents at least half of Maersk's operating expenses, and reducing the speed of ships in transit helped the company cut emissions 7 percent and save $300 million a year, he said.

The company wants to "be out early" in tapping alternatives to oil, Sterling said. It plans to test fuels made from plant waste and non-food crops and some of its vessels have already tested canola-blended fuels.

"With a fuel bill of $5 billion to $6 billion a year, even one-digit percentage savings are very significant," Sterling said. "There is such a strong link between reducing the cost and thereby improving the competitiveness of the company and improving the carbon footprint."

Source: Bloomberg, ARTICLE LINK