

From the November 2008 Issue

## Various international biodiesel projects underway

by Erin Voegele

Numerous international biodiesel projects have been announced in recent months, illustrating the industry's ability to move forward worldwide despite current market challenges.

Many of these new facilities, such as Green Biofuels Ireland Ltd., are choosing to use inedible and waste oils in place of more traditional vegetable oil feedstocks. Green Biofuels completed construction of Ireland's first commercial-scale biodiesel plant in June and reached full-scale production in mid-August. The 9 MMgy facility is located in Wexford County in the southeast corner of Ireland and is capable of transporting biodiesel by ship. While the plant will take in multiple feedstocks, Green Biofuels currently uses yellow grease and animal fats. According to Joe Byrne, the facility's operations officer, these feedstocks are not only cheaper than virgin oils, but also help to keep Green Biofuels out of the food-versus-fuel debate. The company plans to sell biodiesel to small distributors in Ireland and export the fuel to the United Kingdom. The \$30 million facility was funded two years ago through bank loans and private investors. Byrne said that if his company was looking for funding today, they wouldn't be able to get it.

Pure Biofuels Corp. announced completion of its main biodiesel production facility in Peru on Aug. 18. The 52.2 MMgy plant is located at Port Calleo near Lima, and will utilize jatropha and algae as primary feedstocks. The plant includes a mooring facility capable of receiving Panamax vessels that can carry 6,600 tons of liquid cargo. The facility also features Peru's two longest underwater pipelines. The 2.5-mile pipelines connect to Pure Biofuels' tank farm for the receipt and delivery of raw materials. They also allow access to other fuels for blending and terminal services. Pure Biofuels currently cultivates jatropha and intends to meet 80 percent of its feedstock needs with company-owned and harvested jatropha by 2015. In addition, the company recently upgraded a 7 MMgy facility in Lima, Peru, to 10 MMgy, bringing the company's total capacity to 62.5 MMgy.

In the United Arab Emirates, Emirates Biodiesel LLC plans to open its first commercial-scale biodiesel plant in 2009. Located in Al Ain, Abu Dhabi, the 3 MMgy facility will use waste cooking oil and other inedible oils as feedstocks. Emirates Biodiesel was founded by United Arab Emirates-based Ecobility Energy Solutions in May and funded by Alf Yad Ltd. LLC, a Dubai-based venture capital fund. The facility was scheduled to break ground in October and begin production in mid-2009, according to Karim Aly, managing partner of Ecobility Energy Solutions.

Other facilities, such as Brazil-based Integrated Biodiesel Industries Ltd., plan to utilize virgin vegetable oils. On Sept. 3, IBI announced its acquisition of a biodiesel process unit that will become part of the company's second facility in Argentina. The new unit uses a second-generation biodiesel production technology that has no reactors or moving parts.

Although the plant features a dry biodiesel purification process that can operate with a variety of feedstocks, including vegetable oil and animal fats, the facility is expected to run exclusively on crude, degummed soybean oil. The 15 MMgy facility is expected to cost approximately \$1 million, a fraction of what a traditional plant would require.