D1 Oils to build bio-diesel refinery in Guangxi British firm to invest up to 700m yuan on mainland's first jatropha oil-based plant

Eric Ng in Baise, Guangxi Jun 18, 2007

Britain-based bio-diesel producer D1 Oils plans to invest 500 million to 700 million yuan to build a refinery in Guangxi Zhuang autonomous region, in what is expected to be the first biodiesel plant in the country using jatropha oil as a feedstock.

The project is part of an effort by energy firms, both domestic and foreign, to use the inedible

jatropha plant as a fuel source after <u>Beijing</u> banned new bio-fuel projects using grains as feedstocks amid surging food prices and dwindling agricultural land.

On the sidelines of a biomass energy and petrochemicals forum, D1 chief executive of China operations Khoo Hock Aun said the plant would be set up in a new petrochemical industry park in Baise city in northwestern Guangxi.

Scheduled to be completed by the end of next year or early 2009, it will have an initial processing capacity of 10,000 tonnes, rising to 100,000 tonnes over five years.

The plant will be fed by seed oil from an existing 1,667 hectares of jatropha plantations in Baise, rising to 30,000 hectares by next year. It takes three years for the plants to mature.

London-listed D1 provides seeds to local farmers and buys their harvests under contract.

"China has abundant low-cost labour and good farming technology; we expect its jatropha plantations to achieve better sales value than in other countries eventually," said a company official, adding that he expected the plant to break even in five years.

Although refined jatropha oil could be sold for as much as 10,000 yuan a tonne, double the amount on the mainland due to the latter's fuel price controls, he said D1 planned to sell some of its mainland output in the domestic market to support the government's alternative energy development initiatives.

The firm, which plants or sources from farmers 156,741 hectares of jatropha from India, Africa and East Asia, said in February it expected to sell half its jatropha planted in developing nations domestically.

A 39 per cent jump in two-month crude palm oil futures contracts in Malaysia to a record high of US\$807 last week from the start of the year has increased incentives for foreign bio-fuel producers to switch to the less-costly jatropha oil.

A lack of quality standards and undeveloped distribution networks also made it challenging for project developers to sell to the mass market.

While Beijing has signalled an intention to give jatropha farmers subsidies and seedlings, details have yet to be unveiled, making it difficult for processors to assess the attractiveness of the local market.

In Europe, where crude oil-derived diesel is subject to hefty consumption taxes, governments have exempted bio-diesel from 90 per cent of the fuel tax, according to China National Petroleum & Chemical Planning Institute vice-president Bai Yi.

As the mainland has yet to implement a fuel consumption tax, bio-diesel made from plant oils cannot compete with crude oil-based diesel without heavy subsidies.

Mainland bio-diesel output was 110,000 tonnes in 2005 but exponential growth is expected amid persistent high crude oil prices, with more than two million tonnes in annual capacity under construction, Ms Bai said.

The bulk of existing capacity is operated by small firms processing used cooking oil while large firms plan to use rapeseed and palm oil as feedstock for proposed projects.

All three national oil companies are jostling to enter the bio-diesel sector to prepare for the "post-crude oil" era in case fossil fuels run out in a few decades.

China National Offshore, parent of CNOOC (SEHK: <u>0883</u>), plans to produce bio-diesel from imported palm oil on Hainan Island and has signed a preliminary agreement to plant jatropha and process its oil in Panzhihua, Sichuan province.

**PetroChina** (SEHK: <u>0857</u>, <u>announcements</u>, <u>news</u>) has signed framework agreements with the provincial governments of Guangxi, Shandong, Sichuan and Yunnan to produce bio-diesel. By 2010, it aims to produce 200,000 tonnes of bio-diesel annually and two million tonnes of ethanol from non-crop plants.

A PetroChina official said the group was in talks with foreign firms on technology transfer cooperation.

China Petroleum & Chemical has entered into bio-energy tie-ups with China National Cereals, Oils & Foodstuffs Corp and <u>Chengdu</u> municipal government in Sichuan.