

# Van Der Horst, NTU sign JV for biodiesel processing plant

**VDH Biodiesel will start production by December 2008**

By **TEH HOOLING**

VAN Der Horst Engineering Services yesterday signed a joint venture agreement with a technology development company of Nanyang Technological University (NTU) to build a US\$40 million biodiesel processing plant in Jurong Island.

The shareholders are working on injecting the joint venture — Van Der Horst Biodiesel — into a Singapore-listed company in a reverse takeover, so that more capital can be raised.

Another alternative is to seek a listing on London Stock Exchange's Alternative Investment Market, said Peter Cheng, chief executive of VDH Biodiesel.

"A decision will be made in the next two weeks," he said. BT understands that the first option is the likely outcome.

VDH Biodiesel currently has a paid-up capital of \$1 million, and is 60 per cent owned by VDH Engineering and 30 per cent by Kwan Chee Seng, owner of the latter. The remaining 10 per cent is in the hands of its technology partner, NTU's Institute of Environmental Science and Engi-

neering Pte Ltd (IESE). But more funds are coming in, in the form of convertible bonds, before public money is tapped. Listed Firstlink Investments and three other investors will each subscribe to \$1 million worth of convertible bonds soon. These can be converted into a combined 40 per cent stake — or 10 per cent each — in VDH Biodiesel, with the original partners' stake being diluted accordingly.

"We will definitely want to convert our bonds into equity and ride with the venture," said a private equity fund manager who has agreed to take up the loan, but declined to be named until she signs on the dotted line.

VDH Biodiesel's first facility, covering an area of 4.5 hectares, will start production by December 2008. It will produce 100,000 tonnes of biodiesel per annum in 2009, and then ramp up to its full capacity of 200,000 tonnes within two years, said Mr Cheng.

Situated in an agriculture-rich region, coupled with the fact that it is already a centre for fuel processing and distribution, Singapore is emerging as a key biodiesel player.

Including VDH Biodiesel's facility, Jurong Island will have more than one million tonnes of biodiesel production capacity by the

end of 2008. The biggest production facilities belong to Australia's Natural Fuel.

For VDH Biodiesel, plans are also on the cards for a second plant in Malaysia's Iskandar Development Region, which will be built after the Jurong Island facility commences operations.

Mr Cheng said the joint venture's plant will be designed to accept multiple agricultural feed source, moving away from the more popular palm oil. It intends to cultivate its own agricultural oil from *Jatropha Curcas* and marine algae.

The joint venture, said Mr Cheng, has secured 1,000 hectares of concession land in the province of Pursat, Cambodia to grow *Jatropha Curcas*. An agreement is also in place to expand that to another 20,000 hectares of land.

In addition, the company has also received an offer from the Forest Department of Pan Zhi Hua City in Sichuan, China, to lease 10,000 mu (about 667 hectares) of land to cultivate the plants.

Tay Joo Hwa, director and CEO of IESE, said the joint venture's project differs from other biodiesel projects in that it uses a sustainable, high-yield feedstock. *Jatropha* can grow on poor soil condi-

tions, and does not compete with other food produce for the use of valuable farmland. Also, its enzyme-based process to convert feedstock oil to biodiesel is environmentally friendly and consequently, minimises generated waste.

"IESE has developed a comprehensive R&D plan for the JV company to sustain its competitive edge," said Prof Tay. "They include the development of new, cheaper enzymes, the conversion of the by-product glycerin to a higher valued chemical, alternative feedstock such as marine algae and yeast."

Mr Cheng said the joint venture can produce one tonne of biodiesel at US\$500. Crude oil, meanwhile, is trading at US\$415 a tonne. But mandatory requirements from the EU and other governments to blend biodiesel with fossil diesel in order to cut carbon dioxide emissions will ensure demand for biodiesel. Including government subsidies, one tonne of biodiesel can sell for US\$800 to US\$850, a company official said.

VDH Engineering is the marine, industrial and energy unit of Van Der Horst Ltd sold to Mr Kwan, the former managing director of GRP Ltd, in 2001.