

Click Here For More Details!

Photon CONSULTING **New report available:**
To get the latest PHOTON Consulting report please click here!



Click Here For More Info!

PHOTON International
The Photovoltaic Magazine
Your global navigation system through the PV industry **Publishing**

Ihr Browser unterstützt leider keine Frames, bitte installieren Sie einen neueren Browser, z. B. den **Microsoft Internet Explorer** oder den **Netscape Browser** oder auch den **Firefox Browser** als kostenlose Downloads.

Ihr Browser unterstützt leider keine Frames, bitte installieren Sie einen neueren Browser, z. B. den **Microsoft Internet Explorer** oder den **Netscape Browser** oder auch den **Firefox Browser** als kostenlose Downloads.

news worldwide

IPO helps Chinese Si recycler ReneSola start wafering

October, 2006: With \$50 million raised this summer through an IPO on London's AIM market for small growth companies, emerging Chinese silicon recycler ReneSola Ltd. is launching into a major expansion.



© ReneSola Ltd.

Grey gold: Partially processed wafers, pot scrap, ingot tops and tails are the foundation of ReneSola's recycling business.

Up-and-coming Chinese wafer manufacturer ReneSola Ltd. is finding truth in the old saying, »One man's trash is another man's treasure.« The company – with its wholly-owned operating subsidiary Zhejiang Yuhui Solar Energy Source located in China's Zhejiang province, near Shanghai – recycles silicon from a piecemeal of partially processed wafers, pot scrap, ingot tops and

tails, and other unwanted silicon leftovers from the semiconductor industry and grows ingots and sells wafers to the global PV industry.

After an IPO on London's AIM market for high-growth small companies in late July, in which ReneSola reeled in net proceeds of about \$46 million by placing 33.3 million shares at \$1.50 each, the company is busy installing dozens of new monocrystalline furnaces. At the time of its IPO, ReneSola had 54 furnaces in operation, with an annual production capacity of about 6 tons per device, translating to a total annual capacity of around 324 tons, or about 20 million five-inch solar wafers, or 48 MW. Using earnings from its IPO, ReneSola says it will install a further 36 mono furnaces in a new facility, expanding capacity to 80 MW, or 33 million 5 inch wafers, by the end of the third quarter.

Until now, ReneSola has subcontracted its wafer slicing. However, some of the IPO proceeds are being spent on 20 wire saws, which are planned to be in operation by the end of the year. These will reduce the thickness of ReneSola's wafers to 200 μm from 220 μm under subcontract.

The company, which is purchasing its monocrystalline CZ-pullers domestically for about \$100,000 per unit, also plans to produce multicrystalline ingots and wafers beginning in 2007. According to ReneSola, it will have to pay much more for the multicrystalline furnaces from manufacturers in Germany, Japan, and the US, which will cost around \$750,000. But these cost less to operate and require lower grade silicon, which would heighten yields from its raw materials.

Early next year, ReneSola plans to begin installing 15 multicrystalline furnaces. When complete, the company's multicrystalline ingot production capacity would increase total annual capacity to about 125 MW annually, or equal to 50 million five inch solar wafers. Previously, the company was producing a small quantity of PV modules, but says it will focus solely on wafers.

A full 600 of ReneSola's 900 employees sort, test, and clean up scrap silicon by hand or with handheld devices in two separate buildings with a combined floorspace of about 24,000 m². This number should grow to 800 by the end of the year as the company prepares to receive an increasing amount of semiconductor – and even solar – industry leftovers.

In July, ReneSola signed a contract with Taiwan's Motech Industries Inc. for supply of 80 MW wafers over three years starting in 2007. Another contract was signed in July with Jiangsu Linyang Solarfun Co. for 14.4 MW of solar wafers in 2007 and at least 25 MW in 2008.

Second-quarter results released on Aug. 16 showed that ReneSola increased its revenues 146 percent over the first quarter of the year to \$17.1 million. The jump resulted from a more than doubling of production during the quarter. Both net income and operating profits improved about 237 percent – the first to \$5.05 million and the latter to \$5.16 million quarter-on-quarter. ReneSola's operating margin jumped from 22 percent in the first quarter of 2006 to 30 percent in the second.

Since trading started on Aug. 8, ReneSola's stock price has risen over 90 percent to £1.73 (\$3.29) per share by Sept. 22, translating into a market cap of around £172.5 million (\$328.6 million). This gives an early indication that, especially in times of the silicon shortage, this silicon recycler's potential is big, though from a cost perspective it could also remain attractive once this issue is resolved – at least if it can produce good quality and thin wafers with high production yields.

Garrett Hering

© PHOTON International, October 2006

© PHOTON International, October 2006

◀ [back](#)

→ [archive](#)