Increase in Polysilicon Production May Not Ease Chinese Shortages
Zijun Li – June 15, 2006 – 11:39am

At a Beijing conference last week, several leading solar energy companies projected that the global shortage in silicon, the material used in most of the world’s solar cells, will ease by 2008 as production capacity expands, according to China Security Newspaper. The forecast was made by Elkem Solar, a leading polysilicon supplier, and BP, one of the largest producers of photovoltaic (PV) cells, at the second annual "China’s Power and Alternative Energy Summit 2006" on June 8 and 9. The event was organized by the China Power Enterprise Management Magazine and the China Decision Makers Consultancy.

Elkem Solar projected that the price of polysilicon will drop after 2008 as supply capacity doubles to around 70,000 tons. On May 23, Norway’s Renewable Energy Corporation, the world’s largest producer of solar grade silicon, announced that it would more than double its production of polysilicon and begin construction of a third plant that would add approximately 6,500 tons of production capacity. A second leading polysilicon manufacturer, Munich-based Wacker, is breaking ground on a new production facility with an annual output of 2,500 tons. This facility, together with other expansion plans, is expected to boost Wacker’s annual solar silicon capacity from the current 5,500 tons to 9,000 tons by 2008.

Projections made at the Beijing summit failed to account for recent growth in solar silicon capacity in China, however. Starting last year, Chinese manufacturers began building their own indigenous polysilicon base. The nation’s polysilicon capacity already totals 20,000 tons from current and upcoming activities, and local manufacturer Sichuan Xingguang plans to add another 1,250 tons by next year. China’s most recent high-purity polysilicon program was initiated in southwestern Yunnan province in May. With a total investment of 10 billion RMB (US$1.25 billion), the facility is expected to produce 10,000 tons of the material annually after three years.

Despite China’s move to boost domestic polysilicon supply, neither international nor domestic experts think this will be enough to alleviate the supply constraint in the Chinese market, because the country has not yet mastered advanced silicon technologies. “We have actively introduced top-notch polysilicon technologies into China,“ an official from the National Development Reform Commission was quoted as saying. “However, it is hard to get over the international hurdles, as companies are all currently using their own proprietary technologies and are reluctant to share with others.”