Solar energy is in the throes of bubble with loads of new entrants striving to take a position in the photovoltaic (PV) industry, especially in the polysilicon supply chain, but this is not going to shake an industry-wide belief about promising demand for renewable energy in the long run, said Chung-Wen Lan, director-general of Industrial Technology Research Institute (ITRI)’s Photovoltaics Technology Center.

Lan believes that governments worldwide tend to continue encouraging solar subsidies on the whole, despite the fact two key solar consuming regions, Germany and Spain, may cut incentives. However, Japan, Korea and Taiwan are some regions that are believed to be planning a series of incentive programs, he said.

In addition, there is currently a shortage of polysilicon in the market, which has drawn many players into the PV industry. Lan estimated that there are about 100 new polysilicon makers, with half of them based in China.

These new companies are also looking at the long-term opportunities in the solar industry, best represented by grid parity, when the price of solar energy will become an economically viable energy alternative to traditional energy sources. At that point, there will be explosive growth in the solar energy market, Lan said. High crude oil prices are continuing to place cost burdens on the electric grid, spurring the scheduled forward for expected grid parity, he added. Citing costs of traditional electricity, he projects that grid parity could be reached anywhere in the 2013-2020 time frame.

However, while he implied demand for solar energy will be promising in the long run, he did note that there is bubble looming in the short-term. Speaking about the 100 new entrants into the market, Lan pointed out that polysilicon producing is a capital-intensive industry that not many companies with a small capital size can tap into easily.

Among the newcomers, Lan pointed to DC Chemical (DCC) and M.Setek as the two most remarkable ones in terms of their volume production schedule. Among the others, Lan estimates that only about 20 companies among the 100 new polysilicon makers can expect to realistically move to volume production. With that additional capacity providing supply in the market, Lan noted that the present shortage could swing to an equilibrium, bringing down prices.

With falling prices come falling profits, and at that point the remaining other 80 polysilicon makers, may find it difficult to progress to volume production stage, or may end up being exposed to stiff competition, Lan commented. Those that are not in healthy shape will be forced to quit the market.

But in the near term, a bubble is inevitable, he summed up.
Chung-Wen Lan, director-general of Industrial Technology Research Institute (ITRI)'s Photovoltaics Technology Center.

Photo: Nuying Huang, Digitimes, August 2008

Related stories:
Polysilicon spot price posts mild drop (Jul 22)
As more players eye polysilicon production, tight supply of crucibles becomes a concern (Jul 11)
Solar cell investments to reach parity with semiconductor industry by 2010, says iSuppli (Jun 24)
E-ton to invest US$200 million in new M.Setek polysilicon fab (May 28)
Silicon shortage prompts strategy changes for photovoltaic industry, says iSuppli (May 2)