

Solar Power Generation in Southeast Asia---- Ripe enough?

Southeast Asia as a region is blessed with abundant natural resources to lead the way in power generation from renewable sources. Home to some of the most dynamic developing countries, the energy demand in the region is soaring. Rapid economic growth clubbed with concerns on energy security has ensured natural progression to renewable sources of energy- hydro, biomass, geothermal, hydro and solar.

Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam comprise about 95% of the energy consumption in the region. With most of these countries out with their national renewable energy targets, policy support in place and pilot projects implemented successfully, the stage is finally set for large scale implementation of projects.

Solar energy forms an integral part of most of Southeast Asian countries' national renewable energy plans and policies are in place (or are being finalized) to attract large scale investments. The region is hence emerging as an attractive destination for both solar manufacturers and power producers.

Malaysia has set a target for 2,080 MW or 11% of all electricity generated in 2020 to be sourced from renewable sources. Philippines launched a National Renewable Energy Program (NREP) that aims to increase the 2010 renewable energy capacity from 5,400 MW to 15,300 MW in 2030. Thailand expects renewable energy to contribute 25% of total country's energy mix by 2022. Of this 25%, solar was initially targeted to contribute 500 MW but this target is now proposed to go up to 2000 MW by 2022.

Concrete policy initiatives are very much in place. Thailand has implemented an adder policy paying an additional 6.5 THB (0.20 US\$)/kWh over and above the normal electricity tariff for solar power projects. Last year, Malaysia implemented feed-in-tariffs (FIT) rate provide tariffs starting from RM0.85 (0.27 US\$)/kWh for solar projects; under special conditions, very small projects could earn up to RM1.75 (0.5 US\$)/kWh. Similarly, Philippines is on the verge of declaring about 18 PHP/kWh as the preferential tariff for solar power projects.

Other incentives in the region include tax exemptions, duty cuts in Malaysia, Philippines and Indonesia, investment grants, soft loans, government co-investing schemes in Thailand and research focused government funding in Singapore. Thailand, Indonesia and Malaysia have also introduced non-financial support mechanisms like standardizing power purchase agreements (PPAs), infrastructure investments in providing grid access and preferential mechanisms for decentralized power producers.

Some questions that still need to be answered before this solar investment wave takes off:

- ✓ How are businesses and governments in the region responding to the pressing enthusiasm for solar power investments in the region?
- ✓ How can companies ensure that they are on the right side of the investment curve before funding solar power projects?
- ✓ How do companies ensure access to technology providers and consultants in an industry in its infancy in the region?

One of the major challenges is to find ways to deliver the capital more efficiently and thereby make adoption of solar in the region more attractive for banks and investors. With cost of solar power generation falling at an aggregate of 10-15% per year over the last 10 years, time might just be right for investments in energy hungry Southeast Asia. While governments in the region are incentivizing investments in solar power generation, on the other hand, globally the prices of solar technology (wafers to modules) are heading southwards. These attractive policies, business enthusiasm and inherent industry issues nevertheless ensure a rollercoaster ride for the solar industry in the region.

-----X-----

Jatin Kapoor

Regional Head- Southeast Asia

Emergent Ventures International Pte. Ltd.