

Pakistan is going through severe energy crisis

Pakistan is experiencing severe power shortage, with deficits reaching an all-time high deficit of 8500 MW when peak electricity demand reached to 21,063 MW on June 2012. Though, the country's gross installed generation capacity is 22,477 MW, which is technically more than peak demand. The reasons for this shortfall in electricity is due to de-rated capacity of some plants which led to capacity shortfall, shortage of fossil fuel – Oil and gas; gas shortage due to increased demand in other sectors, and oil shortage due to government's inability to pay the bills which led to circular debts. Nevertheless, in the past decade, energy mix has shifted from hydro to thermal power, no new hydro project commissioned. Renewable energy has great potential for Pakistan to meet the sustainable development goals while providing clean, secure, reliable and affordable electricity without compromising the growth paradigm. It has already proven to be more cost-effective than most of the diesel based generation for off-grid electricity. Solar power has great potential for Pakistan's agricultural based economy with major portion of population living in rural areas –which are not connected to the grid.

In my presentation at 6th South Asian International Conference 2014, I highlighted the economics of solar power in global perspective, with special focus on developing world. I presented a case study of Pakistan in this context. I evaluated that most of donor agencies are focused on providing funding for wind energy where Pakistan has more solar resources than wind. Similarly, the labor intensive – agricultural based Pakistani economy has limited access to grid based electricity. Nevertheless, providing grid based electricity in near future will be not possible. Therefore, we should consider market based mechanism to provide solar power for poor farmers in rural areas of Pakistan.