

MOULI COHEN, FOUNDER OF VOLTAGE CAPITAL,
TALKS ABOUT THE PAST, PRESENT AND FUTURE OF
SOLAR POWER



Solar energy continues to be an emerging market and a compelling sector for many energy focused equity firms. Recently, with his new fund analyzing numerous sectors for investment opportunities, investor Mouli Cohen was asked for his thoughts on the sector.

Question: Why have solar energy costs been traditionally so expensive?

Mouli Cohen: The history of solar power is interesting. You first have to understand that for many years, Germany was really the only country invested and deeply pursuing solar power. They had the first true solar grid, and therefore had most of the early knowledge on the process of farming energy from the sun and feeding it into traditional power grids. Because of this, Germany instituted a feed-in tariff that guaranteed solar power would be at a fixed price paid by whatever utilities purchased the energy. This tariff also applied to the manufacturing of technology and hardware to produce solar energy. Germany's main solar company, Q cells, has been the leader in solar manufacturing and production up until very recently. From what I've heard the recession has hit the company very hard.

Question: What are some of the major hurdles still for solar energy and where is the research heading?

Mouli Cohen: I think the challenge to solar energy as a commodity is the price right now. Because of that, the research is heading towards improving the efficiency of the technology. As of right now, even the most advanced solar panels are only using around 40% of the spectrum of sunlight. Research is being conducted on what is the best way to optimize the light. Nanotechnology has also entered into the conversation, creating tiny nano-antennas to be able to trap infrared. This would be a leap forward if installed on a large scale, allowing infrared light energy to also be captured at night.

Question: How much is solar energy going to play a factor in the economies of developing nations in the years to come?

Mouli Cohen: Well I think here is a situation where these developing nations may not be able to afford to invest in solar energy right now, but are still interested in taking part in the revolution in the energy market. I think the private sector needs to take on a strategy of micro-financing in these countries so that the technology can not only be used to make cleaner energy, but also to improve the livelihoods of impoverished communities. I think it could be a huge step forward towards leveling the economic playing field and also be a source of profit for all invested.

Question: What's the best incentive system to encourage solar power usage in the U.S. market?

Mouli Cohen: Right now, the department of energy has just issued \$377 million in new grants for solar research – mostly on ways of maximizing efficiency within the sun's spectrum. That's on top of the tens of billions in grants and government loans contained within this year's stimulus package. I think there needs to be some way of subsidizing households as well, either with tax breaks, or in some sort of rebate for the costs of maintenance and installation.

Question: What role will China play in manufacturing and distribution of solar power technology?

Mouli Cohen: This is a good question. It is without a doubt the emerging competitor in the solar energy market. Recently there was a New York Times article on Suntech Power Holdings, a Chinese company which has just moved up to the 2nd spot in terms of biggest providers of solar technology. The Chinese have been making business loans extremely cheap to companies looking to get into the solar energy market, and therefore they may be a boom in solar technology within China. What's more, Suntech will even be constructing a plant in the U.S., capable of producing the elements needed for large-scale solar farms while still employing American workers.

Question: Will solar power be the key to turning back the trends of global warming?

Mouli Cohen: No, I think it will be one of the many facets of the strategy to ensure a healthy planet for the generations to come. There will be no one solution, and that's why we must all keep an open mind as to what is the best way to ensure sustainable living.

Question: How was the economic downturn affected the prospects for solar power's economic viability?

Mouli Cohen: Solar power has no doubt been hurt by the economic downturn. For one, it has forced a drop in oil prices, and that in turn has hurt solar power in terms of its compared price. As much as solar will be employed in the future, it only really makes sense in a macro-economic way when oil prices turn higher. This complicates it even more for countries with less wealth, because it becomes yet another cost which cannot be fully rationalized in the face of such economic hardship.

Question: Aside from large-scale solar power farms like the one being built in California, what are the frontiers of solar energy?

Mouli Cohen: Well, I guess I'll give the quick answer for that. As solar energy is improved, it will become smaller, more consumer friendly, and lead to developments and inventions which will be assimilated into a retail model more easily. Just think solar powered i-phones, cars, and various gadgets. Even infrared powered!?

Question: Is most of the research into solar energy production being done at the private or public level? How much is the academy involved?

Mouli Cohen: I think right now much of the research in the United States is being conducted at the academic level, but the private sector is certainly watching keenly as to the market prospects. I know a lot of firms are a little gun-shy right now, but once the recovery begins I have no doubt that investment in solar research will pick up.