Creating a viable solar market

DR. MICHAEL KRÄMER, SENIOR ASSOCIATE AT INTERNATIONAL LAW FIRM TAYLOR WESSING DISCUSSES WAYS TO DEVELOP A SOLAR INVESTMENT SCHEME THAT SUITS THE NEEDS OF THE GULF REGION.

The Gulf region is blessed with infinite amounts of solar energy. In theory, there is hardly any need to generate energy from other sources. There are, of course, a number of stumbling blocks that will need to be overcome, but tapping into the vast supply of solar energy that is freely available to us here in the Gulf does not have to remain a romantic vision.

Dubai has just announced its plans for the Mohamed Bin Rashid Al Maktoum Solar Park, which is supposed to have a total capacity of 1 giga watt (GW) once completed in 2030. While this is a great start to a better and cleaner future, it should be considered a starting point and not the final solution. Putting things into perspective, 1GW of solar capacity is an amount that more densely populated countries with incentive schemes for solar energy generation install on average in just one month!

Governmental investments into renewable energy are a great start and can pave the way for a viable solar market coming into existence. Such investments cannot, however, actually create such a market. The actual breakthrough will only happen if private investors start investing into the generation of solar energy. It is only then that substantial financial resources are being mobilized, which are capable of changing the energy generation landscape of a country.

Private investments into solar require a solid legal framework which provides the basis for the investment to be viable. No investor, whether private or public, will invest if the prospects of making a profit or even recouping the investment are bleak.

Taylor Wessing advises clients who are active in the Renewables industries in various jurisdictions through its offices in Europe, the Middle East and Asia. There are, of course, lessons to be learned from all the different approaches the governments in various countries take in encouraging private investment into the generation of renewable energy.

Schemes that work in one country do not necessarily have to work equally well in another jurisdiction. Although best practices exist, some modifications may have to be made in order to create a solution that works best for the country in which such a scheme is supposed to be applied.

Our firm has just recently joined forces with the Emirates Solar Industry.
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In order to benefit all parties involved, an incentive scheme will have to comply with basic requirements, with which a future solar desalination market will be created. An aim of this exercise is to compile assessments of all involved solar solution providers and also providers of ancillary solar solutions, such as solar cooling and solar desalination. The application of solar technologies is an ideal environment for the use and market in a region such as the Gulf with its ideal environment for the use of renewables industries with local parties including local utilities in order to jointly develop strategies and ultimately create a viable solar market here in the Gulf region. As a first step, we are preparing a questionnaire that we will be sending out to representatives of all relevant areas, such as utilities, solar (PV, CPV, CSP) solution providers and also providers of ancillary solar solutions, such as solar cooling and solar desalination. The aim of this exercise will be to compile assessments of all involved parties of the current situation and views on how matters could be improved in order to create a viable solar market.

The next step will then be to define basic requirements, with which a future incentive scheme will have to comply in order to benefit all parties involved. Solar solution providers, for example, will be interested in high incentives, which make investments into their technologies more appealing to private investors. Utility companies here in the region that due to high subsidies on energy consumption will arguably operate at a loss, are likely to be interested in generating energy more cost efficiently as they are currently able to.

Last, but not least, policy makers will have a vital interest in the cost involved. Government backed incentive schemes will have to be financed, which can be difficult, while incentive schemes that operate by putting the financial burden on the general public (such as most feed-in tariff schemes) will inevitably result in higher electricity bills. Further factors, such as mandatory participation of local industries may play a role as well. Despite these partially contradicting interests there will be a common denominator, around which an incentive scheme can be built.

Possible scenarios for a beneficial incentive scheme are as follows: A model that has worked rather well in some countries is the introduction of feed-in tariffs (tariffs that are being paid to homeowners who feed self generated solar energy back into the public grid). Homeowners are being encouraged to invest in solar energy generation by paying them a guaranteed price per KWh for a set period of time. Such a tariff is usually set at a level, which allows the homeowner to recoup his investment during a timeframe that is shorter than the time for which the payment is guaranteed, thus leaving the homeowner a profit once the installation is fully paid off.

Although a great tool in principle, the introduction of feed-in tariffs will inevitably lead to higher electricity costs for end consumers, at least until such time when solar electricity generation has reached “grid parity” (which means that the cost of generation of solar energy is equal to that of conventional energy generation). The tariff that utilities are legally obliged to pay to investors is usually higher than the amount utility providers charge their customers. This leaves the utility companies with reduced profits, which the utilities will aim to recoup from their customers, thus resulting in higher electricity costs.

Higher electricity bills can be avoided if self-use of all generated solar energy is encouraged. Under such a scheme homeowners are obliged to use all the energy they produce themselves without feeding it back into the grid. This results in the relevant utility company having to supply only a smaller amount of electricity, which constitutes a saving for all utilities that are forced to sell electricity at a loss, such as those in this region. Some part of these savings could be diverted to the homeowner, thus providing further incentive to invest into the generation of renewable energy without any party losing out. A typical win-win situation.

The possibilities are endless and there will be a scheme that suits the needs of the Gulf countries as well. Taylor Wessing is determined to assist in finding the right solution and preparing the legal basis for a solar market that benefits all parties involved. We cannot do it alone, however, and therefore invite all interested parties to assist us in our quest.

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