

On the Grid

## Renewable Energy's New Bread and Butter

By Tom Wu

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Solar stocks and markets rallied in the recent months as markets stabilized and recovered from oversupply and regulatory uncertainties. Bloomberg reports that the clean tech and renewable energy industry saw a 22% growth in the second quarter this year with increase spending from

investment communities. Other analysts report that the PV module manufacturers saw a turn-around from declining revenues to steady increase in sales and growth.

The recent trend for bullish sentiments in the solar and renewable energy space can be attributed to the increase in secured and financeable projects. In the state of Massachusetts, large-scale solar projects are taking prominence in the shape of third party owned assets that operate and sell power to local municipalities. This is a drastic change that has occurred in recent trends that has led the market away from private projects and off-takers to secured government host and users.

In a world of uncertainty, investors of solar look for strong and secured cash-flows that negate many market risks. For example, two major sources of revenue exist for any given solar asset. The first is the sale of electricity, which can be hedge and contracted in the form of long-term power purchase agreements (PPA) with a municipal off-taker. The municipality benefits greatly from heavily discounted energy and the investors have a secured cash-flow on their energy commodities that are produced. The biggest risk to a PPA is the counter-party default, where the off-taker can no longer purchase and use the energy produced by a solar system. This risk is negated by the credit worthiness of a municipal entity. The second form of revenue is the solar renewable energy credits (SRECs), which are susceptible to extremely volatility due to changing regulations. In order to secure SREC prices, solar investors are able to leverage the stability of the PPA with a private company in exchange for forward contracts. Currently, more and more larger corporations (Fortune 100) with a “green image” are buying SREC forwards to supply the necessary underwriting requirements to satisfy institutional lenders and banks.

None of these options would be possible without the strength and risk adverse environment that solar is

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currently experiencing with municipal projects. Another value added benefit of municipal solar projects is the surety of land control. Typically, these large ground-mounted arrays are built on municipally owned land that is leased to the solar investors. The land lease to the municipality is very favorable and secure in the aspect that the risk of foreclosure on the property, or the default of the land-owner becomes negligible.

In the past, the buzz and bubble of solar put municipal projects on the backburner. Most developers did not want to spend the tremendous amount of capital on securing public bids. Additionally, municipalities were not experienced in structuring these long-term commitments, and lacked knowledge and understanding on how to successfully craft and project with the investment community. Given the prominence and the proven economics, municipalities are on the active pursuit of renewable energy in their local communities. The third party ownership structures have proven again and again their concepts and are being replicated across Massachusetts.

On a side of caution, the failure rates for public bids have left a sour taste in many municipalities. The failure resides not on the side of the municipality, but on the developer's inaptitude on securing finance. The general message in previous years has been “If you build it, they will come”, which has caused numerous projects that were awarded bids to be left un-built or abandoned. The trend should be reverse. Since the investment communities for solar has grown up and matured, many are willing to commit conditionally in advance to support a public bidding process. This action, has allowed municipal projects to be given financial support prior than awarding bids to developers.

The solar industry is experiencing renewed growth, even amid regulatory uncertainties. These growths are attributed to a new risk-adverse strategy that has been brought over by the investment communities. Developers are no longer a layer in the complete integration, rather a complete stack that works contiguously with matured financing partners. It is now the time to further this integration model by developing successful projects with municipalities.

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