

Solar's coming of age



Investors are popularly characterised as risk averse and fickle when it comes to new technologies. David Giordano, of the world's largest asset management firm, BlackRock, tells John Parnell what has persuaded the investment community that solar is a safe bet

The solar industry can at times talk about the investment world as some kind of ephemeral being. We hear about the "investors" but all many of us know about these unseen creatures is that they crave stability and hate uncertainty and if you displease them, they will move on elsewhere.

The investment view of the solar industry can offer some extremely helpful, impartial and clear-headed insights that may not be possible from within.

So where are the opportunities in the solar industry, how can impending policy challenges be mitigated and what exactly does the impact of dreaded "uncertainty" do to investment decisions?

David Giordano, managing director at BlackRock Alternative Investments, tells PV Tech power what some of the current trends on the north American market mean to their decision making process as merchant projects and developer-led funding through yield cos become more prevalent.

With vast experience in the more mature wind sector, (Giordano closed US\$4 billion of wind transactions for one of his prior employers) he has had a glimpse of what financing looks like when the technology approaches the end of a cost reduction curve and underlying policies start to take on a look of something approaching stability.

"Solar is following a consistent trajectory to the one we saw in the early days with wind, a combination of policies that have related incentives, the maturation of the technology and with that a growing sophistication around the financing options," he says.

"The equipment providers and the contractors become more financeable and more mature developers move in to the space, and that brings more capital. The cost of that comes down and you end up with a positive spiral that makes things more competitive, more accepted."

Falling costs, of finance and of technology, have helped to put utility-scale solar in competition with traditional fuels. In the US this means competition without the aid of a lucrative feed-in tariff or clean generation certificates of one description or another.

Giordano downplays the impact of so-called merchant-based solar projects on BlackRock's focus.

"Solar has a particular advantage because it offsets peak power in most situations, the most expensive wholesale part of the 24 hour curve. For us, as you approach grid parity, as you look at markets where there is more of an accurate representation of time of day pricing, it opens up the opportunities," he explains.

Competition has in some cases forced utilities in the US to push back. This is another metric for BlackRock and co to monitor, but ultimately cooperation will be needed between the industry and the incumbent power firms.

ITC cliff

Despite progress towards standing on its own two feet, the economics of projects in the US face the hurdle of the cut in the Investment Tax Credit (ITC) from 30% to 10%.

Giordano acknowledges that the route the market takes tends to be set by the developers with the finance following on afterwards. This means they need to be ready to react, and for many developers the ITC means changing the geographic focus of their efforts.

"We're a bit of a market follower on that," he says explaining that a broad geographic focus is key. "If things shift in one particular jurisdiction, it gives us the flexibility to refocus and deploy capital in other markets, be that Canada or in European markets," he says.

Despite solar power being part of BlackRock's Alternative Investments arm, the company is not looking to assume high risk. Alternative does not mean fringe, or perilous or unproven. They aren't interested in development risk and they only look at markets with "stable jurisdictions".

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So where does PV's most mature utility-scale market rank?

"I think we'd count portions of Europe as stable at the moment. We've invested in portfolios of projects in France, in the UK, on the wind side, and in Ireland. It boils down to the market structure and the way the policy has been enacted."

For Giordano there is a huge difference between policy changes affecting future projects and those applied retroactively.

"If you look at the places where there have been retroactive changes, their policies have put direct pressure on annualised budgets. Where you have seen consistency of policy, which is the situation in the UK, there have been changes but there has been nothing that has gone back and retroactively hurt the capital that has been deployed in existing assets."

The industry's lawyers, solar advocates and trade groups will invariably respond to such changes with warning of the consequences on investor confidence. So how would BlackRock assess a project in a market such as Greece or Spain where retroactive changes have been implemented in the past?

"Certainly with an awful lot of caution," Giordano says. "You'll be able to see from the investments we have made to date that we have

not participated in the Spanish market. That's not to say we wouldn't. Going forward changes are one thing, they are manageable and it's our responsibility to pay attention to those factors as we develop our strategies."

Retroactive changes are a different beast.

"In those markets we will look for an awful lot of premium associated with that risk of future retroactive changes or we will be very cautious about investing at all until we get some clarity on going forward policy and stability," he says.

While the disruptive nature of solar is throwing down new challenges for policymakers and utilities, it is also generating a new challenge for traditional finance sources.

The rise in the number of yield cos, public companies created to own and take revenue from completed solar projects usually on behalf of a developer parent company, means there is competition for finance.

Giordano is unperturbed by the "trend" for yield cos and accepts that if that offers someone a more efficient route, so be it.

"The attractiveness of the yield co is in creating your own source of capital, your own take out for the term equity and the assets. With that comes the additional expense of handling the admin of that public company and tying yourself to the projections and the growth targets. Doing it on a project basis with us, we have ready capital available to invest in assets, it's our core mandate to invest in those types of projects so we can be a good partner for a single project or for a portfolio of assets and without the same scrutiny of a public vehicle," he says.

The CFOs of major PV developers spent chunks of their second quarter analyst calls fielding questions on the prospects of them starting a yield co. Given the burdens described by Giordano, will this option only ever be open to the largest players?

"I think it's a story that is playing out in real-time right now. There will be opportunities for some of the smaller players to partner with the larger developers that do put yield cos in place. I think we'll see the full spectrum of outcomes but it will be difficult for the smaller players," he says.

"The ones we have seen be successful out there have this growth story. In most cases, possibly all cases, it's a built-in growth story that already exists within their development pipeline."

The growth story means showing that you have the pedigree and track record to add a decent chunk of capacity and continue improving the prospects for the yield co's shareholders. "That's where developers with either a targeted geographic region or a more modest develop-

Investment in clean energy

2009	US\$196bn
2010	US\$262bn
2011	US\$318bn
2012	US\$286bn
2013	US\$254bn

Source: BNEF

ment pipeline will find it a harder hurdle to overcome," says Giordano.

Growth in the solar industry looks like a near certainty right now but whether you're an established developer in the US or Europe, extending that geographic spread is important. Whether it's outmanoeuvring the ITC cut in the States, looking beyond Germany's annual 2.5GW cap or for more capacity than the UK's new auction scheme will offer, developers have good reason to look to the new markets that are on the cusp of growth.

BlackRock, of course, doesn't want to give too much detail away about where it is preparing for business but Giordano acknowledges that the potential among the usual suspects of Chile, Brazil, Turkey, Mexico and the Middle East.

"We look at each market individually and focus on the ones where we think we are strategically advantaged. The currency plays a big role too. If you're using a foreign currency to invest in an overseas market, your returns can sometimes be disproportionately affected by currency moves that have nothing to do with the underlying risk-return characteristics of the assets themselves."

With the addition of currency, Giordano says assessing any new market comes back to one thing: policy stability.

Warnings against uncertainty are too often lost during campaigns against regressive policy shift. Investor certainty in isolation sounds rather nebulous. Giordano has explained that it is far from that. Put simply, retroactive changes deflect money out of your economy.

Governments that use energy bills as an excuse for solar cuts are being short-sighted. Investor uncertainty means that people like Giordano and his peers will bench mind-popping volumes of investment and sideline your economy as a risky gamble.

The technology is mature, the supply chain is stable, the financing is economically sound. The final part of solar energy's progress needs policymakers to assume these three attributes.

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SunEdison is enjoying success with its TerraForm Power yield co and plans another for emerging market projects only. Giordano says that while yield cos work for some, they are not a catch all solution for the industry as a whole.