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Shop talk: Flagging up Vietnamese solar finance

The growth of solar energy generation is fundamental to phasing out coal-fired projects in Vietnam. TXF spoke with lawyers at Watson Farley & Williams to discuss the country's recently revised feed-in-tariff (FiT) scheme and the financial hurdles faced by a market in project finance adolescence.

Ross Crear

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On 28 January 2019, Vietnam's Ministry of Industry and Trade (MOIT) announced new feed-in-tariffs (FiT) for two additional years for solar energy schemes, a boon for prospective sponsors eyeing up this adolescent renewable market. Solar projects which meet the 1 July 2021 deadline will now benefit from a revised FiT that will range from $0.0659/Kwh to $0.0985/Kwh for a 20-year operational period.

The news is symptomatic of the Vietnamese government's push for solar energy, with an expected 3,812MW of solar scheduled to be online by the end of this month (June). And, with lender appetite for funding coal projects falling dramatically, other than for legacy projects such as Van Phong 1, the move marks an important step towards the diversification of Vietnam's energy generation.

Both solar and wind are promising energy markets for Vietnam, but there are still hurdles to the financial viability of such projects. While developers have attracted significant interest from local and regional banks, as the market continues to grow, local financiers may find their liquidity stretched. Therefore, tapping ECA cover and international commercial bank financing is imperative for the success and longevity of Vietnam's renewable energy market.

TXF spoke to Linh Doan and Michael Folsom, partner and senior associate at Watson Farley & Williams, to assess the future of Vietnam's solar energy market and the wider renewables market.

Linh Doan

Michael Folsom

TXF: Can you explain how the feed-in-tariff system works in Vietnam?

Linh Doan (LD): State power company Electricity of Vietnam (EVN) is responsible for the offtake of electricity generated from all renewable projects in the country. The feed-in-tariff scheme in Vietnam states the price payable by EVN, for renewable energy purchases and therefore the FiT is not a top up system, but is the total amount per kilowatt hour that is paid, excluding taxes.

TXF: How effective is solar energy in Vietnam in comparison to other forms of renewable energy such as Hydro?

Michael Folsom (MF): Hydroelectric power generation has long been Vietnam's primary renewable energy resource, but most of the nation's hydro power resource potential has now been exploited.

The country also has tremendous solar energy resource potential with around 1600 – 2700 hours of sunlight falling on Vietnam in a typical year, compared to the United Kingdom which as a whole averages 1493 hours of sun per year. Solar photovoltaic power also poses very few negative impacts on the environment.

Vietnam is also well suited to wind power. Located in the monsoonal climate zone, the country has a coastline of more than 3,000km and an average wind speed of 6 metres per second. The most promising wind potential provinces include Binh Thuan, Vung Tau, and Ben Tre.

LD: After the initial investment, other than operation and maintenance costs and non-direct costs such as insurance, the operating costs of generating electricity from solar and wind energy are relatively low.

This, combined with a significant drop in the capital costs of solar and wind over the past 5 years - which has seen a 75% decrease in solar costs and a 30% decrease in wind - both wind and solar are now effective and viable options for energy generation in the country.

TXF: Is there a substantial currency convertibility risk for offtakers in relation to the feed-in-tariff?

MF: The FiT is set in US dollars but is payable in Vietnamese dong which needs to be converted in order to be remitted offshore as dividends or repayments of shareholder loans in the case of a foreign investor. Investors therefore may experience difficulty in currency conversion given the Government does not provide a guarantee on the exchange rate and dollar availability for the converted amount.

The lack of government guarantee on the currency conversion is a problem under the wind and solar Power Purchase Agreement when compared against a conventional power project. But in our experience there have not been conversion or liquidity issues in the market and developers have not had to call on the currency conversion guarantee in the conventional power market. Therefore to date this has been more of a theoretical risk than a practical one except when in a scenario where the macro financial market in Vietnam collapses.

TXF: What kind of financiers are attracted to these solar projects?

LD: In light of Vietnamese Ministry of Industry and Trade's aims to raise solar power capacity, investments from the private sector, especially foreign investors, will be pivotal to solar project development. However, international lenders have to date struggled to enter into the Vietnamese renewable market on a project financing basis. While there is significant interest, certain key bankability issues remain.

MF: The market is currently dominated by Vietnamese banks, regional banks in Asia or development banks. The domestic and regional banks have been willing to take greater risk on certain bankability issues and also have established relationships with local developers which the international lenders lack. The question that remains is whether there

will be sufficient liquidity in the domestic and regional banking market to fund the increase in projects that will be required to meet the energy demand of Vietnam in the coming decade.

TXF: Do you believe institutional investors will play a role here?

MF: As has been seen in Europe, the role of institutional investors, in both the debt and equity market, is increasing, however given the typical conservative nature of institutional lenders it is likely too early for their entry into the Vietnamese market. The presence of international commercial lenders will likely be seen ahead of them.

TXF: What are the main hurdles you have seen financing solar in Vietnam?

LD: The main issue is related to international lenders and the PPA. EVN is required to purchase all power generated from the renewable power project, but is only liable for payment of energy received, not of energy generated but not received. This position differs from that of conventional energy in which sellers are paid on capacity and energy. The developer therefore takes on the curtailment risk. While the recent solar PPA does give grid curtailment priority to solar project this has not yet been introduced for wind projects.

Other hurdles we see relate to the lack of any form of Government guarantee, dispute resolution and change in law provisions. Additionally, challenges are faced in relation to compensation of local land users and the construction of resettlement areas. Such processes are commonly a key condition precedent for financial close and any delay may prevent the projects from meeting the deadline of the new FiT scheme in 2021. In addition, Vietnamese law does not permit foreign banks taking security over land or assets attached to land, so alternative security structures need to be put in place.

TXF: What are the ramifications of the 2021 cut off for the Feed-in-tariff? Could a lot of projects fail to materialise?

MF: We don't think this is likely to happen. The same situation could have been argued with the previous FiT which is due to end in June 2019. And while there was a slowdown in the run up to this period, as projects would not be able to reach COD in time, a draft decision for the new FiT regime is in place with the final decision expected shortly to ensure the continued growth in the solar industry. After 2021 it is likely that the government will proceed with an auction process as per the draft Circular.

The MOIT proposes varied tariffs dependent on the technology type such as ground mounted, floating, rooftop as well as higher tariffs in provinces with lower solar irradiance and lower tariffs in provinces with higher solar irradiance. This is an important step to distribute the projects around Vietnam which will help address the curtailment issues that are caused by a high density of projects all in one region.

TXF: With Vietnam still reliant on energy from non-renewable sources like coal, how important is this move from the government?

LD: The development of renewables is crucial for Vietnam. Energy demand in Vietnam is forecast to grow at 10% annually and the existing power supply from non-renewables is not sustainable. The appetite of lenders and ECAs around the globe to fund new coal projects is diminishing and Vietnam needs a new source of energy for the growing energy demand and to eventually replace the existing coal projects.

To date, over 100 significant financial institutions, including those who have in the past played a role in financing Vietnamese coal projects such as MUFG and Mizuho, have divested away from coal and are no longer able or willing to participate in coal power projects (apart from certain legacy projects). The same trend can be seen with ECAs. Therefore, raising debt for coal power projects in Vietnam will only become more difficult.

While in 2017 hydropower and coal-fired power led amongst the power generation sources, the government aims to increase the electricity output from renewable sources from approximately 58 billion kWh in 2015 to 186 billion kWh by 2030. In relation to solar, the government aims to raise solar power capacity to 0.5 percent of national output by 2020, 3.3 percent by 2030 and 20 percent by 2050. And for wind the government aims to raise wind power capacity to 0.8 percent of national output by 2020, and 2.1 percent by 2030.

TXF: Do you think the common financiers of these coal projects will make the transition to financing solar in Vietnam?

MF: Absolutely. We have discussed some of the bankability issues that exist, but once these are resolved there is no reason that international lenders would not finance such projects. Renewable projects are increasingly attractive to international lenders who target green lending levels, as distinct from coal which is now for policy reasons, becoming more difficult to finance.

MUFG for example are aiming to provide $182 billion in financing for renewable energy and other projects, so even if renewable projects do not benefit from government guarantees, there is a significant desire to

finance such projects which can help mitigate such drawbacks. In addition to this, as the projects get larger, and the CAPEX and debt required increases this will place difficulties on relying solely on domestic or regional financing. So international banks are vital.

TXF: What does the future look like for Vietnam's solar energy market and more broadly Vietnam's renewables market?

LD: As Vietnam continues to modernise and develop, its power consumption will continue to increase. The Vietnamese Government has shown strong support for clean energy, and the domestic market has responded positively. In terms of solar deployment, it is expected that 3812 MW will achieve commercial operation date and be online by the end of June 2019. This is a significant increase on the 800 MW which was included in the Master Plan and shows the appetite for solar by domestic developers in Vietnam.

However, to meet the increasing energy demand, the next phase of renewables in Vietnam will need the involvement of international developers and lenders. In order to do this the PPA will need to see certain amendments to make this bankable. We are positive about this for large scale offshore wind projects though, and Vietnam has demonstrated through its current large scale conventional projects that it has the expertise to develop and finance large power projects.

MF: A recent development in relation to offshore wind can be seen with Enterprize Energy receiving a license to conduct survey for the offshore wind farm Ke Ga Cape in Binh Thuan. The project, would be one of the biggest offshore wind projects in the world and help turn Vietnam into the leading country in Southeast Asia in developing offshore wind power.