While financial close for the first offshore wind power project in France has just only been reached a few weeks ago, and while Japan and South Korea are now starting to gear up towards developing their own offshore power industry and gathering liquidity to finance it, Taiwan can rightfully boast of having developed a leadership position in this sector, with three sizeable offshore wind power projects successfully developed and project financed to-date.

Taiwan has enjoyed tremendous success in attracting equity capital from all over the world, with investors from Australia, Denmark, Germany, Japan and Canada among others flocking to the country and debt financiers from multiple categories and geographies providing capital to those projects.

In a relatively short 18-month time-frame, more than NT$170bn of limited-recourse debt financing has been raised for what is a brand new asset class in the Asia-Pacific region. This is a remarkable achievement that goes to the credit of the Taiwanese government and regulatory bodies, to the various project sponsors and to their debt providers.

A lot has been already written on the reasons for this success, from the supportive approach of the Taiwanese government and energy regulators through the formulation of a conducive regulatory framework and feed-in tariff, to the tremendous work performed by the various developers to combine localisation requirements with cost optimisation, to the significant investments undertaken by equipment suppliers to design and manufacture equipment capable of coping with extreme weather and site conditions, without forgetting the contribution of local and international fund providers including export credit agencies.

In my view, the strategy followed by the Taiwanese authorities can be considered as a recipe for success: applied at first on a prototype project such as Formosa 1 Phase I, the Taiwanese regulatory support regime has over time allowed the financing on a non-recourse basis first of the 128MW Formosa 1 project in 2018, before delivering further with the much larger financings in 2019 of the 640MW Yunlin and 378MW Formosa 2 projects. As an institution, we are proud to have been part of this story. Societe Generale played a key role in the financing of the Formosa 2 project, thanks to our involvement as financial adviser, mandated lead arranger and hedge provider.

Formosa 2 is not only the most recent and competitive financing closed in this sector in Taiwan, but also a very relevant illustration of the recent evolution of the Taiwanese offshore wind project financing environment, and of both the attractiveness and challenges encountered by Taiwanese offshore wind project financings.

As mentioned above, an obvious characteristic of the Taiwanese offshore wind market is its attractiveness:

- With 20 financial institutions and four export credit agencies in the debt syndicate, Formosa 2 sets a new record in both the number of financial institutions and export credit agencies (ECAs) mobilised in a single transaction in Taiwan.

Formosa 2 successfully attracted six local Taiwanese financial institutions, providing approximately 30% of the project financing, making it the largest participation of local funding in an offshore wind power project in Taiwan so far, both in terms of number of participating institutions and percentage in total funding.

We are hopeful that this trend will continue to accelerate over time, as it will be critical for the continued development of this burgeoning asset class to be able to tap into the local financial community’s liquidity to finance upcoming offshore wind projects.

- Formosa 2’s financing structure follows generally the lines of European offshore non-recourse project financing. This shows how Asian offshore wind was able to swiftly catch up on Europe.

The successful implementation of long-term project financing, 18-year tenor for the most...
recent transactions, with proper limited-recourse project finance terms, contrasts significantly with the traditional lending activity in Taiwan, which has historically been based on medium term maturities, with some level of credit support from sponsors. This was achieved thanks to the contribution of leading international offshore wind project finance lenders that have developed a significant body of knowledge in markets such as the UK, Germany, Belgium, the Netherlands.

While those institutions might not be natural providers of NT$-denominated loans, they have played a key role in transferring knowledge from other, more mature offshore wind power markets. Local banks on their side have been the beneficiaries of that knowledge transfer and have been able to overcome their initial lack of experience in offshore wind, thus becoming able to deploy some of their ample NT$ funding capacity.

- Among the local financial institutions, the participation of Taiwan Life makes Formosa 2 the first offshore wind power project financing in Taiwan involving a local life insurance company, helping to unlock what should over time become a new source of liquidity for this sector, not unlike what is occurring in the European offshore wind power market.

However, the ability to continue to efficiently fund the offshore wind power sector in Taiwan does not come without some challenges:

- It is at first somewhat counter-intuitive to see such a significant involvement of ECAs for projects located in a high investment grade jurisdiction, Taiwan is rated AA−/Aa3, all the more for an asset class that is already well-established in most of the Western European markets. This is largely a reflection of the fact that export credit agencies are playing a role as additional liquidity enablers in this nascent market.

- Another somewhat unusual feature is that some of the Taiwanese offshore wind project financings have included a foreign currency, non-NT$ denominated component in their financing plan, either via direct loans or unfunded risk participations. Even if these facilities are of relatively marginal size compared with the overall project debt quantum, their mere existence further underscores the limitations that exist for some market participants with respect to their ability to provide competitive NT$-denominated financing.

- More generally, international banks are typically not the most efficient funders in NT$, as they are not the most active deposit takers in the country and are facing relatively illiquid cross-currency swaps markets, particularly for long tenors. Those banks will need to continue to work towards developing effective and reliable funding sources. One possible avenue is for banks to issue bonds locally to raise NT$ funding and redeploy those proceeds into their offshore wind power lending activity. This is something that we have undertaken at Societe Generale, with our Taipei branch issuing several series of green bonds to that effect over the course of 2018 and 2019.

- In addition, the Taiwanese banking regulatory regime imposes a system of single borrower limit, which is to be taken into account by the debt providers when allocating their capital resources. As a result, Taipei branches of international banks will have to balance out factors such as lending limit considerations, Taiwan country limit exposure, and concentration to the asset class with the rapid growth projected for the sector in Taiwan and the large associated capital requirements.

- Indeed, the forward-looking pipeline for offshore wind power in Taiwan adds up to 4GW–5GW, translating into hundreds of billions of NT$ funding requirements, as global energy investors are increasingly shifting towards Asia in general and Taiwan in particular as a source of growth for their businesses.

- Additionally, the localisation requirements that result from the government’s objective to foster the domestic offshore wind industry are adding a layer of complexity to our usual technical due diligence and technology assessments. In an industry already marked by a rapid pace of technological change, be it with respect to turbine size, foundations or installation vessels, this represents yet another area in which prospective lenders to the sector need to be made comfortable.

- An important component of any limited-recourse project financing is the insurance package. The fact is that the general insurance market has hardened recently. This trend can be felt also in the renewables sector, with specific constraints when it comes to the coverage of natural catastrophe events across the region. We can, however, witness the significant work already performed by the most active industry players in improving the familiarity of the insurance community with offshore wind and extreme weather conditions, in order to unlock current capacity constraints.

- Finally, while the state-owned banks have so far elected not to participate in those financings, we are expecting a greater level of involvement of those institutions going forward, as this sector will become increasingly strategic for the country to meet its long-term goals of rebalancing its energy matrix away from nuclear and coal.
In addition, the fact that the first project, Formosa 1, was completed on time and on budget and recently started operating is also likely to provide further comfort to new entrants to this market. Deepening the pool of local NT$ liquidity is clearly an important consideration for this sector going forward.

Notwithstanding some of those considerations, the outlook for the sector in Taiwan is encouraging and Taiwan will undoubtedly continue to set the pace for the offshore wind power sector in Asia-Pacific for the foreseeable future. We expect liquidity to continue to improve for this asset class, driven by the following factors:

- Continued involvement of tier-one sponsors investing in adequately structured non-recourse project financings, that can capitalise on a core group of 20 international and local commercial banks that have supported the three projects closed to-date, with new market participants expected to join this investor universe over time.
- The market will continue to display creativity and will seek to find ways to accommodate financiers with more limited NT$ funding capabilities, by offering structures incorporating alternative currency facilities and by promoting unfunded risk participations.
- The trend of local banks joining in those transactions will undoubtedly accelerate, as the sector becomes more established and emerges gradually as a cornerstone of the country’s energy matrix.
- Local institutional investors alike will show increasing interests towards this asset class. Offshore wind is an asset class offering long duration and predictable, stable revenues, which makes it a very good fit for investors such as life insurance companies, that seek to match long-term assets with long-term liabilities.

The emergence of this asset class in the country represents a tremendous investment opportunity for institutional investors, with the potential of providing additional investment options as well as diversification for their portfolios.

For an investment community that can at times be constrained by the investments options available in NT$, this is likely to represent an opportunity that their regulator will have to assess in earnest, taking a leaf from the European markets in which life insurance companies and asset managers are providing debt to offshore wind power projects.

- The opening of an institutional funding market could also be a great way to recycle exposure from banks, which in turn would allow those banks to continue to support new projects without encountering limitations around concentration and group borrowing limits.
- All those factors should over time lessen the reliance on export credit agencies as a source of liquidity, not unlike what we are witnessing in other high investment grade markets, and channel the cover provided by the export credit agencies more selectively towards new market entrants or funders that are more hindered by regulatory requirements.

Societe Generale is highly confident in the growth prospects of this market and believes that the pool of available liquidity will continue to grow for this promising asset class.