JAPAN'S GREEN RUSH – FIT ISSUES

SINCE THE JAPANESE FIT ACT BECAME EFFECTIVE IN MID-2012, COUNTLESS DEVELOPERS AND INVESTORS HAVE COME TO JAPAN LOOKING FOR OPPORTUNITIES. BY **YOICHI KATAYAMA**, **MINAKO WAKABAYASHI** AND **CHRISTOPHER GLADBACH**, **ORRICK HERRINGTON & SUTCLIFFE**'S ENERGY AND INFRASTRUCTURE GROUP.

On August 30 2011, the Japanese parliament enacted the Act on Purchase of Renewable Energy Sourced Electricity by Electric Utilities (Law No. 108) (the FIT Act), which along with implementing regulations is known as the FIT Scheme. The FIT Act was designed to spur investment in and promote the use of renewable energy by obligating electric utilities to purchase power generated from renewable resources, specifically from solar PV, wind, hydro (up to 30MW), geothermal and biomass projects.

Compared with feed-in tariff schemes in Europe and elsewhere, the Japanese FIT price is high and the current fixed-price 20-year power purchase term is particularly long – an attractive combination for renewable energy developers. Since the FIT Act became effective in mid-2012, countless developers and investors have come to Japan looking for opportunities. Like the California gold rush of the mid-19th century, this has become known as Japan's green rush. Solar PV development has been especially active. The first half of 2013 saw twice as much solar capacity installed in Japan as in all of 2012 and most analysts expect that these strong trends will continue.

The FIT Scheme sets out specific timelines and requirements for development. Each year, the Ministry of Economy, Trade and Industry (the METI) publishes the fixed price in yen/kWh that electric utilities must pay under power purchase agreements, or PPAs, for renewable energy (the FIT Price). Utilities recover these costs by collecting surcharges from their end-use consumers. In 2012, the METI fixed the FIT Price for solar and wind projects that met qualifying conditions by March 2013. The METI reset that price earlier this year for projects that meet similar conditions by March 2014. See Table1 for more detail.

There are two conditions to lock in the FIT Price. First, the supplier must apply for and achieve appropriate METI regional bureau approval for project facility. The application must contain detailed information related to the facility, including the maintenance and operation plan, the design and location, and the technology specifications. Additionally, applicants developing facilities with over 500kW capacity must provide evidence of site control.

Second, the utility must receive the supplier's interconnection application. The FIT Act generally requires utilities to interconnect METI-approved projects, so long as the supplier commits to pay for relevant additional costs necessary to interconnect the facility with the utility's system. Interconnection arrangements can be governed by a standalone agreement or the PPA itself.

Developers should use caution before significantly altering previously approved, critical aspects of the project. Under the FIT Scheme, a later "major change" could require a METI application amendment or an interconnection application resubmission, either of which could place the FIT Price in jeopardy. A typical example of a major change is a modification in the facility's projected output by 20% or more. The METI is still evaluating other categories of major changes. The METI has also recently provided some relief: if the developer provides written evidence that a major change in the facilities projected output (ie, by 20% or more) was ordered by the utility to facilitate interconnection, then the FIT Price will not be affected.

Following METI application approval, the FIT Act requires the utility to enter into a PPA with the supplier. After execution, the parties are usually locked into the FIT Price for the applicable purchase term (currently 20 years). The METI can modify the PPA FIT Price only if there is a fundamental economic shift (ex hyperinflation) that has a significant impact on the entire Japanese electricity market. End-user consumer protests are not sufficient to justify a FIT Price modification. The utility seeking PPA modification must prove both the existence of an economic shift and that continuing to perform under the PPA would unjustly harm its interests.

TABLE 1 - FIT PRICES

Solar*			
Fiscal year		**2012**	**2013**
Procurement costs/1kWh	Tax-inclusive	¥42.00 ($0.41)	¥37.80 ($0.37)
	Tax-exclusive	¥40.00 ($0.39)	¥36.00 ($0.35)
Procurement period	20 years	20 years	

*Figures provided are for solar PV power generation of 10kW or more.

Wind*			
Fiscal year	**2012**	**2013**	
Procurement costs/1kWh	Tax-inclusive	¥23.10 ($0.23)	¥23.10 ($0.23)
	Tax-exclusive	¥22.00 ($0.21)	¥22.00 ($0.21)
Procurement period	20 years	20 years	

*Figures provided are for wind power generation of 20kW or more.

PPA mandatory provisions

FIT-eligible PPAs must include several mandatory terms, including representations that the developer is not a member of an "anti-social force" (ie, a known Japanese criminal syndicate), Japanese forum selection and governing law clauses, basic metering provisions, provisions allowing the utility limited facility inspection rights to measure energy output or repair metering equipment, and provisions related to utility curtailment.

If the PPA contains the mandatory provisions, the utility must execute it upon the supplier's request unless (a) it contains damage provisions that require utility payments for reasons unrelated to the utility's action or that are grossly excessive, or (b) its terms violate Japanese law or contain material misrepresentations related to the facility's generation capacity. Beyond these requirements, the FIT Scheme allows developers substantial control over PPA terms and conditions. In fact, the METI may intervene to require utility execution if the utility refuses to accept a proposed form that otherwise complies with the FIT Scheme.

In spite of this developer-favourable PPA flexibility, initially all major Japanese utilities prepared their own PPA forms. Nearly all of these PPAs suffered from serious financeability issues. For example, many PPAs required renewal and utility re-evaluation for every year of the purchase term. Some PPAs also granted utilities limited rights to change the power purchase price on a discretionary basis during the term, which conflicted with the intention of the FIT Scheme.

Because project financing lenders demand a certain amount of revenue and pricing certainty to service project debt, PPAs containing these terms would normally not be acceptable to lenders. The utility models also often contained broad restrictions on assignment, including collateral assignment for financing purposes.

After receiving industry input, the METI recognised that there were serious flaws in the draft utility PPAs. So the METI, in consultation with a consortium of all major Japanese electric utilities and industry participants (including Orrick), put forth its own Model PPA around September 2012. Importantly, the Model PPA set forth a number of clear approaches to the problems identified above.

For example, the Model PPA improved the assignment clause by providing that the utility will consent in advance to assignments of the PPA for financing purposes or in connection with the sale of the project with limited exceptions. Annual utility renewal rights and discretionary pricing adjustments are also abandoned in favour of the statutorily mandated term and price. The Model PPA also includes all of the necessary interconnection agreement provisions. The Model PPA is not prescriptive or mandatory, but instead should be a good starting point for subsequent negotiations with the utility.

The Model PPA still contains some provisions that require careful consideration. The curtailment section especially merits review. The provisions required by the FIT scheme allow curtailment of the supplier's deliveries of electricity for up to 30 days a year, without compensation, so long as the utility has first (a) decreased the output of other non-renewable electric generation facilities that it owns and (b) attempted to sell the excess energy produced on the market.

Beyond this provision and other limited curtailment scenarios (ex force majeure), the Model PPA allows for damage payments to the supplier for an "acknowledged" amount of energy that would have been produced, based on the average amount of generated electricity at the facility during period of curtailment, or another amount determined by the parties. It is unclear how these damages would be calculated due to the ambiguous nature of this provision. By adding a more explicit concept: the "Estimated Amount of Electricity," the provision could be made clearer.

The Estimated Amount of Electricity is a formula that specifically captures the estimated amount of electricity generated during the compensable curtailment period, based on the facility's isolation (if the facility is a solar facility), the rated output capacity (based on agreed-upon facility specifications) and an agreed-upon allowance for transmission losses. By providing a detailed method for computation, party disputes regarding curtailment damages can be mitigated or avoided altogether.

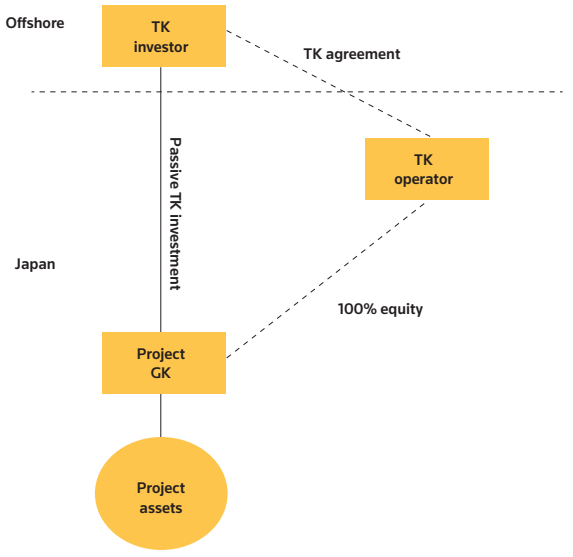
Other items not addressed adequately in the Model PPA include (a) a method to measure delay damages if the supplier does not complete facility construction or commence delivery by a date certain (whether the failure is caused by the supplier or utility), (b) a method to estimate power delivery in case of a meter malfunction, and (c) a measure of damages upon an early termination of the contract due to the fault of the utility. Developers should prepare to clarify these items in their negotiations with the utility.

Tax considerations

- *Green investment tax credit/Depreciation* – In June 2011, the Japanese parliament enacted a special Green Investment Tax Benefit entitling persons that acquire applicable renewable energy facilities to a special depreciation deduction equal to 30% of the acquisition price, or, if the entity acquiring the facility is a small or medium-sized enterprise, a tax credit equal to 7% of the acquisition price (with a cap of 20% of the relevant entity's tax liability). Facilities qualifying for the tax benefit include solar PV, wind, hydrothermal and biomass facilities.

This tax benefit was recently extended for applicable facilities purchased by March 31 2016, assuming the purchaser places the facility in service within one year following acquisition. In addition, for projects acquired or developed after May 29 2012 but prior to March 31 2015 (and which places the facility in service within one year of purchase), the purchaser is entitled during the first year that the facility is placed in service

FIGURE 1 - PROFIT AND LOSS SHARING



to an accelerated 100% depreciation deduction equal to the acquisition price. Given that the typical developer of these projects does not have a large balance sheet or tax capacity to take advantage of such large depreciation deductions, bringing in a separate tax-equity investor to the deal may be an attractive option.

- *GK/TK structure* – The inbound investor in Japan desires to invest in renewable energy projects in a tax-efficient manner. To advance this goal, project investors have begun to use a method that was first utilised for inbound investment in the Japanese real estate market, a tokumei kumiai (TK).

A TK, translated loosely, is a silent partnership between two entities, the TK investor and the business owner and manager, or the TK operator. The TK operator is established and organised as a Japanese entity, often a godo kasha (GK), which, in its most simple form, would own 100% of the project assets, and would also constitute the project company GK (the project GK). Commonly, the TK operator/project GK will have an upstream Japanese or offshore owner that exercises control over the project GK's business.

The TK investor is organised and domiciled abroad, and must be passive and have no control over the operations of the project GK. The TK investor and TK operator typically enter into a TK agreement, whereby, in exchange for the TK investor's contribution of cash or other property, the TK Investor receives a right to participate in the profits in the project GK's business. The TK agreement also contains the terms related to sharing of profits and losses among the parties. See Figure 1 and Figure 2 for a simplified illustration of this structure.

Without using the TK arrangement, the project GK is subject to an effective corporate tax rate of approximately 34% of income from its electric generation business, and after this tax has been collected dividends to an offshore parent entity are also subject to a withholding tax (ranging from 0%–20.42% depending on the tax treaty).

The GK/TK structure illustrated above generally avoids this problem of double taxation. TK distributions from the project GK to the foreign TK investor will typically only be subject to the 20.42% withholding tax rate (or less, depending on whether there is a relevant tax treaty between the TK investor's country of organisation and Japan). The project GK may deduct profits allocable to the TK investor from its taxable income, thus eliminating double taxation on its allocated earnings.

The foreign investor utilising the GK/TK structure needs to carefully consider a couple of items. The most important is establishing the independence of the project GK from the TK investor; if the project GK is perceived by the tax authority to be controlled by the TK investor, the application of Japanese tax law may result in reduced project GK deductibility of profit allocations to the TK Investor.

Other tax rules to be aware of are the earnings stripping rule and the thin capitalisation rule. These rules work to disallow a portion of project GK gross interest expense deductions on related person guaranteed-debt. A related person includes an entity that indirectly or directly owns 50% or more of the equity interests in the Project GK or an entity that exercises substantial control over the project GK through financial, personnel, or business means. Thus, attention should be paid to the project GK financing arrangements, as a financing guaranty or other form of credit support provided by the TK investor to the project GK could trigger the rule.

Keeping these considerations in mind, given the potential tax efficiencies, foreign project developers would be wise to consider the GK/TK structure when investing in Japan and should discuss the various benefits and risks with their tax advisers.

Developer considerations

Several risks exist related to developers obtaining site control in Japan. First, because there is no title insurance in Japan, the appropriate land registry records need to be thoroughly checked by professionals. Unregistered leasehold interests are subject to perfection risk in relation to future transferees, so the developer needs to be certain that proper leasehold registration has been effected. Leases of property with many co-owners present additional problems, especially if there are absentee landowners, as their consent often is required to register leasehold interests.

In Japan, unlike countries in Europe, there is no central source for renewable energy project development and construction permits. A patchwork of national, regional and local ordinances and regulations may be applicable to the development, construction and operation of any one project, depending on the site and technology utilised. Developers should consult with relevant permitting counsel to determine which regulations apply to a particular project site. Also, while the FIT Act does not restrict foreign investments in

renewable energy projects in Japan, investors may be required to complete necessary procedures under the Foreign Exchange and Foreign Trade Act depending on the form of investment.

Apart from these considerations, developers face many other challenges related to facility construction. Given the level of activity, there is a shortage of qualified engineers and construction companies required to design and build projects. Additionally, the ability of foreign construction firms to obtain appropriate licences is tapered given that the approval process is often slow and unwieldy. These restrictions often present problems for inbound investors seeking to use a European or US engineering, procurement and construction (EPC) contractor that does not possess the appropriate Japanese licenses.

For developers on a tight timeline that still wish to use a foreign EPC contractor, one solution is to directly contract with Japanese construction contractors (rather than relying on the EPC contractor to subcontract these responsibilities, which would be prohibited). Then, in order to have a contract package that is equivalent to a traditional EPC contract, the developer should have the foreign EPC contractor guarantee the facility design and specifications, construction schedule and ultimate work product of the Japanese construction contractors, typically in the form of a construction management contract. After procuring this construction wrap the developer will have comfort that the project will be built consistent with the typical standards of the foreign EPC contractor and will not run afoul of the Japanese licensing requirements.

- *Speculation and the sunset* – As the Japanese market for renewable development has been extremely active, some problems have emerged that are now being considered by the METI and other relevant authorities. Many companies rushed to purchase or lease available project sites and "lock in" the ¥42 FIT price that was available for solar facilities that met the FIT Act conditions prior to March 2013. But many of these developers have postponed construction and continue to occupy many desirable project sites to maintain the high FIT price. Some of these developers are waiting for lower construction costs, while others do not have the financial or technical ability to actually develop the project. Still others are pure speculators that have secured the high FIT price and are waiting to find a willing buyer.

Given these issues, the METI has begun to send questionnaires to developers that obtained the ¥42 FIT price but have not yet commenced commercial operation. These basically audit the project's status and include questions regarding site control, the construction timeline, and PPA status. If the developer responds that there are no plans to start construction or operation in the near future, the METI will seek additional information and background material. The METI has not yet affirmatively indicated that it intends to terminate prior FIT price approvals following such audits, but may alter this policy in the future. Therefore, developers that have locked in the ¥42 FIT price should be prepared to competently explain to the METI why construction has not yet commenced.

Developers and investors will have a number of opportunities to participate in the Japanese renewable energy market in coming years. In 2012, non-hydro renewable energy constituted around 1.6% of Japan's energy mix. The current Japanese government recently commissioned a study to determine the appropriate country energy mix, which should be completed by 2016; thus there are no definitive targets or percentage goals available at this time.

However, renewables have been indicated as a major focus and priority growth area by the government. In the prior Democratic Party-controlled government, a 15%–20% renewable energy target was introduced. In today's post-Fukushima environment there is little political appetite for nuclear energy, and the price for imported liquefied natural gas remains very high. Thus, many expect that the current Liberal Democratic Party-controlled government could target even more aggressive renewable energy goals.

Given these Japanese government commitments to renewable energy, many expect a rich FIT price for many years to come. That said, developers and investors looking to enter the market, especially those with little to no experience in Japanese project development, should be aware of the considerations and pitfalls associated with such development, including those described in this article, and should proceed carefully with experienced advisers. ■

FIGURE 2 - INDEPENDENT INVESTORS