THAI SOLAR ENERGY PLC

No. 156/2017 17 November 2017

Company Rating: BBB

Outlook: Stable

Company Rating History:

Date	Rating	Outlook/Alert
08/02/16	BBB	Stable

Contacts:

Pravit Chaichamnapai, CFA
pravit@trisrating.com

Sermwit Sriyotha
sermwit@trisrating.com

Parat Mahuttano
parat@trisrating.com

Monthian Chantarklam
monthian@trisrating.com

WWW.TRISRATING.COM

Rating Rationale

TRIS Rating affirms the company rating of Thai Solar Energy PLC (TSE) at “BBB”. The rating continues to reflect the predictable cash flows TSE receives from the long-term power purchase agreements (PPAs) with state-owned utility off-takers, the good performances of the main power plants, and the good prospects for renewable energy in Thailand. However, the rating is partially offset by TSE’s execution risk associated with biomass power projects and a weakened financial profile due to a large debt-funded investment in the Onikoube project in Japan.

TSE is an investment holding company, created to develop renewable energy power projects. The company was established in 2008 and was listed on the Market for Alternative Investment (MAI) in October 2014. In late 2016, Sino-Thai Engineering and Construction PLC (STEC), a leading construction contractor, purchased a 10% stake in TSE, and became the company’s third-largest shareholder. Dr. Cathleen Maleenont was the largest shareholder, holding about 45.5% of the outstanding shares as of May 2017.

TSE started the business from developing solar power plants in Thailand before the company expanded aboard for growth opportunity. As of September 2017, the company racked up a total contracted capacity of 298.42 megawatts (MW). TSE currently operates solar power projects (99.5 MW) and develops biomass power projects (22.2 MW) in Thailand, plus solar farms in Japan (176.72 MW, including the Onikoube project). All the Thai solar power projects are operating, but the biomass power projects are still under construction. Only five MW of the solar projects in Japan are operating.

TSE’s core projects, solar farms with contracted capacity of 80 MW, are owned and operated by Thai Solar Renewable Co., Ltd. (TSR), which is a joint venture (JV) between TSE (60%) and Global Power Synergy PLC (GSPC) (40%). The projects are considered a centerpiece of profit-making, contributing approximately 68% of TSE’s revenue in 2016.

In the absence of large opportunities for domestic solar power in years ahead, TSE has pledged to invest in the Onikoube project, a large solar farm in Japan, with the contracted capacity of 154.9 MW. TSE will receive a Feed-in Tariff (FiT) of 36 yen per kilowatt hours (kWh) under a 20-year PPA. The project requires an investment of about 60 billion yen or Bt18-Bt19 billion. The investment will be structured as a JV with strategic partners. The company plans to primarily fund the project with debts. The new borrowings will comprise at least 80% of the total investment need for the project. The project development phase will span about four years and the commercial operation date is planned in the fourth quarter of 2021.

TRIS Rating views that the Onikoube project, the largest project TSE has ever acquired, will double production capacity, and thus enlarging cash flow base significantly. More importantly, the Onikoube project should help TSE solidify its earnings after the tariff adder TSE receives from the main solar farms starts to expire in 2023-2024.

On the downside, the size of the Onikoube project is material, as the project investment is about 2 times the value of TSE’s assets at present. The high degree of leverage for the project will also weigh down TSE’s financial profile during the development phase. That said, TRIS Rating affirms the current rating, given the investment structure and acceptable risks associated with the project.

TSE's business profile is moderate, reflecting the reliable cash flows from the sale of electricity to the credible off-takers, the Provincial Electricity Authority (PEA) and the Metropolitan Electricity Authority (MEA). TSE's core project, the 80-MW solar farms, carries the multi-year PPAs that receive a favorable tariff adder of Bt6.5 per kWh for 10 years. The secured cash flows from the solar power projects are supported by the contractually committed tariffs, the minimal payment risk of the buyers, as well as a low operational risk in the solar power plants.

The rating factors in the better-than-estimated performance of the core project. The 80-MW solar farms have produced more power than the estimated power output, with a probability of 50% (P50), by 5%-8% per year since the plants started up. The rating also incorporates the encouraging prospects for renewable sources of energy in Thailand, as evidenced by the government's concrete long-term plan to develop alternative sources of energy.

On the opposite end, TSE's business strengths are weighed down by lack of track record in executing biomass power projects. The two biomass projects under the operation of Oscar Save the World Co., Ltd. (OSCAR) and Bangsawan Green Co., Ltd. (BSW) are expected to commence commercial operation in mid-2018. A biomass power project carries higher execution risks than a solar power project as a biomass power project has higher operational complexity, resource risks, and uncertainty of fuel prices.

TRIS Rating highlights that TSE's reported financial statements do not fully reflect all of the sources of revenue and debt exposure as TSE records the performance of the 80-MW solar farm projects, or TSR, by the equity method. Thus, TRIS Rating adjusts important figures, such as revenue, earnings before interest, tax, depreciation, and amortization (EBITDA), funds from operations (FFO), and total debts, by including TSR's financial performance on pro-rata basis in the rating assessment to more accurately reflect the company's financial performance and potential exposure.

During 2018-2020, TSE's revenue is expected to grow significantly, driven by new income steams generated from two biomass power projects and some solar farm projects in Japan. Adjusted revenue is expected to rise from Bt1.5 billion in 2018 to Bt2.1 billion in 2020. Adjusted EBITDA will improve to Bt1.3-Bt1.4 billion per year during the same period. Our projection assumes the revenue from the Onikoube project will occur in 2022.

The capital expenditures TSE has planned will deteriorate the financial profile significantly. The company already paid Bt4.1 billion approximately for licenses in the Onikobe project. The remaining investments during 2018-2020 will include Bt15 billion for the development of Onikoube project, plus Bt2.6 billion for the construction of biomass power projects and other solar farms in Japan. TSE's investments will amount to about Bt3-Bt4 billion per annum during 2018-2020. TSE is expected to receive new equity after the company successfully sells its 40% ownership of shares in the Onikoube project to partners. However, despite the equity injection, TSE's debt to capitalization ratio is expected to continue to weaken. The ratio will rise to 60%-70% during 2018-2020. The FFO to total debt ratio will weaken, declining to 6%-8% over the forecast period. TRIS Rating does not expect TSE to make any more sizable investments unless the company could raise enough additional capital to maintain leverage at an acceptable level. A deluge of new borrowing could jeopardize TSE's credit strength further and add downward pressure to the rating.

Rating Outlook

The "stable" outlook reflects the expectation that TSE will remain capable of generating sizable cash flows from its core solar power projects in the years ahead, on the back of sustained operating efficiencies.

The credit upside is limited during the development period of the Onikoube project, given the increasing debt load and weakened cash flow against debt obligations over the next three years. In contrast, the credit downside would emerge if the financial profile weakens significantly. This could happen if TSE makes excessive debt-funded investments or fails to deliver satisfactory returns from the projects under development.

Thai Solar Energy PLC (TSE)

Company Rating:	BBB
Rating Outlook:	Stable

Financial Statistics and Key Financial Ratios*

Unit: Bt million

		------------------- Year Ended 31 Dec ------------------			
	Jan-Sep 2017	2016	2015	2014	2013
Revenue	180	422	129	825	141
Adjusted Revenue***	855	1,309	1,071	825	141
Gross interest expense	93	60	28	158	83
Net income from operations	317	617	516	317	20
Funds from operations (FFO)	275	510	438	468	(72)
Adjusted FFO***	524	867	712	468	(72)
Earnings before interest, tax, depreciation, and amortization (EBITDA)	470	775	590	621	8
Adjusted EBITDA***	605	1,025	853	621	8
Capital expenditures	1,798	926	937	1,060	3,611
Total assets	9,515	8,375	4,844	6,881	5,305
Total debt	4,504	3,328	762	3,159	3,517
Adjusted debt***	6,346	5,412	3,168	3,159	3,517
Shareholders' equity	4,809	4,585	4,040	3,488	933
Operating income before depreciation and amortization as % of sales***	68.7	75.4	76.1	74.2	(0.1)
Pretax return on permanent capital (%)***	4.2 **	9.5	9.8	8.5	(1.0)
EBITDA Interest coverage (times)***	3.7	6.2	5.5	3.9	0.1
FFO/total debt (%)***	8.3 **	16.0	22.5	14.8	(2.0)
Total debt/capitalization (%)***	56.9	54.1	43.9	47.5	79.0

* *Consolidated financial statements*
** *Non-annualized*
*** *The figures and financial ratios are adjusted by including TSR's financial performance (80-MW solar farm projects) on pro-rata basis.*

Note: A new accounting standard took effect in 2015. The standard covers recognition of the performance of joint venture (JV) companies. The new standard meant TSE has had to change the accounting to recognize the performance of its JV from the proportionate consolidation method to the equity method, effective on 1 January 2015. As a result, some financial figures in 2015 and beyond may not be directly comparable to the values prior to 2015.

TRIS Rating Co., Ltd.
Tel: 0-2231-3011 ext 500 / Silom Complex Building, 24th Floor, 191 Silom Road, Bangkok 10500, Thailand www.trisrating.com