

# THAI SOLAR ENERGY PLC

No. 154/2020  
30 September 2020

## CORPORATES

**Company Rating:** BBB-  
**Outlook:** Stable

**Last Review Date:** 26/09/19

### Company Rating History:

Date	Rating	Outlook/Alert
26/09/19	BBB	Negative
08/02/16	BBB	Stable

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## RATIONALE

TRIS Rating downgrades the company rating on Thai Solar Energy PLC (TSE) to “BBB-” from “BBB” and revises the rating outlook to “stable” from “negative”. The rating downgrade mirrors an expected surge in TSE’s financial leverage to fund the construction of the company’s largest solar power plant, the Onikoube project, as well as to support its potential acquisitions or investments in new renewable power projects.

The rating continues to reflect the reliable cash flows from the company’s renewable power portfolio and the sound performance of its operating power plants. However, these credit strengths are tempered by the expected rise in financial leverage over the near term.

## KEY RATING CONSIDERATIONS

### Reliable cash flow from power portfolio

TRIS Rating expects TSE’s solid cash flow generation will sustain over the foreseeable future, backed by secure earnings from multi-year power purchase agreements (PPAs) with creditable utility off-takers. At the end of August 2020, TSE’s total installed power generation capacity and contracted capacity were 355.8 megawatts (MW) and 304.9 MW, respectively. Solar power assets constitute about 90% of total contracted capacity while the remainder comes from biomass power plants.

TSE’s solar power portfolio remains its core cash generator, contributing about 75% of total earnings before interest, taxes, depreciation, and amortization (EBITDA). Cash flow from solar farms is steady and predictable, owing largely to low operational risks.

About 171.9 MW contracted capacity of TSE’s current power portfolio is in operation. Upcoming new capacity of 133 MW will stem from the much-anticipated Onikoube project, a sizable solar farm in Japan. The project is expected to commence operations in the fourth quarter of 2022.

### Sound performance of power plants

TSE’s existing power plants have reported consistently sound performance. Total power output in 2019 rose materially to 402.9 gigawatt-hours (GWh), from 251.4 GWh in 2018, up by 60% year-on-year (y-o-y) thanks to the full-year contribution of output from the company’s biomass power plants. In the first half of 2020, output rose to 216.3 GWh from 200.6 GWh over the same period last year, an increase of 7.8%.

TSE’s core solar project, comprising 10 solar farms with 80-MW contracted capacity, continues to outperform the 50% probability of production (P50) by 5%-10%. Its biomass power plants have also delivered satisfactory results with high utilization rates and improving profitability. This pool of power plants contributes most of TSE’s earnings, accounting for approximately 85% of total EBITDA in 2019.

### Challenging business environment

We view investment opportunities for renewable power, particularly solar power in Thailand, to be in decline compared to the boom period several years

ago. The changing business environment of Thailand's renewable power industry has made new investment more difficult, following the cessation of incentive tariffs, intensified bidding competition, and diminishing returns on investment. Furthermore, despite the government's intent to support the use of renewable power, bid openings for new public projects are still being delayed, causing project developers to enter into PPAs with private customers or seek opportunities overseas instead. Given the dearth of new opportunities, we expect to see increasing consolidation and divestiture of existing power projects in the industry.

TSE has a target to add 100-300 MW of new capacity over the medium term. Since 2019, the company has added 31 MW of contracted capacity, comprising four operating solar farms (23 MW) and a floating solar power plant (8 MW) under a private PPA. To reach its growth objectives, we believe the company will likely seek investment opportunities by acquiring operating power assets in Thailand or by undertaking green-field projects overseas.

### **Investment risk in the Onikoube project**

TSE's credit strength is constrained chiefly by its exposure in the Onikoube project, a single large-scale solar farm in Japan. The project, which got underway in 2017, is TSE's largest-ever investment. TSE's main objective in the investment is to maintain revenue growth in view of an anticipated sharp drop in revenue from its key 80-MW solar farms due to the expiry of adders between 2023 and 2024.

The investment in the project has been a strain on TSE's credit profile, given its large capital spending requirement and long period of development. The Onikoube project accounts for 44% of TSE's power portfolio, suggesting significant concentration risk. In addition, TSE will likely shoulder a heavy debt load until the project can commence operations.

However, these drawbacks are offset by the project's low country risk, favorable tariff rate of JPY36 per kilowatt-hour, and low construction and operational risks. In the long term, we believe the project commencement will likely be a positive factor that will considerably strengthen TSE's credit profile. Given its sizable scale and high tariff rates, the project should bolster TSE's business strength and enlarge its cash flow for a sustained period once the project begins its commercial operation.

### **Debt-heavy financial profile**

In our base case for 2020-2022, we expect TSE's power plant performance will remain solid and bring in around THB1.4-THB1.55 billion in EBITDA per year. We also expect the Onikoube project to progress as planned and TSE to maintain 100% ownership in the project over the course of development, contrary to its initial plan to divest a 40% share in the project.

We expect TSE's financial profile to weaken during construction as the company will need to spend approximately THB9.4 billion during 2020-2022 for construction of the Onikoube project. The spending will be mainly financed by loans. Since we believe the company is still seeking to acquire existing renewable projects and participate in bidding for new projects once they are available, we assume that TSE will further add around 10-20 MW of new capacity per year to its portfolio. We believe the probability of TSE raising new equity to be limited. We see the divestiture of existing power projects as a more probable option for the company to meet its financing needs.

Based on this scenario, we forecast that the ratio of net debt to EBITDA will rise and stay at around 10 times during 2021-2022. This level of leverage is deemed relatively high compared to most other renewable power producers rated by TRIS Rating. However, we expect TSE's leverage to drop sharply once the Onikoube project starts operations. Leverage could also be lowered in the scenario of a partial divestment of TSE's share in the project.

### **Liquidity remains manageable**

In assessing TSE's financial profile and performance, we include the respective assets, liabilities, and financial performances of the joint ventures in TSE's consolidated accounts, in proportion to the ownership stake in each venture. As of June 2020, total debt stood at THB12.55 billion. In all, the company had THB994 million in long-term loans coming due in the next 12 months, which should be sufficiently covered by cash on hand and expected operating cash flows.

### **BASE-CASE ASSUMPTIONS**

- Total operating revenues of about THB2.2-THB2.4 billion per year during 2020-2022
- EBITDA margin (EBITDA as a percentage of total operating revenue) of around 60%-63%
- Total capital expenditure (CAPEX) amounting to about THB12 billion during 2020-2022
- Dividend payout ratio of 30%

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**RATING OUTLOOK**

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The “stable” outlook reflects our expectation that TSE’s power portfolio will continue to deliver sound performance and bring in robust cash flows. Furthermore, we expect the Onikoube project to progress as scheduled with no significant cost overruns.

**RATING SENSITIVITIES**

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The rating upside during the development of the Onikoube project is limited but it could emerge if TSE strengthens its capital structure significantly, which could result from selling part of its stake in the Onikoube project or raising new equity, such that the ratio of debt to EBITDA declines to below 8 times.

A rating downgrade could occur if TSE’s financial profile deteriorates further, which could result from aggressive debt-funded investments.

**COMPANY OVERVIEW**

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TSE is an investment holding company, established in 2008 to develop renewable power projects. The company was listed on the Market for Alternative Investment (MAI) in October 2014. TSE’s shares were moved to trade on the Stock Exchange of Thailand (SET) in May 2019.

As of August 2020, the company had 42 projects in its power portfolio. The company had total installed capacity of about 355.8 MW and contracted capacity of 304.9 MW. The equity installed capacity was 313.9 MW. All projects are in operation, except the Onikoube project.

The company’s core project, comprising 10 solar farms, is operated by Thai Solar Renewable Co., Ltd. (TSR), a 60:40 joint venture (JV) between TSE and Global Power Synergy PLC (GPSC). The project’s installed capacity is 104.8 MW with contracted capacity of 80 MW. The project is a centerpiece of profit-making, generating over 63% of TSE’s EBITDA in 2019. The company is constructing the Onikoube project, a Japanese solar farm with an installed capacity of 147 MW and a contracted capacity of 133 MW. The project is scheduled to commence operations in the fourth quarter of 2022.

KEY OPERATING PERFORMANCE

Table 1: Power Project Portfolio as of Aug 2020

Project/Country	Hold by TSE (%)	Status	Installed Capacity (MW)	Contracted Capacity (MW)	Tariff	Commercial Operating date
<b>Thailand</b>						
<b><u>Solar</u></b>						
Solar Farm	60	Operating	104.8	80	Adder Bt6.5	Jul-13- Jun14
Solar Rooftop	100	Operating	14	14	FIT Bt6.16	Sep14 - Aug15
SLC (Prajubkiri)	100	Operating	1	1	FIT Bt5.66	Dec 16
INS (Ang Thong)	100	Operating	2	2	FIT Bt5.66	Dec 15
BSS (Ayuthaya)	100	Operating	5	5	FIT Bt5.66	Dec 16
BSE (Udonthani)	100	Operating	5	5	FIT Bt4.12	Dec 18
SSP (Ang Thong)	100	Operating	9.7	8	Adder Bt8.0	Mar 13
MARS (Krabi)	100	Operating	5	5	FIT Bt4.12	Dec 18
BPT (Prachinburi)	100	Developing	8	8	Private PPA	Q1 21
<b><u>Biomass</u></b>						
BSW	100	Operating	6	4.6	FIT Bt4.24 + Premium Bt0.3 (8 years)	Mar18
OSW 1 & 2	100	Operating	19.8	17.6	FIT Bt4.24 + Premium Bt0.3 (8 years)	Aug-Oct-18
			<b>180.3</b>	<b>150.2</b>		
<b>Japan</b>						
<b><u>Solar</u></b>						
Kuno	100	Operating	0.65	0.5	FIT JPY36	Aug 15
Shima	100	Operating	1.43	1.25	FIT JPY32	Mar 16
Hikeme	100	Operating	1.86	1.5	FIT JPY32	Apr 16
Ryugasaki	100	Operating	2.36	1.75	FIT JPY36	Sep 16
Sakura	100	Operating	2.56	1.99	FIT JPY32	Nov 17
Jyoso	100	Operating	1.59	1.25	FIT JPY36	May 18
Hanamizuki	100	Operating	18.1	13.5	FIT JPY36	Jan 19
Onikoube	100	Developing	147.0	133.0	FIT JPY36	Q4 2022
			<b>175.5</b>	<b>154.7</b>		
<b>Total Capacity</b>			<b>355.8</b>	<b>304.9</b>		

Source: TSE

**FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS\***

Unit: Mil. THB

	Jan-Jun 2020	-----Year Ended 31 December -----			
		2019	2018	2017	2016
Total operating revenues	1,266	2,297	1,481	1,172	1,332
Earnings before interest and taxes (EBIT)	504	958	666	625	826
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	766	1,463	1,088	859	1,040
Funds from operations (FFO)	582	1,240	796	639	829
Adjusted interest expense	184	218	207	213	177
Capital expenditures	958	446	2,304	1,737	938
Total assets	18,942	17,362	16,352	14,125	10,599
Adjusted debt	11,109	10,249	10,233	8,171	2,959
Adjusted equity	5,774	5,632	4,915	4,781	4,585
<b>Adjusted Ratios</b>					
EBITDA Margin (%)	60.5	63.7	73.5	73.4	78.1
Pretax return on permanent capital (%)	5.4 **	5.8	4.5	5.2	9.4
EBITDA interest coverage (times)	4.2	6.7	5.3	4.0	5.9
Debt to EBITDA (times)	7.7 **	7.0	9.4	9.5	2.8
FFO to debt (%)	10.7 **	12.1	7.8	7.8	28.0
Debt to capitalization (%)	65.8	64.5	67.6	63.1	39.2

\* Consolidated financial statements

\*\* Annualized with 12 months trailing

Note: All figures and financial ratios are adjusted by including TSR's financial performance (80-MW solar farm projects) on proportionate basis instead of equity method.

**RELATED CRITERIA**

- Rating Methodology – Corporate, 26 July 2019
- Key Financial Ratios and Adjustments, 5 September 2018

**Thai Solar Energy PLC (TSE)**

<b>Company Rating:</b>	BBB-
<b>Rating Outlook:</b>	Stable

**TRIS Rating Co., Ltd.**

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