

# GLOW ENERGY PLC

No. 175/2018  
6 November 2018

## CORPORATES

<b>Company Rating:</b>	AA-
<b>Issue Ratings:</b>	
Guaranteed	AA-
<b>Outlook:</b>	Developing

<b>Last Review Date :</b>		
<b>Date</b>	<b>Rating</b>	<b>Outlook/Alert</b>
22/06/18	AA-	Alert Developing

<b>Company Rating History:</b>		
<b>Date</b>	<b>Rating</b>	<b>Outlook/Alert</b>
22/06/18	AA-	Alert Developing
21/09/17	AA-	Stable
09/09/14	A+	Stable
04/05/06	A	Stable
25/07/03	A-	Stable
27/07/00	BBB+	Stable

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## RATIONALE

TRIS Rating affirms the company rating on GLOW Energy PLC (GLOW) at “AA-”, and also affirms the ratings on GLOW’s guaranteed debentures at “AA-”. The ratings reflect the company’s solid cash flows from long-term power purchase agreements (PPA), reliable record of operation, and strong financial profile. These strengths are partially offset by exposure to fuel price risk and declining revenue profile.

At the same time, TRIS Rating replaces a “developing” CreditAlert on GLOW’s ratings with a “developing” outlook. The “developing” outlook reflects potential delays in the acquisition of GLOW by Global Power Synergy PLC (GPSC) after Energy Regulatory Commission (ERC) disapproved the transaction.

TRIS Rating highlights that if GPSC becomes the largest shareholder of GLOW, GLOW’s credit profile may change as the new owner may alter the company’s business strategy and financial policies. GLOW’s credit ratings will be capped by the credit profile of GPSC, under TRIS Rating’s Group Rating Methodology.

## KEY RATING CONSIDERATIONS

### Reliable revenue from PPAs

GLOW’s strong credit profile is derived from long-term contracts with a creditworthy off-taker, Electricity Generating Authority of Thailand (EGAT), and a diverse group of industrial customers. As of September 2018, GLOW’s total capacity was 3,216.7 megawatts (MW). The PPA contracts with EGAT cover 71% of total capacity. GLOW supplies the remaining capacities and steam generating capacities to industrial customers. Sales of electricity to EGAT makes up about 55%-60% of GLOW’s total revenue, while the sales to industrial customers comprises 25%-30%. The balance is sales of steam and water to industrial customers.

Electricity sales to EGAT are reliable and predictable, underpinned by contractual conditions, such as minimum off-take amounts and a mechanism to pass through fuel price. The lives of the existing PPAs with EGAT vary from 2-19 years. Industrial customers are also a steady source of revenue, thanks to lengthy contracts and stable electricity demand since the most of them are large petrochemical producers in Map Ta Phut area.

### Strong operational record

GLOW’s operations remain strong, characterized by its long record of high plant availability. The equivalent availability factor (EAF) in the cogeneration segment has stayed over 95% availability for the last five years. The combined EAF of two independent power producer (IPP) power plants, Glow IPP and GHECO-One, has ranged 93%-96% in a year with no scheduled maintenance. The steady high availability demonstrates GLOW’s ability to supply electricity, and thus making the revenue and earning stable and predictable.

### Limited exposure to fuel price risk

GLOW’s electricity sales to industrial customers, accounted for 25%-30% of total revenue, expose to fuel price risk. The risk is due to a possible mismatch between the selling price of electricity and its fuel cost used to generate electricity. GLOW’s selling price is based on the Provincial Electricity Authority’s (PEA) tariff structure, which contains an adjustable Ft component. The Ft component is designed to compensate the private power producer for fuel

price fluctuations. However, any adjustments of the Ft payment carry a time lag and related authorities have some discretion over timing and size of the adjustments. As a result, the profit margin of power sold to GLOW's industrial customers varies more widely than the margin earned on the power sold to EGAT.

### **Declining stage of revenue**

We expect GLOW's cash flow will decline over the next three years, due mainly to a step down of structured revenue of GHECO-one, a 660-MW coal-fired power plant. As specified in the PPA, GHECO-One's revenue from the availability payment will drop rapidly during 2019-2020 by about 30%. In addition, the total contracted capacity of cogeneration segment will fall since four PPAs, totaling 230 MW, will expire over 2021 and 2022. According to the National Energy Policy Council's (NEPC) resolution in May 2016, the four expiring PPAs may be replaced with new contracts. But the contracted capacity in each of new PPAs is likely to be limited at maximum of 30 MW, down from 55-60 MW each in the existing PPAs.

As a result, we forecast that earnings before interest, taxes, depreciation, and amortization (EBITDA) of GLOW will gradually decrease to Bt16-Bt17 billion over the next three years, from Bt18 billion recorded in 2016 and 2017. For the replacement of expiring SPP PPAs, we view that the downside risk may occur from potential delays in obtaining the new PPAs or adverse changes in the detail of new contracts since the certain terms and conditions have not been finalized.

### **Strong financial profile**

TRIS Rating expects GLOW's financial status will remain strong. Given limited opportunities in Thailand, GLOW is expected to refinance part of its maturing bonds and will continue to pay special dividends in a bid to maintain the current gearing ratio. Over the next three years, we forecast the debt to EBITDA ratio will range between 1.5-2 times.

### **GPSC's continued efforts to acquire GLOW**

The prospect of completing the acquisition of GLOW by GPSC is unclear after ERC's disapproval of the transaction. ERC viewed that the transaction was deemed to breach the Energy Industry Act by reducing competition and giving GPSC a near-monopoly in the supply of power to customers in one industrial area. GPSC decided to file the appeal to ERC and will submit additional information by 15 November 2018.

GPSC is an affiliate of PTT PLC, the flagship of the power generating segment. On 20 June 2018, GPSC announced it would purchase 69.11% of GLOW's outstanding shares, followed by a tender offer for the rest. The total transaction is valued at approximately Bt141 billion.

### **RATING OUTLOOK**

The "developing" outlook reflects the uncertainty surrounding the share ownership transfer between ENGIE (GLOW's major shareholder) and GPSC post ERC's disapproval of the transaction. We view that the appeal process will prolong the completion of the deal, meanwhile the timeframe of the appeal process is unclear.

### **RATING SENSITIVITIES**

A change in GLOW's ratings and/or outlook will mainly depend on the completion of the share ownership transfer, which is subject to final approval from the ERC. The "developing" outlook may be changed to "stable" if the proposed acquisition is halted. If the transaction is allowed to continue, any change in the ratings and/or outlook will happen after we conduct a full assessment of the post-acquisition credit profile of GLOW and the new shareholders. If the acquisition is successfully completed, GPSC will become the largest shareholder of GLOW. The post-transaction credit profile of GPSC will largely determine the credit ratings of GLOW, under our Group Rating Methodology.

### **COMPANY OVERVIEW**

GLOW is a leading private power producer in Thailand. The company was established in 1993 to provide utility services in the Map Ta Phut area. GLOW was listed on the Stock Exchange of Thailand (SET) in April 2005. The business comprises the cogeneration (including the SPP) and the IPP segment. The company and its affiliates supply electricity, steam, and treated water to large customers in the Map Ta Phut Industrial Estate, the Eastern Seaboard Industrial Estate, and Siam Eastern Industrial Park.

As of September 2018, GLOW's power generating capacity totaled 3,216.7 MW, largely consisting of 1,525 MW in IPP plants and 1,682 MW in cogeneration segment. GLOW's technical knowledge and operations are underpinned by ENGIE, a French energy company. ENGIE remains GLOW's major shareholder, holding about 69% of the total shares.

**KEY OPERATING PERFORMANCE**
**Table 1: GLOW's Power Portfolio**

Plant Name	Type	Holding (%)	Capacity (MW)	Equity Capacity (MW)	Steam (Tonne/hr)	Commercial Operating Date
<b>IPP Business</b>						
GLOW IPP	Gas	95	713	677.4	-	Jan 2003
GHECO-One	Coal	65	660	429	-	Aug 2012
Houay Ho	Hydro	67.25	152	84.1	-	Sep 1999
<b>Total IPP</b>			<b>1,525</b>	<b>1,208.6</b>		
<b>Cogeneration Business</b>						
Glow Energy Phase 1	Gas	100	-	-	250	Jul 1994
Glow Energy Phase 2	Gas	100	281	281	300	Apr 1996
Glow Energy Phase 4	Gas	100	77	77	137	Jan 2005
Glow Energy Phase 5	Gas	100	328	328	160	Sep 2011
Glow SPP 1	Gas	100	124	124	90	Feb 1998
Glow SPP2/Glow SPP3	Hybrid Gas/Coal	100	513	513	190	Mar 1999
Glow Energy CFB 3	Coal	100	85	85	79	Nov 2010
Glow SPP 11 Phase 1 & 3	Gas	100	162	162	-	Oct 2000
Glow SPP 11 Phase 2	Gas	100	110	110	-	Dec 2012
<b>Total SPP</b>			<b>1,680</b>	<b>1,680</b>	<b>1,206</b>	
Glow Energy Solar	Solar	100	1.55	1.55	-	Aug 2012
Chonburi Clean Energy (CCE)	Waste	33.3	8.3	2.74	-	End 2019
C&I Rooftop Solar	Solar	100	1.87	1.87	-	End 2018
<b>Total Capacity</b>			<b>3,216.7</b>	<b>2,894.8</b>	<b>1,206</b>	

**Table 2: Plant Performance Statistics of GLOW**

Cogeneration Performance	Unit	9M2018	2017	2016	2015	2014
Net output*	MWhe ('000)	9,287	12,599	12,640	12,655	12,673
Availability	%	94.9	96.7	97.0	94.1	96.6
Forced outage	%	0.7	0.5	1.0	1.9	0.7
Schedule & maintenance outage**	%	4.3	2.75	2.0	4.0	2.7
Plant heat rate* - Gas-fired	BTU/kWh eq	8,078	8,136	8,113	8,098	8,155
Plant heat rate* - Coal-fired	BTU/kWh eq	10,419	10,293	10,363	10,389	10,437
<b>IPP Performance***</b>						
Net output	MWhe ('000)	4,253	5,056	5,521	7,477	9,831
Availability	%	94.7	91.8	93.5	88.0	96.2
Forced outage	%	3.4	0.2	1.7	2.7	1.0
Schedule & maintenance outage**	%	1.9	8.0	4.8	9.3	2.8
Plant heat rate - Gas-fired	BTU/kWh eq	7,283	7,465	7,400	7,054	6,980
Plant heat rate - Coal-fired	BTU/kWh eq	8,851	8,915	9,021	8,895	8,940

\* Including power and steam

\*\* Planned and unplanned maintenance outages

\*\*\* Excluding Houay Ho Power Company (HHPC)

## FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS\*

Unit: Bt million

	Jan-Sep *** 2018	-----Year Ended 31 December-----			
		2017	2016	2015	2014
Total operating revenues	40,144	51,212	52,825	64,274	73,168
Operating income	13,127	17,220	17,870	18,523	20,023
Earnings before interest and taxes (EBIT)	9,938	13,703	13,594	13,037	15,201
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	13,290	18,226	18,017	17,370	20,019
Funds from operations (FFO)	10,887	14,807	14,367	12,961	15,556
Adjusted interest expense	1,582	2,444	2,669	3,315	3,458
Capital expenditures	593	853	1,276	3,337	1,271
Total assets	105,064	106,031	109,518	116,864	120,322
Adjusted debt	29,513	31,541	39,372	44,848	52,627
Adjusted equity	56,867	58,009	56,771	55,958	52,571
<b>Adjusted Ratios</b>					
Operating income as % of total operating revenues (%)	32.7	33.6	33.8	28.8	27.4
Pretax return on permanent capital (%)	13.2 **	13.6	12.7	11.8	13.5
EBITDA interest coverage (times)	8.4	7.5	6.8	5.2	5.8
Debt to EBITDA (times)	1.7 **	1.7	2.2	2.6	2.6
FFO to debt (%)	48.4 **	46.9	36.5	28.9	29.6
Debt to capitalization (%)	34.2	35.2	41.0	44.5	50.0

\* Consolidated financial statements

\*\* Annualized with trailing 12 months

\*\*\* Unreviewed and unaudited financial statements

## RELATED CRITERIA

- Key Financial Ratios and Adjustments, 5 September 2018
- Rating Methodology – Corporate, 31 October 2007

**Glow Energy PLC (GLOW)**

<b>Company Rating:</b>	AA-
<b>Issue Ratings:</b>	
GLOW18NA : Bt1,500 million guaranteed debentures due 2018	AA-
GLOW194A : Bt2,000 million guaranteed debentures due 2019	AA-
GLOW190A : Bt1,400 million guaranteed debentures due 2019	AA-
GLOW218A : Bt5,555 million guaranteed debentures due 2021	AA-
GLOW259A : Bt4,000 million guaranteed debentures due 2025	AA-
GLOW265A : Bt3,000 million guaranteed debentures due 2026	AA-
<b>Rating Outlook:</b>	Developing

**TRIS Rating Co., Ltd.**

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