

# GLOW ENERGY PLC

No. 95/2016

15 September 2016

<b>Company Rating:</b>	A+
<b>Issue Ratings:</b>	
Guaranteed	A+
<b>Outlook:</b>	Stable

## Company Rating History:

Date	Rating	Outlook/Alert
09/09/14	A+	Stable
04/05/06	A	Stable
25/07/03	A-	Stable
27/07/00	BBB+	Stable

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## Rating Rationale

TRIS Rating affirms the company and guaranteed debenture ratings of GLOW Energy PLC (GLOW) at “A+”. The ratings continue to reflect GLOW’s proven track record in the power generating industry in Thailand, reliable cash flows from long-term power purchase agreements (PPA) with the Electricity Generating Authority of Thailand (EGAT), and long-term contracts with a group of industrial customers. These strengths are partially offset by customer concentration risk, as most of GLOW’s customers are in the petrochemical industry and are located in the Map Ta Phut area.

GLOW is a leading private power producer in Thailand. Its business scope includes cogeneration under the Small Power Producer (SPP) scheme and Independent Power Producer (IPP) projects. GLOW’s technical knowledge and operations are underpinned by ENGIE, which is one of the world’s leading energy providers, supplying energy throughout the world, but primarily in Europe. ENGIE remains the major shareholder of GLOW, holding about 69% of total shares.

As of June 2016, GLOW’s power generating capacity totaled 3,207 megawatts (MW), consisting of 1,525 MW in IPP plants and a total of 1,682 MW in cogeneration units. GLOW’s IPP plants include a 713-MW gas-fired plant in Chonburi province, a 660-MW coal-fired power plant in Rayong province, and a 152-MW hydro power plant in the Lao People’s Democratic Republic (Lao PDR). GLOW’s cogeneration segment primarily supplies electricity it produces to petrochemical plants in the Map Ta Phut Industrial Estate.

Of GLOW’s total capacity of 3,207 MW of electricity, 2,345 MW has been contracted to EGAT under several PPAs. The remainder of GLOW’s electricity and steam generating capacities are supplied to industrial customers via long-term contracts. These long-term commitments provide GLOW with reliable sources of cash inflow. In 2015, GLOW’s revenue was Bt64,225 million. Sales of electricity to EGAT comprised approximately 61% of total annual revenue. Sales of electricity to industrial customers was about 26%. The rest was sales of steam and water to industrial customers.

GLOW’s operational results remain stable. The equivalent availability factor (EAF) in the cogeneration segment in the first half of 2016 returned to 96.5%, exceeding the five-year average of about 95%. The EAF in the IPP segment was below 90% during 2015 and the first half of 2016 because Glow IPP Co., Ltd. (GIPP) had planned major inspections of about 95 days during November 2015 and February 2016. GHECO-One Co., Ltd. also had major planned maintenance between January and February in 2015.

GLOW’s financial profile continues to strengthen. In the first six months of 2016, earnings before interest, tax, depreciation, and amortization (EBITDA) was Bt10,023 million, up by 12% year-on-year (y-o-y). Funds from operation (FFO) were Bt8,267 million, up by 6.3% y-o-y. The increase in the cash inflows was attributed to strong demand from industrial customers, a widened gas spread, and no major

maintenance at GHECO-One in the past year. GLOW’s liquidity profile improved as the amount of outstanding debt fell. In the first six months of 2016, FFO to total debt ratio rose to 31% from 28.8% in 2015 and the EBITDA interest coverage ratio increased to 7.8 times from 5.7 times in 2015.

GLOW has two PPAs under the SPP program, totaling 180 MW, which will expire in 2017. According to the latest resolution of the National Energy Policy Committee (NEPC), GLOW is allowed to extend the expiring PPAs for three years. The new tariff will mainly cover the energy payment. The new extended contract limits selling capacity at 60 MW per contract, lower than GLOW’s existing contracts at 90 MW per contract. Thus GLOW’s extended contracted capacity will be reduced to 120 MW during 2017-2020. In TRIS Rating’s view, SPP expiration will have a limited effect on GLOW’s credit profile in the short to medium term. The 60-MW reduction in the contracted capacity represents about 2% of GLOW’s installed capacity. The reduction is estimated to decrease GLOW’s EBITDA by Bt200-Bt300 million per annum. In 2015, GLOW’s EBITDA was Bt18,485 million.

Going forward, GLOW is forecasted to generate solid and predictable cash flows. TRIS Rating’s base-case forecast assumes that GLOW’s cash flows will decline gradually due to a decrease in the Available Payment Rate (APR) of GIPP as per the PPA contract and a reduction in the contracted capacity affected from the SPP expiration. FFO is forecasted to range from Bt13,000-Bt15,000 million per annum over the next three years. Capital expenditures is assumed at about Bt1,000 million per annum. TRIS Rating forecasts that the company will have no material expenditures in the near term since potential investments are in a period of feasibility study stage. As a result, GLOW’s debt level is expected to decline further. Although there is a potential that GLOW will increase dividend payout again this year, TRIS Rating expects that GLOW’s debt to capitalization ratio will not exceed 50%, consistent to the company’s capital structure policy. The FFO to total debt ratio should stay between 30%-40% and EBITDA interest coverage ratio should range between 7-8 times over the next three years.

#### Rating Outlook

The “stable” outlook reflects the expectation that GLOW will receive stable streams of cash from its long-term power sales contracts with EGAT and its industrial customers. TRIS Rating also expects GLOW will sustain a good level of operating performance, deliver reliable cash flow streams, and maintain capital structure as planned.

The ratings and/or outlook could be revised upward if there is a significant improvement in the company’s cash flow base or financial profiles. In contrast, the ratings and/or outlook could be revised downward if GLOW’s operating performance deteriorates significantly or the company engages in a large debt-financed acquisition or investments that would significantly weaken its financial profile.

### GLOW Energy PLC (GLOW)

<b>Company Rating:</b>	A+
<b>Issue Ratings:</b>	
GLOW173A : Bt1,000 million guaranteed debentures due 2017	A+
GLOW175A : Bt2,000 million guaranteed debentures due 2017	A+
GLOW170A: Bt1,600 million guaranteed debentures due 2017	A+
GLOW186A : Bt2,500 million guaranteed debentures due 2018	A+
GLOW18NA : Bt1,500 million guaranteed debentures due 2018	A+
GLOW194A : Bt2,000 million guaranteed debentures due 2019	A+
GLOW190A : Bt1,400 million guaranteed debentures due 2019	A+
GLOW218A : Bt5,555 million guaranteed debentures due 2021	A+
GLOW259A : Bt4,000 million guaranteed debentures due 2025	A+
GLOW265A : Bt3,000 million guaranteed debentures due 2026	A+
<b>Rating Outlook:</b>	Stable

### Plant Performance Statistics of GLOW

Cogeneration Performance	Unit	Jan-Jun 2016	2015	2014	2013	2012	2011	2010
Net output*	MWhe ('000)	6,240	12,655	12,673	12,402	11,724	9,594	8,235
Availability	%	96.5	94.1	96.62	97.51	95.87	95.26	93.57
Forced outage	%	0.9	1.9	0.65	0.50	0.47	0.64	0.39
Schedule & maintenance outage**	%	2.6	4.0	2.73	1.99	3.65	4.10	6.04
Plant heat rate* - Gas-fired	BTU/kWh eq	8,162	8,098	8,155	8,105	8,091	8,621	8,762
Plant heat rate* - Coal-fired	BTU/kWh eq	10,288	10,389	10,437	10,513	10,420	10,796	10,165
<b>IPP Performance***</b>								
Net output	MWhe ('000)	2,744	7,477	9,831	9,222	6,661	4,841	5,327
Availability	%	89.1	88.0	96.24	88.42	84.82	96.26	95.37
Forced outage	%	0.5	2.7	0.96	6.77	5.53	1.82	1.80
Schedule & maintenance outage**	%	10.4	9.3	2.80	4.81	9.65	1.91	2.82
Plant heat rate - Gas-fired	BTU/kWh eq	8,127	7,054	6,980	6,946	6,930	6,924	6,898
Plant heat rate - Coal-fired	BTU/kWh eq	8,917	8,895	8,940	9,183	9,094	-	-

\* Including power and steam

\*\* Planned and unplanned maintenance outages

\*\*\* Excluding HHPC

### Financial Statistics and Key Financial Ratios\*

Unit: Bt million

	Jan-Jun 2016	----- Year Ended 31 December -----				
		2015	2014	2013	2012	2011
Sales	27,646	64,225	72,991	69,207	57,204	40,359
Gross interest expense	1,284	3,244	3,386	3,389	3,446	3,568
Net income from operations	5,147	8,512	9,200	8,217	4,476	3,864
Fund from operations (FFO)	8,267	15,217	15,739	13,927	10,201	7,638
Total capital expenditures	551	1,975	854	1,783	4,172	9,873
Total assets	112,914	117,169	120,322	125,006	130,039	120,235
Total debt	50,607	52,771	56,451	65,305	74,821	73,693
Total liabilities	57,657	61,210	67,751	77,746	87,496	81,003
Shareholders' equity	55,257	55,958	52,571	47,260	42,543	39,232
Depreciation & amortization	2,146	4,317	4,772	4,869	4,247	3,216
Dividends paid	7,050	6,380	5,537	3,277	3,021	2,854
Operating income before depreciation and amortization as % of sales	35.9	28.6	27.0	25.4	21.8	23.0
Pretax return on permanent capital (%)	14.3 **	13.0	13.8	11.6	7.3	5.8
Earnings before interest, tax, depreciation, and amortization (EBITDA) interest coverage (times)	7.8	5.7	5.9	5.4	3.7	2.7
FFO/total debt (%)	31.0 **	28.8	27.9	21.3	13.6	10.4
Total debt/capitalization (%)	47.8	48.5	51.8	58.0	63.8	65.3

\* Consolidated financial statements

\*\* Annualized from trailing 12 months

### TRIS Rating Co., Ltd.

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