

CreditUpdate

INDORAMA VENTURES PLC

16 November 2017

No. 74/2017

Company Rating:	A+
Issue Ratings:	
Senior unsecured	A+
Hybrid	A-
Outlook:	Positive

Company Rating History:

Date	Rating	Outlook/Alert
18/10/17	A+	Positive
09/09/11	A+	Stable

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Rating Rationale

TRIS Rating affirms the company rating of Indorama Ventures PLC (IVL) and the ratings of IVL's existing senior unsecured debentures at "A+". TRIS Rating also affirms the rating of "A-" to IVL's subordinated capital debentures. The two notches below the corporate credit rating of IVL reflect the interest payment deferability and deep subordination characters of the subordinated capital debentures. At the same time, TRIS Rating assigns the rating of "A+" to IVL's proposed issue of up to Bt2,000 million in senior unsecured debentures. The proceeds from the new debentures will be used for its working capital.

The ratings of IVL and its debentures reflect the company's leading position in the polyester value chain, competitiveness stemming from vertical integration, and geographic diversification in terms of production and customer bases. The ratings also take into consideration the management team's capability and experience, as well as IVL's access to key technologies. However, the ratings are constrained by the volatile nature of the petrochemical industry.

IVL was established by the Lohia family on 21 February 2003 as a holding company to invest mainly in businesses along the polyester value chain. IVL was listed on the Stock Exchange of Thailand (SET) on 5 February 2010. As of September 2017, the Lohia family held a 65.9% stake in IVL. The company's core businesses comprise the production of polyethylene terephthalate (PET), fiber, and feedstock. At the end of September 2017, IVL's total installed capacity was 10.5 million tonnes per annum (MTA), of which the PET segment comprised 41%, the fiber segment 15%, and the feedstock segment 44%.

IVL's production bases are well diversified in terms of geography. Currently, IVL had 74 plants located in 24 countries across four continents: Asia, Europe, North America, and Africa. IVL's business model is aimed at vertical integration, a diversified geographical presence around the globe, and a shift portfolio mix toward high value added (HVA) products. This model should enhance the company's profitability and competitive advantage, as well as mitigate the risks associated with the volatility of the petrochemical industry and trade barriers.

During 2016 to the first nine months of 2017, the company spent about Bt31,500 million to conclude five acquisition transactions. The acquisitions included a purified terephthalic acid (PTA) plant in Spain, an integrated paraxylene (PX) and PTA plant in the United States (US), HVA yarn production facilities in Europe, China, and Mexico, and PET plants in India. The acquisitions increased IVL's total capacity from 8.8 MTA in 2015 to 10.5 MTA in September 2017.

These acquisitions help enhance IVL's profitability. The spread between PTA price and its raw materials is normally wider in North America and Europe than in Asia, in which IVL was concentrated before the acquisition. In addition, the PTA plants in Spain and in the US also produce the HVA products, i.e., isophthalic acid (IPA) and naphthalene dicarboxylate (NDC), respectively. The acquisitions over the past five years have balanced IVL's portfolio in terms of geographic diversification. About 38% of IVL's total capacity now is located in North America, 32% in Asia, and about 30% in Europe, the Middle East, and Africa. IVL is also refurbishing the ethane cracker it acquired in 2014 in the US. The project is expected to commence

CreditUpdate reviews ratings of companies or debt issues that have already been rated by TRIS Rating. The CreditUpdate occurs when new debt instruments are issued or if significant events have taken place that may impact a company's current ratings or when current ratings are cancelled. The CreditUpdate announces whether a rating has been "upgraded," "downgraded," "affirmed" or "cancelled." The update includes information to supplement the previously published ratings. CreditUpdates are part of TRIS Rating's monitoring process. TRIS Rating monitors every rating it assigns until either the debt instrument matures or the rating

contract ends. To keep the public informed of changing situations, TRIS Rating periodically issues announcements about the credit ratings it monitors.



operations in late 2017. This project will help enhance IVL's profitability, as it could capture the low gas price environment in the US. It is also another step of backward integration, as ethylene is a raw material of mono ethylene glycol (MEG).

For the first nine months of 2017, IVL's revenue was Bt215,916 million, an increase of 14% year-on-year (y-o-y). The increase was mainly due to the higher sales volume from the acquisitions together with higher selling price. Since 2012, the oversupply of PTA in Asia has put pressure on IVL's profitability, as it caused a squeezing in the spread of PTA price and its raw materials in Asia. The spread was below US\$100 per tonne. However, the acquisition during 2015-2017 is helping increase IVL's profitability and balance its feedstock portfolio. The operating margin (operating income before depreciation and amortization, as percentage of sales) has improved, rising about 5% during 2012-2014 to 11% in the first nine months of 2017. The rise resulted from the acquisition of the PTA plants in Canada, Spain, and the US.

IVL's strategy of being more toward the HVA products helps improve operating margin. In 2012, HVA products accounted for about 16% of total production and 25% of total earnings before interest, tax, depreciation, and amortization (EBITDA). However, for the first nine months of 2017, HVA accounted for 20% of IVL's productions and contributed about 55% of IVL's EBITDA. IVL's EBITDA per tonne improved from about US\$80-US\$90 per tonne in 2015-2016 to US\$114 per tonne for the first nine months of 2017. The increase in EBITDA per tonne resulted from the higher contribution of the HVA products in total portfolio. In addition, the acquisition of PTA plants in Europe and the US enhance IVL's profitability, as the PTA spread in these regions is wider than in Asia. The sustainability of this margin improvement is being monitored.

IVL's capital structure is moderate. The company's equity base increased by about Bt15,500 million due to the warrants exercised in July and August 2017. Using these funds to prepay some of its existing debts, the company's total adjusted debt for hybrid debentures (total adjusted debt) decreased to Bt92,767 million at the end of September 2017. The company total adjusted debt to capitalization ratio improved from 56.6% as of June 2017 to 49.3% as of September 2017. The company's funds from operations (FFO) also increased from Bt16,108 million for the first nine months of 2016 to Bt23,718 million for the first nine months of 2017. The FFO to total adjusted debt ratio improved from 12%-16% during 2012-2015 to 28.5% for the first nine months of 2017.

Looking forward, the company's financial position is expected to improve from the current level, as the company will realize the full benefit from the acquisitions it made during 2015-2017. TRIS Rating's base case scenario has incorporated the company's acquisition budget and its capital expenditure plans for maintenance, debottlenecking, and expansion of its current facilities. This expenditure is projected at about Bt136,000 million spanning 2017-2020.

With its investment and capital expenditure plan, the company's total installed capacity will increase from 10.5 MTA in 2017 to about 15.5 MTA by 2020. Based on the expected mix of HVA products and the gradual recovery of the industry margin, TRIS Rating expects the company's EBITDA per tonne will be in the range of US\$105-US\$115 over the next three years. The company's total EBITDA is expected to be Bt30,000-Bt50,000 million per year during 2018-2020. Approximately Bt10,500 million in debt will come due in 2018, Bt22,200 million in 2019, and about Bt14,600 million will be due in 2020.

Rating Outlook

The "positive" outlook reflects the company's improved business profile caused by successful strategies to expand in the HVA products. It also takes into account the benefits it receives from vertical integration and geographical diversification strategies implemented during 2015-2017.

The ratings should be upgraded if IVL can improve its FFO to total adjusted debt ratio to about 20%-25% on a sustainable basis. The negative factor for the ratings could be a significant deterioration in financial performance. Sizable debt-funded acquisitions, which lead to a weakening of balance sheet, are also negative factors for the ratings.



Indorama Ventures PLC (IVL)

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Indorama Ventures PLC (IVL)	
Company Rating:	A+
Issue Ratings:	
IVL186A: Bt550 million senior unsecured debentures due 2018	A+
IVL18OA: Bt98 million senior unsecured debentures due 2018	A+
IVL18OB: Bt1,302 million senior unsecured debentures due 2018	A+
IVL18DA: Bt780 million senior unsecured debentures due 2018	A+
IVL193A: Bt800 million senior unsecured debentures due 2019	A+
IVL194A: Bt1,500 million senior unsecured debentures due 2019	A+
IVL205A: Bt2,000 million senior unsecured debentures due 2020	A+
IVL206A: Bt520 million senior unsecured debentures due 2020	A+
IVL20DA: Bt880 million senior unsecured debentures due 2020	A+
IVL21OA: Bt37 million senior unsecured debentures due 2021	A+
IVL21OB: Bt3,163 million senior unsecured debentures due 2021	A+
IVL21OC: Bt300 million senior unsecured debentures due 2021	A+
IVL224A: Bt1,250.5 million senior unsecured debentures due 2022	A+
IVL224B: Bt2,649.5 million senior unsecured debentures due 2022	A+
IVL225A: Bt500 million senior unsecured debentures due 2022	A+
IVL22DA: Bt1,645 million senior unsecured debentures due 2022	A+
IVL236A: Bt1,100 million senior unsecured debentures due 2023	A+
IVL243A: Bt1,400 million senior unsecured debentures due 2024	A+
IVL245A: Bt1,000 million senior unsecured debentures due 2024	A+
IVL24DA: Bt1,475 million senior unsecured debentures due 2024	A+
IVL25DA: Bt1,150 million senior unsecured debentures due 2025	A+
IVL26OA: Bt200 million senior unsecured debentures due 2026	A+
IVL275A: Bt2,000 million senior unsecured debentures due 2027	A+
IVL28OA: Bt2,200 million senior unsecured debentures due 2028	A+
IVL295A: Bt2,000 million senior unsecured debentures due 2029	A+
IVL31OA: Bt2,300 million senior unsecured debentures due 2031	A+
IVL14PA: Bt15,000 million subordinated capital debentures	A-
Up to Bt2,000 million senior unsecured debentures due within 15 years	A+
Rating Outlook:	Positive



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Financial Statistics and Key Financial Ratios*

Unit: Bt million

		Year Ended 31 December					
	Jan-Sep 2017	2016	2015	2014	2013	2012	
Revenue	215,916	254,620	234,698	243,907	229,120	210,729	
Gross interest expense	2,959	4,601	3,787	3,622	3,986	3,611	
Net income from operations	10,804	9,563	2,935	234	24	(444)	
Funds from operations (FFO)	23,718	21,469	15,347	12,274	10,389	11,571	
Earnings before interest, tax, depreciation, and amortization (EBITDA)	24,501	27,075	18,073	13,598	12,371	11,958	
Capital expenditures and investments	22,215	38,537	26,385	13,716	7,192	42,176	
Total assets	269,532	258,380	221,641	194,534	189,042	172,474	
Total debts	92,767	102,106	83,606	73,294	85,266	80,630	
Total adjusted debt	100,204	109,543	91,043	80,731	85,266	80,630	
Shareholders' equity	110,636	91,815	82,953	74,610	61,568	56,565	
Operating income before depreciation and amortization as % of sales	11.0	10.1	7.1	5.5	5.0	5.7	
Pretax return on permanent capital (%)	10.1 **	8.9	5.6	3.9	3.7	4.1	
EBITDA interest coverage (times)	7.3	5.3	4.2	3.8	3.1	3.3	
FFO/total debt (%)	28.5 **	19.1	16.3	15.2	12.2	14.4	
Total debt/capitalization (%)	49.3	56.5	54.7	54.6	58.1	58.8	

* Consolidated financial statements

** Annualized with trailing 12 months

Note: All ratios are adjusted with the subordinated capital debentures (50% of the outstanding is treated as debts and the rest is treated as equity.)

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