

# INDORAMA VENTURES PLC

No. 127/2018  
29 August 2018

## CORPORATES

<b>Company Rating:</b>	AA-
<b>Issue Ratings:</b>	
Senior unsecured	AA-
Hybrid	A
<b>Outlook:</b>	Stable

### Company Rating History:

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

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## RATIONALE

TRIS Rating upgrades the company rating on Indorama Ventures PLC (IVL) and the ratings on IVL's senior unsecured debentures to "AA-" from "A+". TRIS Rating also upgrades the rating on the company's subordinated capital debentures to "A" from "A-". The upgrade reflects the company's strengthened business profile as a result of its strategic shift toward high value added (HVA) products and geographically diversified portfolio from the acquisitions during the last five years.

The ratings continue to reflect the company's leading position in the polyester value chain. IVL has a competitive edge stemming from vertical integration. IVL has production locations and customers around the world. The ratings also take into consideration the management team's ability and experience, as well as IVL's access to key technologies. However, the ratings are constrained by the volatile nature of the petrochemical industry.

## KEY RATING CONSIDERATIONS

### A global leader in polyester value chain

IVL has been the world's largest polyethylene terephthalate (PET) producer. At the end of June 2018, IVL's total capacity was 12.0 million tonnes per annum (MTA), comprising PET segment (40%), feedstock segment (45%), and fiber segment (15%). IVL's strategy is to expand its portfolio along the polyester value chain, from feedstock (purified terephthalic acid (PTA) and monoethylene glycol (MEG)) to derivative products (PET and polyester fiber and yarn). IVL has diversified its production bases through greenfield investments and acquisitions of distressed assets during the last five years. Currently, IVL's facilities are located in 29 countries across four continents: Asia, North and South America, Europe, and Africa. The recent investment in an ethane cracker and integrated paraxylene (PX) and PTA plants in the United States (US) have strengthened IVL's value chain.

As a vertically integrated producer, the company can achieve a number of advantages, including cost competitiveness, production efficiency, as well as geographically diversified production bases and wider market reach.

### HVA products boost profitability

A structural shift of IVL's portfolio toward HVA products improved the company's overall margins. The proportion of HVA products to total production increased to 20% in 2017 from 16% in 2012. As HVA products typically have higher margin than necessity products, the company's profitability improved, with earnings before interest, tax, depreciation, and amortization (EBITDA) per tonne increasing to US\$115 in 2017 from US\$88 in 2012. Although HVA products represent only 20% of total production volume, they contributed 53% of IVL's total EBITDA in 2017.

### Geographic diversification efforts bring balance

Acquisitions over the past five years have balanced IVL's portfolio from the stand point of geographic diversification. Other than the well balance of PET and fiber segments, IVL now has PTA production plants across three regions. The spread between the price of PTA and its raw materials is generally wider in North America and Europe than in Asia. Before 2015, about 78% of PTA capacity was in Asia. Currently, about 37% of PTA capacity is located in Europe,

34% in America, and 29% in Asia.

### Enlarged cash flow from acquisitions

A rise in production capacity and geographic diversification bases have led to an increase in cash flow. Production capacity of IVL was 7.5 MTA in 2014 but rose to about 10.6 MTA in 2017. In addition, the ongoing recovery in global polyester margin is also boosting IVL's cash flows. The company's funds from operations (FFO) increased to Bt28.5 billion in 2017 from Bt12.2 billion in 2014. For the first six months of 2018, the company's FFO was Bt20.1 billion. The FFO to total debt ratio improved to 27.2% in 2017 from 15.2% in 2014.

TRIS Rating's base case scenario incorporates the planned spending for maintaining, debottlenecking, expanding the current facilities and new acquisitions of IVL. Capital expenditures are projected at about Bt122 billion spanning 2018-2021 for the committed investment. In addition, TRIS Rating has also built in IVL's additional investment of about Bt32 billion for any new opportunity for mergers and acquisitions (M&A).

Given the capital expenditures plan, the company's total installed capacity will increase to about 15.6 MTA by 2021. Based on the higher mix of HVA products and a recovery of the industry margin, TRIS Rating expects the company's EBITDA per tonne will be in the range of US\$110-US\$130 during 2018-2021, while the company's FFO will hover around Bt35-Bt45 billion per year.

IVL has a significant amount of debt coming due. The company has a debt of Bt5.1 billion due in the second half of 2018. Approximately Bt17.8 billion in debt will come due in 2019, Bt13.5 billion in 2020, and about Bt16 billion in 2021. Considering the committed investments and operating cash flow during such periods, IVL would need to refinance some of its debt obligations. Given a positive prospect of business and accessibility to money market, refinancing risk is deemed manageable. TRIS Rating believes the company's FFO total debt ratio could stay in a range of 23%-27% during the forecast period.

### Improved capital structure

IVL's balance sheet has been strengthened during the last three years. Despite pursuing its growth strategy, the company is able to gradually improve its capital structure throughout that period. The exercise of warrants in 2017-2018 is expected to bring in about Bt28.5 billion in new equity capital. At the end of June 2018, the company's total adjusted debt (including hybrid debentures) was Bt121 billion, increasing from Bt109.5 billion at the end of 2016. However, the total debt to capitalization ratio improved from 56.5% at the end of 2016 to 47.2% at the end of June 2018.

In our base case scenario, TRIS Rating forecasts IVL's total debt to capitalization ratio will stay below 50%, while the net debt to EBITDA ratio will stay around 3-4 times during 2018-2021.

### RATING OUTLOOK

The "stable" outlook reflects TRIS Rating's expectation that IVL should be able to demonstrate strong cash flow generation from a well-balanced polyester portfolio. More contribution from HVA products and integration of supply chain across continents should partly mitigate commodity price risk inherent in the volatile petrochemical industry.

### RATING SENSITIVITIES

IVL's credit upside is limited over next 12-18 months. The negative factor for the ratings would be a significant deterioration in operating performance. Any sizable debt-funded acquisitions which significantly weaken the balance sheet over a long period will also be a trigger for the downgrade of the ratings.

### COMPANY OVERVIEW

IVL was established by the Lohia family on 21 February 2003. As a holding company, the company invests mainly in businesses along the polyester value chain. IVL was listed on the Stock Exchange of Thailand (SET) on 5 February 2010. As of 30 June 2018, the Lohia family held a 66.4% stake in IVL. The company's core businesses comprise the production of PET, fiber, and the feedstock. At the end of June 2018, IVL's total installed capacity was 12.0 MTA, of which the PET segment comprised 40%, the feedstock segment 45%, and the fiber segment 14%.

IVL's production bases are well diversified geographically. Currently, IVL has 72 plants located in 29 countries across four continents: Asia, Europe, North and South America, and Africa.

**KEY OPERATING PERFORMANCES**
**Table 1: IVL's Portfolio Mix by Segment**

Segment	Unit	2011	2012	2013	2014	2015	2016	2017	6M18
PET	'000 tonnes	2,322	2,555	2,897	3,098	3,414	3,799	3,733	2,013
Fiber	'000 tonnes	418	783	909	1,148	1,315	1,384	1,370	739
Feedstock	'000 tonnes	1,621	1,917	1,998	2,003	2,295	3,546	4,000	2,119
<b>Total</b>	<b>'000 tonnes</b>	<b>4,361</b>	<b>5,255</b>	<b>5,804</b>	<b>6,249</b>	<b>7,024</b>	<b>8,729</b>	<b>9,103</b>	<b>4,871</b>

Source: IVL

**Table 2: IVL's Portfolio Mix by Production**

	Unit	2011	2012	2013	2014	2015	2016	2017	6M18
<b>Total production</b>	<b>'000 tonnes</b>	<b>4,361</b>	<b>5,255</b>	<b>5,804</b>	<b>6,249</b>	<b>7,024</b>	<b>8,729</b>	<b>9,103</b>	<b>4,871</b>
<b>Product mix</b>									
HVA	%	7.0	16.6	18.6	21.5	20.8	18.9	19.7	20.4
Necessity (commodity)	%	93.0	83.4	81.4	78.5	79.2	81.1	80.3	79.6
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: IVL

**Table 3: IVL's Portfolio Mix by EBITDA**

	Unit	2011	2012	2013	2014	2015	2016	2017	6M18
<b>Total EBITDA</b>	<b>Bt. Mil.</b>	<b>17,380</b>	<b>11,571</b>	<b>12,371</b>	<b>13,598</b>	<b>18,073</b>	<b>27,075</b>	<b>33,070</b>	<b>22,000</b>
<b>Product mix</b>									
HVA	%	11.0	24.5	35.5	43.0	48.8	48.1	53.3	37.5
Necessity (commodity)	%	89.0	75.5	64.5	57.0	51.2	51.9	46.7	62.5
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: IVL

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

Unit: Bt million

	Jan-Jun 2018	----- Year -Ended 31 December -----			
		2017	2016	2015	2014
Revenue	159,734	286,332	254,620	234,698	243,907
Gross interest expense	1,778	4,532	4,601	3,787	3,622
Net income from operations	11,872	18,171	9,563	2,935	234
Funds from operations (FFO)	20,132	28,554	21,244	15,256	12,234
Earnings before interest, tax, depreciation, and amortization (EBITDA)	22,000	33,070	27,075	18,073	13,598
Capital expenditures and investments	20,794	29,014	38,537	26,385	13,716
Total assets	333,801	282,358	258,380	221,641	194,534
Total debts	113,545	95,785	102,106	83,606	73,294
Total adjusted debt	120,982	103,222	109,543	91,043	80,731
Shareholders' equity	142,781	118,987	91,815	82,953	74,610
Operating income before depreciation and amortization as % of sales	13.3	11.1	10.1	7.1	5.5
Pretax return on permanent capital (%)	11.3 **	10.2	8.9	5.6	3.9
Earnings before interest, tax, depreciation, and amortization (EBITDA) interest coverage (times)	10.8	6.5	5.3	4.2	3.8
FFO/total debt (%)	27.8 **	27.2	18.9	16.2	15.2
Total debt/capitalization (%)	47.2	48.1	56.5	54.7	54.6

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).

\* Consolidated financial statements

\*\* Annualized with trailing 12 months

## Indorama Ventures PLC (IVL)

<b>Company Rating:</b>	AA-
<b>Issue Ratings:</b>	
IVL180A: Bt98 million senior unsecured debentures due 2018	AA-
IVL180B: Bt1,302 million senior unsecured debentures due 2018	AA-
IVL18DA: Bt780 million senior unsecured debentures due 2018	AA-
IVL193A: Bt800 million senior unsecured debentures due 2019	AA-
IVL194A: Bt1,500 million senior unsecured debentures due 2019	AA-
IVL205A: Bt2,000 million senior unsecured debentures due 2020	AA-
IVL206A: Bt520 million senior unsecured debentures due 2020	AA-
IVL20DA: Bt880 million senior unsecured debentures due 2020	AA-
IVL216A: Bt3,000 million senior unsecured debentures due 2021	AA-
IVL210A: Bt37 million senior unsecured debentures due 2021	AA-
IVL210B: Bt3,163 million senior unsecured debentures due 2021	AA-
IVL210C: Bt300 million senior unsecured debentures due 2021	AA-
IVL224A: Bt1,250.5 million senior unsecured debentures due 2022	AA-
IVL224B: Bt2,649.5 million senior unsecured debentures due 2022	AA-
IVL225A: Bt500 million senior unsecured debentures due 2022	AA-
IVL22DA: Bt1,645 million senior unsecured debentures due 2022	AA-
IVL236A: Bt1,100 million senior unsecured debentures due 2023	AA-
IVL236B: Bt3,000 million senior unsecured debentures due 2023	AA-
IVL243A: Bt1,400 million senior unsecured debentures due 2024	AA-
IVL245A: Bt1,000 million senior unsecured debentures due 2024	AA-
IVL24NA: Bt300 million senior unsecured debentures due 2024	AA-
IVL24DA: Bt1,475 million senior unsecured debentures due 2024	AA-
IVL256A: Bt1,500 million senior unsecured debentures due 2025	AA-
IVL25DA: Bt1,150 million senior unsecured debentures due 2025	AA-
IVL260A: Bt200 million senior unsecured debentures due 2026	AA-
IVL275A: Bt2,000 million senior unsecured debentures due 2027	AA-
IVL27NA: Bt700 million senior unsecured debentures due 2027	AA-
IVL286A: Bt1,800 million senior unsecured debentures due 2028	AA-
IVL280A: Bt2,200 million senior unsecured debentures due 2028	AA-
IVL295A: Bt2,000 million senior unsecured debentures due 2029	AA-
IVL306A: Bt5,000 million senior unsecured debentures due 2030	AA-
IVL310A: Bt2,300 million senior unsecured debentures due 2031	AA-
IVL32NA: Bt1,000 million senior unsecured debentures due 2032	AA-
IVL336A: Bt3,200 million senior unsecured debentures due 2033	AA-
IVL14PA: Bt15,000 million subordinated capital debentures	A
<b>Rating Outlook:</b>	Stable

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