

Part 3

Financial Status and Performance

13. Financial Information

The consolidated and separate financial statements for the year ended December 31, 2014 2015 and 2016 and were audited by Miss Orawan Chunhakitpaisan, Certified Public Accountant, with registration No. 6105 of KPMG Phoomchai Audit Ltd.

Summary of audit report of Certified Public Accountant of the Company

Financial Statement For the years ended 31 December 2016

The auditor gave an opinion that the consolidated and separate financial statements present fairly, in all material respects, the financial position of the Group and the Company, respectively, as at 31 December 2016 and their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Without qualifying the opinion, the auditor drew attention to the following matters:

As disclosed in note 4 to the consolidated financial statements, the Group completed the acquisition of 50% equity interest in Dhunseri Petglobal Limited resulting in the recording of goodwill of Baht 898.6 million as part of investment in joint venture in the consolidated statement of financial position as of 31 December 2016. The fair value of identifiable net assets and the allocation of purchase price have been provisionally determined and are subject to potential amendment.

The following table sets forth summary of the consolidated financial statements of Indorama Ventures Public Company Limited from 2014 to 2016

Periods with Restated are restated numbers as per the adoption of new and revised TFRS in 2016

Statements of Financial Position (Consolidated Financial Statements)

	As of December 31					
	2014					
<i>Unit: Baht million</i>	Restated	%	2015	%	2016	%
<u>Assets</u>						
Current assets						
Cash and cash equivalents	5,339.1	2.7	3,232.5	1.5	4,025.6	1.6
Current investments	5,182.3	2.7	451.8	0.2	114.7	0.0
Trade accounts receivable	26,203.0	13.5	27,499.6	12.4	31,085.5	12.0
Short-term loans to related parties	75.1	0.0	265.6	0.1	434.2	0.2
Inventories	29,141.1	15.0	31,785.6	14.3	40,458.9	15.7
Other current assets	6,239.6	3.2	7,313.2	3.3	8,376.4	3.2
Total current assets	72,180.2	37.1	70,548.2	31.8	84,495.3	32.7
Non-current assets						
Investments in joint ventures	1,941.9	1.0	1,962.4	0.9	5,529.8	2.1
Other long-term investments	104.7	0.1	119.6	0.1	90.0	0.0
Long-term loans to related parties	164.1	0.1	165.4	0.1	127.0	0.0
Property, plant and equipment	97,822.5	50.3	120,365.6	54.3	136,860.3	53.0
Goodwill	8,054.8	4.1	9,788.6	4.4	9,654.8	3.7
Other intangible assets	11,126.9	5.7	13,581.2	6.1	17,602.2	6.8
Deferred tax assets	1,229.0	0.6	2,686.8	1.2	2,233.5	0.9
Other non-current assets	1,909.6	1.0	2,422.9	1.1	1,787.5	0.7
Total non-current assets	122,353.5	62.9	151,092.4	68.2	173,885.2	67.3
Total assets	194,533.7	100.0	221,640.6	100.0	258,380.5	100.0
<u>Liabilities and equity</u>						
Current liabilities						
Bank overdrafts and short-term loans from financial institutions	8,581.0	4.4	12,115.0	5.5	9,205.6	3.6
Trade accounts payable	27,764.2	14.3	31,149.0	14.1	37,316.1	14.4
Short-term loans from related party	-	0.0	-	0.0	19.2	0.0
Current portion of long-term loans from financial institutions	4,426.2	2.3	2,118.2	1.0	4,403.6	1.7
Current portion of debentures	-	0.0	2,898.0	1.3	5,499.3	2.1
Current portion of finance lease liabilities	8.3	0.0	8.4	0.0	7.6	0.0
Income tax payable	854.3	0.4	1,162.7	0.5	1,189.9	0.5
Other current liabilities	6,431.6	3.3	7,931.9	3.6	8,220.1	3.2
Total current liabilities	48,065.7	24.7	57,383.2	25.9	65,861.5	25.5

Unit: Baht million	As of December 31					
	2014 Restated	%	2015	%	2016	%
Non-current liabilities						
Long-term loans from financial institutions	32,757.6	16.8	34,140.3	15.4	51,167.9	19.8
Debentures	27,499.0	14.1	32,310.0	14.6	31,789.8	12.3
Finance lease liabilities	21.4	0.0	16.4	0.0	12.4	0.0
Deferred tax liabilities	8,881.2	4.6	11,223.1	5.1	14,796.0	5.7
Employee benefit obligations	1,755.0	0.9	1,795.5	0.8	2,027.8	0.8
Other non-current liabilities	944.2	0.5	1,819.3	0.8	910.0	0.4
Total non-current liabilities	71,858.3	36.9	81,304.5	36.7	100,704.0	39.0
Total liabilities	119,924.1	61.6	138,687.7	62.6	166,565.5	64.5
Equity						
Share capital						
Authorised share capital	5,666.0	2.9	5,666.0	2.6	5,666.0	2.2
Issued and paid-up share capital	4,814.3	2.5	4,814.3	2.2	4,814.3	1.9
Additional paid in capital:						
Share premium	29,774.6	15.3	29,775.1	13.4	29,775.1	11.5
Unrealised surpluses (deficits)						
Hedging reserve	(37.4)	(0.0)	(61.8)	(0.0)	(52.4)	(0.0)
Currency translation differences	955.5	0.5	4,658.7	2.1	1,491.2	0.6
Excess of cost over book value of acquired subsidiaries	(3,300.2)	(1.7)	(3,290.8)	(1.5)	(3,290.8)	(1.3)
Differences arising from common control transactions	(1,235.6)	(0.6)	(1,235.6)	(0.6)	(1,235.6)	(0.5)
Retained earnings						
Appropriated						
Legal reserve	1,834.7	0.9	1,989.9	0.9	2,327.1	0.9
Unappropriated	24,873.5	12.8	28,301.3	12.8	40,352.4	15.6
Equity attributable to shareholders	57,679.4	29.7	64,951.2	29.3	74,181.3	28.7
Subordinated perpetual debentures	14,874.1	7.6	14,874.1	6.7	14,874.1	5.8
Equity attributable to equity holders	72,553.4	37.3	79,825.2	36.0	89,055.4	34.5
Non-controlling interests	2,056.2	1.1	3,127.7	1.4	2,759.6	1.1
Total equity	74,609.6	38.4	82,953.0	37.4	91,814.9	35.5
Total liabilities and equity	194,533.7	100.0	221,640.6	100.0	258,380.5	100.0

Statements of Income (Consolidated Financial Statements)

Unit: Baht million	For the year ended December 31					
	2014 Restated	%	2015	%	2016	%
Income						
Revenue from sale of goods	243,907.2	100.0	234,697.9	100.0	254,619.5	100.0
Net foreign exchange gain	375.4	0.2	48.5	0.0	543.1	0.2
Interest income	71.6	0.0	166.7	0.1	124.4	0.0
Gain on a bargain purchase	1,669.9	0.7	3,625.7	1.5	6,698.6	2.6
Impact of flooding, net	140.0	0.1	-	0.0	-	0.0
Other income	1,572.8	0.6	1,594.8	0.7	1,459.5	0.6
Total income	247,736.9	101.6	240,133.6	102.3	263,445.1	103.5
Expenses						
Cost of sale of goods	221,869.2	91.0	208,177.2	88.7	218,197.7	85.7
Selling and administrative expenses	16,537.0	6.8	19,180.0	8.2	21,679.0	8.5
Management benefit expenses	90.2	0.0	112.9	0.0	143.7	0.0
Impairment losses	744.1	0.3	-	0.0	607.9	0.2
Total expenses	239,240.4	98.1	227,470.1	96.9	240,628.4	94.5
Share of losses of investments in joint ventures, net	(1,356.1)	(0.6)	(242.2)	(0.1)	(173.1)	(0.1)
Profit before finance costs and income tax expense	7,140.4	2.9	12,421.3	5.3	22,643.7	8.9
Finance costs	3,554.5	1.5	3,652.1	1.6	4,222.3	1.7
Profit before income tax expense	3,585.9	1.5	8,769.2	3.7	18,421.3	7.2
Income tax expense	1,625.4	0.7	1,880.8	0.8	2,062.2	0.8
Profit for the year	1,960.5	0.8	6,888.4	2.9	16,359.2	6.4
Attributable to:						
Owners of the Company	1,675.1	2.0	6,609.3	2.8	16,197.1	6.4
Non-controlling interests	285.4	0.3	279.1	0.1	162.1	0.1
Profit for the year	1,960.5	2.3	6,888.4	2.9	16,359.2	6.4
Earnings per share (in Baht)	0.31		1.15		3.15	
Core earnings per share (in Baht)*	0.76		1.06		1.79	

*Core financials are calculated as reported financials less Inventory gain/ (loss) and less extraordinary items, if any to reflect operations before any extraordinary items.

Cash Flow Statement (Consolidated Financial Statements)

	For the year ended December 31		
	2014		
<i>Unit: Baht million</i>	Restated	2015	2016
Cash flows from operation activities			
Profit for the year	1,960.5	6,888.4	16,359.2
<i>Adjustment for</i>			
Depreciation	7,108.3	8,324.5	9,626.6
Amortisation of intangible assets and other assets	790.2	1,001.2	1,438.8
Interest income	(71.6)	(166.7)	(124.4)
Gain on bargain purchases	(1,669.9)	(3,625.7)	(6,698.6)
Gain on partial disposal of interest in subsidiary with a change in control	-	-	(30.2)
Share of losses of investments in joint ventures, net of income tax	1,356.1	242.2	173.1
Finance costs	3,554.5	3,652.1	4,222.3
Unrealised foreign exchange (gain) loss	222.8	129.9	(311.9)
(Reversal of) provision for bad and doubtful debts expenses, net	(7.5)	19.9	30.4
(Reversal of allowance) provision for write-down value of inventory to net realisable value	169.8	40.1	(67.1)
Provision for impairment on property, plant and equipment	597.4	8.9	501.3
Provision for impairment on investment in a joint venture	146.7	-	-
Provision for impairment on intangible assets	-	-	106.6
(Reversal of) provision loss on unrecoverable advances payment for project	-	609.7	(432.9)
Employee benefits expense	123.5	317.5	294.8
Reversal of decommissioning liabilities	-	-	(221.2)
Loss on disposal of property, plant and equipment, net	64.5	111.3	9.3
Income tax expense	1,625.4	1,880.8	2,062.2
	15,970.7	19,434.2	26,938.3
Changes in operating assets and liabilities			
Trade accounts receivable	5,328.7	4,515.8	(236.1)
Inventories	1,945.6	1,168.2	(2,633.0)
Other current assets	(272.4)	(92.6)	(547.4)
Other non-current assets	(244.3)	(124.9)	(17.9)
Trade accounts payable	659.7	(1,046.8)	3,613.7
Other current liabilities	(485.3)	932.7	(217.6)
Other non-current liabilities	(52.4)	770.9	(504.1)
Employee benefits obligation	(169.7)	(117.5)	(186.9)
Income taxes paid	(259.1)	(633.8)	(1,262.8)
Net cash from (used in) operating activities	22,421.5	24,806.1	24,946.2

	For the year ended December 31		
	2014		
Unit: Baht million	Restated	2015	2016
Cash flows from investing activities			
Interest received	42.0	193.0	134.4
Purchase of property, plant and equipment	(8,434.4)	(10,281.8)	(13,411.4)
Proceeds from sale of property, plant and equipment	89.3	79.1	87.1
Proceeds from sale (purchase) of other investment, net	(4,825.3)	4,868.1	361.8
Purchase of intangible assets	(93.2)	(55.8)	(107.8)
Proceeds from sale of intangible assets	-	0.8	-
Net cash outflow on acquisitions of businesses	(3,611.2)	(15,267.4)	(22,239.0)
Net cash outflow on additional investments in subsidiaries and joint ventures	(316.8)	(175.9)	(2,198.9)
Advance payment on additional investments in subsidiary and a joint venture	(437.8)	(412.5)	(687.4)
Net cash inflow on partial disposal of interest in a subsidiary with a change in control	-	-	552.4
Reimbursement (advance payment) for project	(915.5)	(247.2)	1,126.5
Net cash from (used in) investing activities	(18,503.1)	(21,299.5)	(36,382.2)
Cash flow from financing activities			
Interest paid	(3,479.9)	(3,646.6)	(4,340.9)
Deferred financing cost paid	(40.2)	(90.5)	(224.6)
Dividends paid to owners of the Company	(1,587.8)	(2,069.9)	(2,599.5)
Dividends paid to non-controlling interests	(65.7)	(58.1)	(383.5)
Proceeds from short and long-term borrowings	4,093.7	8,803.6	27,322.7
Repayment of short and long-term borrowings	(19,944.3)	(14,998.8)	(8,477.1)
Repayment of debenture	-	-	(2,900.0)
Repayment of finance leases	(9.1)	(7.9)	(8.6)
Proceeds from issue of ordinary shares due to warrants exercised	-	0.5	-
Proceeds from issue of debenture, net of debenture issuance costs	3,691.7	7,686.0	4,991.6
Proceed from issue of subordinated perpetual debentures, net of issuance costs	14,874.1	-	-
Coupon payment on subordinated perpetual debentures	-	(1,050.0)	(1,052.9)
Loans from a joint venture	-	-	19.2
Loans to joint ventures	(97.4)	(175.9)	(123.7)
Net cash from (used in) financing activities	(2,564.9)	(5,607.5)	12,222.7
Net increases (decreases) in cash and cash equivalents	1,353.5	(2,100.9)	786.7
Cash and cash equivalents at beginning of year	4,013.4	5,339.1	3,232.5
Effect of exchange rate changes on balances held in foreign currencies	(27.9)	(5.7)	6.5
Cash and cash equivalents at end of year	5,339.1	3,232.5	4,025.6

Key Financial Ratio

		For the year ended December 31		
		2014 Restated	2015	2016
Liquidity Ratio				
Current ratio	times	1.5	1.2	1.3
Quick ratio	times	0.8	0.5	0.5
Cash from operating ratio	times	0.4	0.5	0.4
Receivable turnover ratio	times	8.8	8.7	8.7
Collection days	days	40.9	41.4	41.6
Inventory turnover ratio	times	7.5	6.7	5.9
Average number of days sales	days	47.8	53.8	60.7
Account payable turnover ratio	times	8.3	7.1	6.4
Payment days	days	43.3	50.9	56.5
Cash cycle	days	45.3	44.3	45.9
Profitability Ratio				
Gross profit margin	%	9.0	11.3	14.3
Operating profit margin	%	2.3	3.1	5.8
Non-operating profit margin	%	1.2	2.2	3.1
Net profit margin	%	0.7	2.8	6.1
Return of equity (ROE)	%	2.5	8.7	19.2
Efficiency Ratio				
Return on asset (ROA)	%	3.7	6.0	9.4
Return on fixed asset	%	7.4	11.4	17.6
Asset turnover	times	1.3	1.2	1.1
Financial Policy Ratio				
Interest bearing debt to equity	times	1.0	1.0	1.1
Net interest bearing debt to equity	times	0.8	1.0	1.1
Interest coverage ratio (on Net Cash provided by operating activities)	times	6.3	6.8	5.9
Interest coverage ratio (on EBITDA)	times	4.5	5.3	6.5

14. Management Discussion and Analysis (MD&A)

The following MD&A should be read in conjunction with our consolidated financial statements. It includes forward-looking statements reflecting our current views with respect to future events and future performance. Thus, a number of factors could cause actual results or outcomes to differ materially from those expressed in any forward-looking statement as described in our Risk Factors and statements appearing elsewhere.

Financial Summary - Core Financials of Consolidated Business

THB in Millions	2015	2016	YoY%
Total Production (in '000 tons)	7,024	8,729	24%
⁽¹⁾ Consolidated Sales	234,698	254,620	8%
PET	131,834	134,990	2%
Fibers	73,219	73,291	0%
Feedstock	59,960	93,771	56%
⁽²⁾ Core EBITDA	21,958	27,366	25%
PET	8,477	10,104	19%
Fibers	6,691	7,246	8%
Feedstock	6,741	9,563	42%
Core EBIT	12,633	16,304	29%
Reported Profit before Tax	8,516	18,633	119%
Reported Net profit after tax and NCI	6,609	16,197	145%
Reported EPS after PERP Interest	1.15	3.15	172%
Dividend Per Share (Announced)	0.48	0.66	38%
Net Operating Debt to Equity	0.81	0.88	9%

Note:

⁽¹⁾ Consolidated financials are based upon elimination of intra-company (or intra-business segment) transactions

⁽²⁾ Core EBITDA is Consolidated EBITDA less Inventory gain/(loss). Segments total may not match to IVL due to the holdings segment.

Executive Summary

For 2016, Indorama Ventures achieved a Net Profit after Tax and NCI of THB 16.2 billion, a rise of 145% on a year-on-year basis driven by improved core performance and extraordinary income primarily coming from gains on bargain purchases from acquisitions. Core EBITDA grew YoY at 25% with each of the business segments contributing to this higher growth. Core EBITDA for the PET segment grew at 19%, the Fibers segment increased by 8% while the Feedstock segment grew at 42%. Production volumes increased sharply by 24% to 8.7 million tons following the completion of two major acquisitions in April 2016 in the relatively higher margin markets of the United States and Europe. These assets were aimed mainly at enhancing value addition and hedging the value chain by increasing feedstock integration and improving the overall financial performance of the Company. All of this was achieved in what was otherwise a tough business environment, especially in Asia with the overall necessities industry being impacted by excess capacity, low operating rates resulting in the lowest margins in the last five years.

As a result of this sterling performance, earnings per share for the year grew exponentially by 172% to THB 3.15 per share. The Board of Directors of IVL proposed a dividend of THB 0.66 per share for 2016 an increase of 38% over 2015. A part of this dividend, amounting to THB 0.30/share was paid for the first half of 2016 with the balance of THB 0.36/share paid in the second.

Improved vertical integration and the inclusion of high value-added products led to improved earnings. Net operating debt-to-equity was 0.88 times, reflecting the two game-changing acquisitions

THB in Millions	9 Months Aromatics Decatur & IVL Spain	2016 IVL excluding Aromatics Decatur & IVL Spain	2016 Core Financials of Consolidated IVL	2015 Core Financials of Consolidated IVL
Production (in '000 tonnes)	1,179	7,550	8,729	7,024
Operating rate (%)	89%	85%	86%	86%
Net Revenue	20,988	233,631	254,620	234,698
Core EBITDA	3,897	23,469	27,366	21,958
Core EBITDA (%)	18.6%	10.0%	10.7%	9.4%
Core EBITDA/t (THB/t)	3,305	3,109	3,135	3,126
ROCE%	12.8%	9.9%	10.4%	9.2%

in 2016. The existing businesses, excluding the two acquisitions made in 2016, also delivered superior performance in 2016 reflecting the impact of ongoing operating excellence projects and the synergy gains across the

Company. Overall production of the 2015 portfolio was higher, despite a poor MEG environment in FY2016 and production issues during 1H2016.

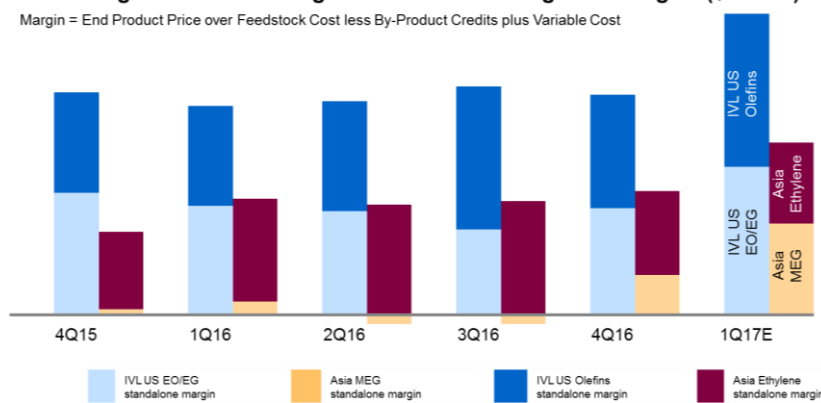
The two strategic acquisitions in the United States and Spain, which operated for nine months under IVL starting in April 2016, performed well and we are delighted with the integration of the teams and the businesses within IVL. We believe these businesses bring us even closer to our customers with our enhanced ability to provide a better value proposition, and a superior and reliable supply chain to the industry.

Business Analysis

Performance across all segments improved in 2016. Core EBITDA for the Feedstock segment was higher by 42% on a YoY basis. This was due to a change in the portfolio mix and new volumes arising from the addition of feedstock assets (including PTA, NDC and IPA) in the United States and Spain. Asian PTA core EBITDA also improved on an annual basis, moving up from \$22 per ton in 2015 to \$36 per ton in 2016, all of which more than adequately compensated for the weaker MEG margins in North America which have been recovering since December 2016.

IVL US Integrated Olefins Margins vs Asia MEG Integrated Margins (\$/tonne)

Margin = End Product Price over Feedstock Cost less By-Product Credits plus Variable Cost



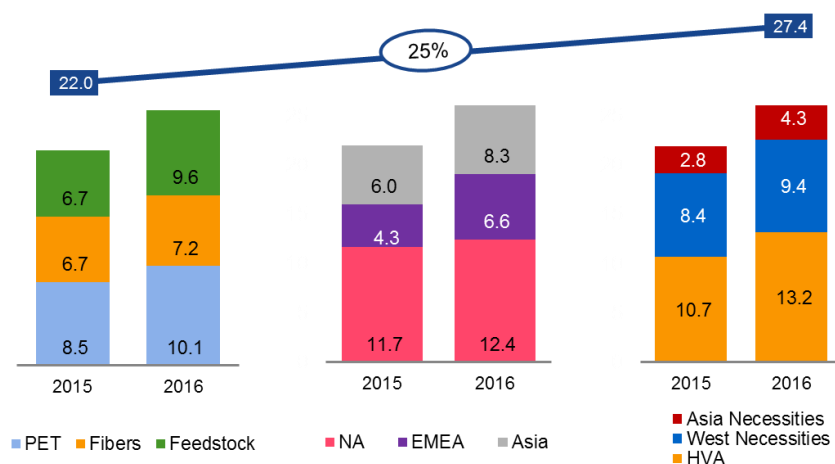
IVL expects to commence commercial production from its dual-feed gas based cracker in the United States by the end of 2017. Once operational, the existing EOEG facility will be fully integrated with own Ethylene. The chart on the

left compares margins of IVL's integrated olefin business in the United States against a typical MEG producer in Asia integrated with a naphtha-based cracker.

IVL's competitive advantages derive from captive consumption of MEG in the United States and a competitive cost structure due to lower capital costs. As seen in the chart above, integrated margins in the United States in 2016 were stable despite the low MEG standalone margins.

IVL's Business Profile

Analysis of Core EBITDA in THB Billion



Note: Segments total may not match to IVL due to holdings segment

On a portfolio basis, Core EBITDA contributions from the higher-volume PET and feedstock segments expanded as a result of the recent acquisitions and improved integration. Core EBITDA from the PET segment grew 19% mainly on the back of increased volumes which grew by 11% on a Y-o-Y basis. This increase was as a result of the part-year impact of the acquisition in India (Micropet, which since September 2016 was merged with Dhunseri PET and de-consolidated) in 2015 and in Spain in April 2016. After consolidating its position through a joint venture with Dhunseri Petrochemicals in India, which is one of the world's fastest growing markets, the Company has become the second-largest manufacturer of PET in India.

The Company has been willing to take the necessary decisions to protect shareholder value and has impaired one of its plants in Turkey while raising the utilization of its second plant so as to protect its market share and simultaneously improve cost efficiencies. The mothballed plant at Adana, Turkey represented around 1% of IVL's global production capacity thereby not impacting the overall business in any meaningful manner.

EBITDA for the fibers segment grew at 8% on a YoY basis as the Company benefited from the full-year earnings impact of the HVA-oriented Performance Fibers acquisition carried out in 2Q15. The higher operating rate at its greenfield necessity fibers plant in Indonesia helped increase fiber production volume in 2016.

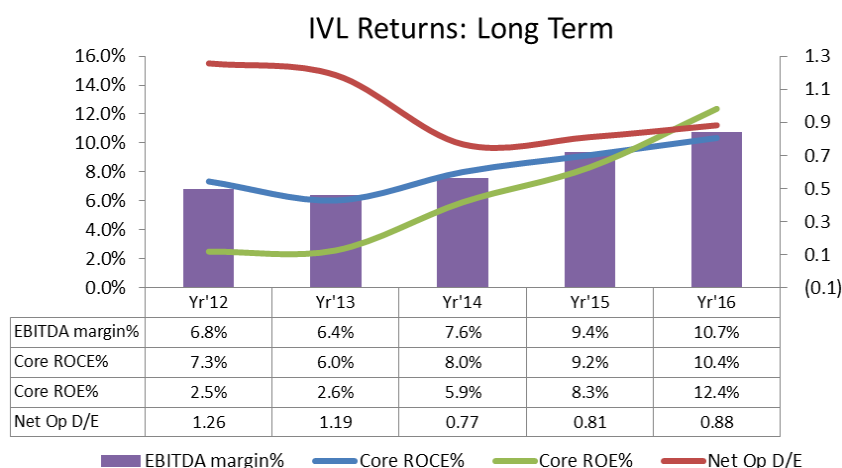
In an ongoing endeavor to improve the quality of analysis provided to capital markets, the management has reviewed the methodology used in order to evaluate inventory gains (or losses). Given that some contracts IVL has with its clients are on a fixed-price basis (net of hedges), or are

pre-sold based on previously agreed pricing, volumes of goods that are sold under such contracts are now excluded from the overall inventories being stated at the end of every reported quarter. While this change in methodology does not impact the reported financials of the Company, they have some impact in the core financials. In order to provide a consistent analysis, the core financials have been restated historically.

Indorama Ventures Business Overview

During the historically low-margin environment, the Company's strategy of earnings diversification, strategic growth in key geographies and integration has continued to play a vital role in its ability to deliver industry-leading performance. On a sustained basis, over the past five years, the Company has enhanced its EBITDA margin from a low of 6.8% in 2012 to 10.7% in 2016. The Company also enhanced its returns with Core ROCE increasing from 7.3% to 10.4% in 2016 while its Core ROE has grown sharply from a low of 2.5% in 2012 to over 12% in 2016. Diversification into HVA products, which now account for half of overall core EBITDA, has enabled the Company to remain in a strong position throughout a period of weaker margins. Even in more recent times, IVL's performance has been enhanced as its winning strategy continues to deliver superior performance and helped consolidate its position as a global market leader in its businesses.

Long-Term Margins and Returns



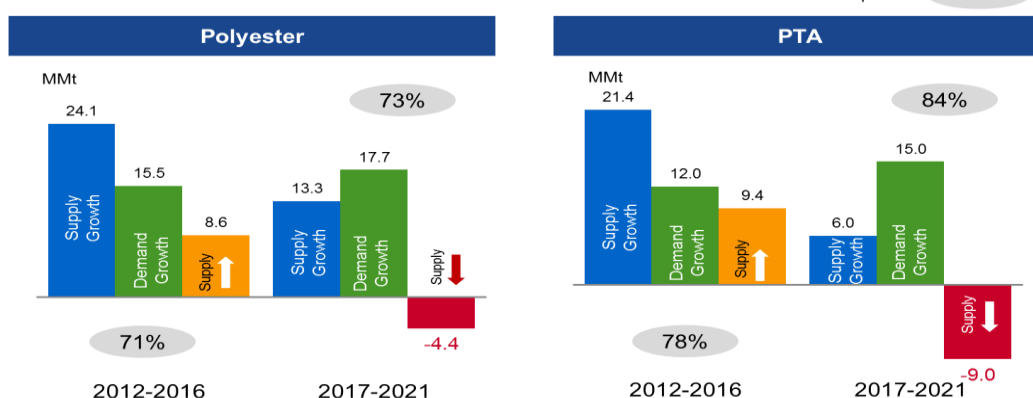
IVL has significantly improved the quality of earnings and enhanced its scale of operations and has achieved this while strengthening its Balance Sheet by lowering the net leverage ratio. All of this was achieved, despite headwinds experienced by the industry as a whole. Given its global scale, the

Company is well-positioned to benefit as and when these headwinds turn to tailwinds. Fewer announcements of capacity expansions, expectations of a higher interest rate environment and greater caution by lenders in China are expected to play a role in accelerating the process of consolidation in the industry and improving the margin environment for global players in the sector as can be seen in the following chart.

Global Supply Easing to Help Improve Operating Environment

Better Supply-Demand Balance

Global Polyester and PTA Incremental Supply-Demand (MMt)



Note: Polyester includes PET, Fibers and Film
 Supply = Design Capacity * 85% (maintenance, seasonality, etc.)
 Source: Industry Data, IVL Analysis

The acquisition of a former BP plant in Decatur, in April 2016, led to further vertical integration of feedstock in the United States, as the Company now has Paraxylene, PTA and PET (and Recycled PET) at the same site. Similarly, the acquisition of assets from CEP SA in Spain helped strengthen IVL's position in PTA and PET in EMEA and added a unique exposure to IPA (Isophthalic Acid), for which the Company is Europe's sole producer. Hence, the volumes of all products globally rose 24% while Feedstock alone rose 54%. On an overall basis, average utilization rates across the group also remained steady at 86%. On an annual basis, Core EBITDA per ton was marginally impacted due to the impact of the shutdown in the Company's MEG facility in the United States during 1Q16.

Ongoing Capital Investments

The Company has effective strategies for entering into high-growth markets, strategically integrating, and adding value-added products to its portfolio. Having completed all of its previously announced acquisitions, there are several ongoing growth projects with a targeted timescale.

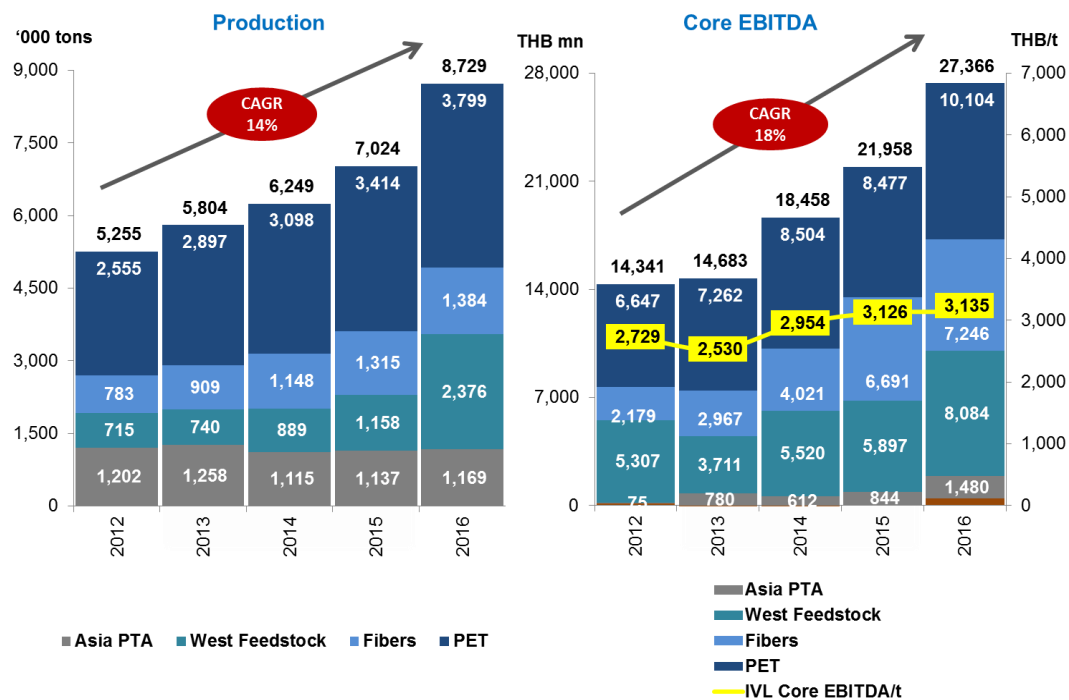
- The dual-feed, gas-based ethylene cracker purchased in Louisiana, in the United States, is undergoing renovation and is on target for completion by the end of 2017, offering 2018 as the first full-year of revenues. The planned capacity of this cracker is 440 KTA. To date, all environmental licenses have been acquired and agreements made for the supply chain.
- Prior to the above, the PTA expansion in Rotterdam, the Netherlands, will come online in mid-2017. This brownfield expansion will help the Company double its PTA capacity from its current 350 KTA to an overall capacity of 700 KTA thereby enabling full integration for its PET facilities in EMEA. The enhanced production will significantly reduce the total cost per ton for the Rotterdam PTA facility.
- In January 2017, the Company also announced the expansion of its High-value added Performance Fiber tire-cord facility in China (expected startup in 1H18), as well as the expansion of its fiber capacity in Indonesia (expected startup in 1Q19).

- The IPA facility in Spain is being prepared to double its production to 250 KTA (expected growth in volumes in 1Q18 is based on the committed supply of xylenes).

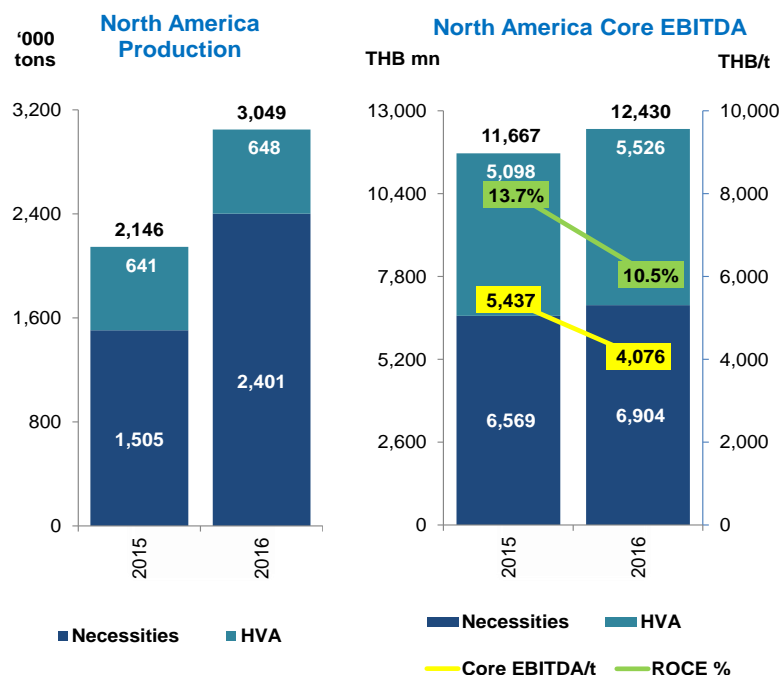
In addition, the Company also has several debottlenecking projects underway. These approved and committed growth projects will be achieved through an investment of around USD 1.0 billion (THB 35 billion) to be incurred over 2017 and 2018. Based on the collective outcome of these expansion and debottlenecking projects, IVL is on track to achieving its announced goals for 2018.

Regional Growth

Annual Business Segments-Production Volume and Core EBITDA



North America (NA) Segment



Note: Holding companies earnings are allocated to regions and all historical are restated accordingly

Volumes in North America grew from 2.1 million to 3.0 million tons following the completion of the acquisition of the Aromatics Decatur complex. As a result, core EBITDA in 2016 rose to THB 12.4 billion from THB 11.7 billion achieved in 2015. The operating rate in North America continues to be roughly 80% providing the Company with additional operating leverage in case of opportunities for import substitution. North America, with

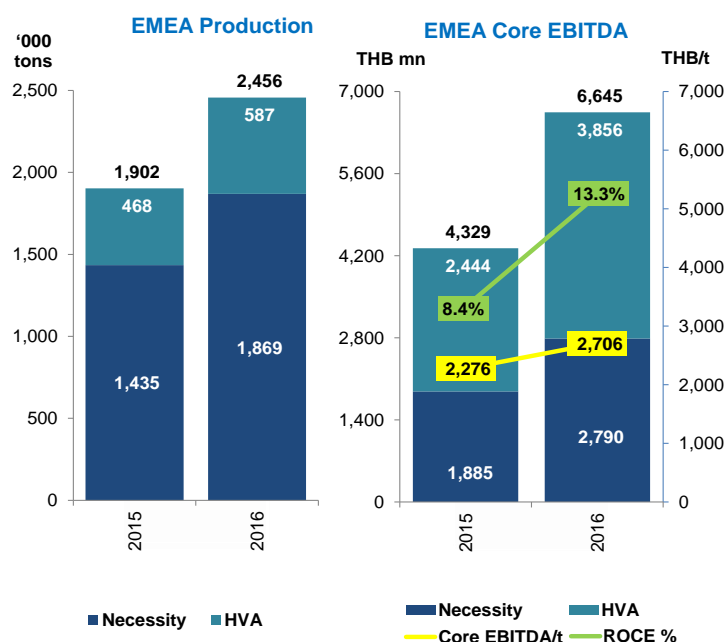
three major PET players, remains a meaningful earnings

region for the Company.

The Annual ROCE and EBITDA/t were impacted due to the production issues in the first half of 2016 at the IVOG facility (which manufactures ethylene oxide and glycols). The Company has also been enhancing its cost competitiveness by investing in vertical integration and recycling in North America, thus enhancing our position as a responsible player in the industry while reducing our carbon footprint.

North America contributed 38% of the Company's revenues with the United States itself at around 75% of the Company's North American operations. The United States is currently a net importer of the entire value chain and expected changes in the duty structure and tariffs will positively impact integrated local operators including the Company. Indorama Ventures does not export any of its production from Mexico to the United States at this juncture. IVL's PTA production in Canada could adequately support its internal needs in Mexico, thereby making its American operation fully integrated within the country and aimed at meeting domestic needs.

Europe, Middle East and Africa (EMEA) Segment



Note: Holding companies earnings are allocated to regions and all historical are restated accordingly.

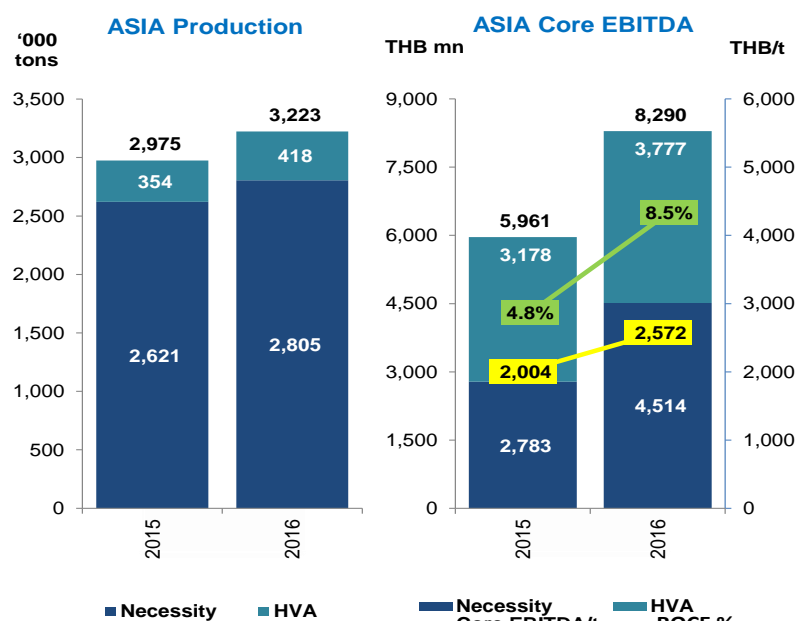
The EMEA region contributes approximately 32% of the Company's revenues and benefited from volume growth of 29% in 2016. The successful acquisition of PET, PTA and IPA assets in Spain have contributed to higher volumes.

The improved portfolio mix including the HVA business and accretive acquisitions have resulted in higher core EBITDA/t of THB 2,706. Subsequently, the ROCE for the EMEA region significantly improved from 8.4% p.a. to 13.3% p.a. This was achieved despite weakness in the euro and capacity impairment on

the Company's plant in Adana, Turkey.

In Africa, the businesses in Nigeria and Ghana continued to operate on a normal basis as can be expected in an emerging market and has shown growth in volumes and earnings despite the significant currency pressure in Nigeria.

Asian Segment



Note: Holding companies earnings are allocated to regions and all historical are restated accordingly.

Core EBITDA for the region in 2016 increased significantly due to higher volumes from our HVA business, especially tire cord, resulting in a sharp increase of around 28% in core EBITDA/t. On the necessities front, higher EBITDA in the Company's PTA segment helped to some extent but remains far below its potential.

Now that the 50/50 JV with Dhunseri in India is complete, the Company ceased consolidating the MicroPet facility

and used the equity method treatment since September 2016. However, the Company is expected to

take a portion of the fast-growing market in the Indian sub-continent (India, Bangladesh and Nepal) with the Joint Venture's combined capacity of 700,000 tons.

Accounting Policy

The accounting policies are adopted and applied consistently to all the periods. For more information on key accounting policies, please refer to Note numbers 2, 3 and 40 of our full-year 2016 audited financial statements.

Emphasis of Matter in the Auditors Opinion

There is no qualification by the auditors and they have drawn the attention to following:

As disclosed in note 4 to the consolidated financial statements, the Group completed the acquisition of a 50% equity interest in Dhunseri Petglobal Limited resulting in the recording of goodwill of THB 898.6 million as part of an investment in the joint venture in the consolidated statement of financial position as of 31 December, 2016. The fair value of identifiable net assets and the allocation of the purchase price have been provisionally determined and are subject to potential amendment.

Performance Comparison

Business Segments - Key Financial Data

	2015	2016	YoY%
Production (000 tons)	7,024	8,729	24%
PET	3,414	3,799	11%
Fibers	1,315	1,384	5%
Feedstock	2,295	3,545	54%
<i>West Feedstock</i>	1,158	2,376	105%
<i>Asia PTA</i>	1,137	1,169	3%
Operating rate (%)	86%	86%	0%
PET	84%	84%	0%
Fibers	90%	88%	(2)%
Feedstock	86%	87%	1%
<i>West Feedstock</i>	90%	88%	(3)%
<i>Asia PTA</i>	83%	85%	3%
Core EBITDA/t (US\$/t)	91	89	(3)%
PET	72	75	4%
Fibers	148	148	(0)%
Feedstock	86	76	(11)%
<i>West Feedstock</i>	149	96	(35)%
<i>Asia PTA</i>	22	36	66%

Revenue from the sale of goods

THB in Millions	FY 2015	FY 2016	Change (%)
Revenue from the sale of goods	234,697.9	254,619.5	8.5%
Add: Eliminations	30,315.4	47,432.0	
Adjusted revenue from the sale of goods	265,013.3	302,051.5	14.0%
PET	131,834.0	134,989.5	2.4%
Fibers	73,218.8	73,291.0	0.1%
Feedstock	59,960.5	93,771.1	56.4%

Sales revenue for the year ended 2016 was THB 254,619.5 million, an increase of 8.5% from 2015 and in-line with volume growth of 24% although higher intercompany sales and lower prices followed the trend in crude prices.

PET Revenue

PET revenue for the year ended 2016 was THB 134,989.5 million, an increase by THB 3,155.5 million or 2.4% from 2015, mainly driven by increased volumes, which grew by 11%. This increase was a result of the part-year impact of the acquisition in India (MicroPet, which since September 2016 was merged with Dhunseri PET and de-consolidated) in 2015 and in Spain in April 2016.

Fibers Revenue

Fibers revenue for the year ended 2016 was THB 73,291.0 million, a slight increase from THB 72.1 million or 0.1% from 2015 despite a 5% increase in volumes as prices were lower over the last year.

Feedstock Revenue

Feedstock revenue for the year ended 2016 was THB 93,771.1 million, an increase of THB 33,810.6 million or 56.4% from 2015, in-line with volume growth of 54%. New volume came from our new acquisition from CEPESA's assets in Spain, and the Aromatics Decatur complex in the United States.

Cost of Sale of Goods

THB in Millions	FY 2015	FY 2016	Change (%)
Cost of sale of goods	202,066.2	211,696.0	4.8%
As a percentage of total revenues	86.1%	83.1%	
Add: Eliminations	28,093.7	44,126.3	
Adjusted cost of sale of goods	230,160.0	255,822.2	11.1%
PET	117,411.9	116,532.2	(0.7)%
As a percentage of total PET revenue	89.1%	86.3%	
Fibers	62,189.9	61,428.0	(1.2)%
As a percentage of total Fibers revenue	84.9%	83.8%	
Feedstock	50,558.2	77,862.1	54.0%
As a percentage of total Feedstock revenue	84.3%	83.0%	

Our cost of sales for the year ended 2016 was THB 211,696.0 million, an increase of THB 9,629.7 million or 4.8% from 2015 which is in-line with the increase in sales revenue.

PET Cost of Sale of Goods

For the year ended 2016, PET cost of sale of goods was THB 116,532.2 million, a slight decrease of THB 879.7 million or 0.7% from 2015, mainly due to a change in the regional mix over the last year and also the post-acquisition of MicroPet and IVL Spain.

Fibers Cost of Sale of Goods

For the year ended 2016, Fibers cost of sale of goods was THB 61,428.0 million, a slight decrease of THB 761.9 million or 1.2% from 2015, mainly due to a change in the regional mix over the last year.

Feedstock Cost of Sale of Goods

For the year ended 2016, Feedstock cost of sale of goods was THB 77,862.1 million, an increase of THB 27,303.9 million or 54.0% from 2015, in-line with an increase in sales revenue.

Gross Profit

THB in Millions	FY 2015	FY 2016	Change (%)
Gross Profit	32,631.7	42,923.6	31.5%
As a percentage of total revenues	13.9%	16.9%	
Add: Eliminations	(2,221.7)	(3,305.7)	
Adjusted gross profit	34,853.4	46,229.3	32.6%
PET	14,422.1	18,457.3	28.0%
As a percentage of total PET revenue	10.9%	13.7%	
Fibers	11,028.9	11,862.9	7.6%
As a percentage of total Fibers revenue	15.1%	16.2%	
Feedstock	9,402.3	15,909.0	69.2%
As a percentage of total Feedstock revenue	15.7%	17.0%	

Gross Profit for the year ended 2016 was THB 42,923.6 million, an increase of THB 10,291.8 million or 31.5% from 2015. The gross profit margin of 16.9% in 2016 increased from the prior year mainly due to a change in the product mix towards higher value-addition and from hedging the value chain by increasing feedstock integration.

PET Gross Profit

For the year ended 2016, PET gross profit was THB 18,457.3 million, an increase of THB 4,035.2 million from 2015 in-line with volume growth. PET gross profit margin in 2016 was 13.7%, an increase YoY as a result of synergies from acquisitions, lower prices and management actions to optimize costs in various locations.

Fibers Gross Profit

For the year ended 2016, Fibers gross profit was THB 11,862.9 million, an increase of THB 834.0 million from 2015 in-line with an increase in volumes. Gross profit margin in 2016 was 16.2%, marginally increasing from the prior year as a result of synergies from acquisitions, lower prices and management actions to optimize costs in various locations.

Feedstock Gross Profit

For the year ended 2016, Feedstock gross profit was THB 15,909.0 million, an increase of THB 6,506.7 million from 2015 in-line with an increase in volumes and a change in the product mix. Gross profit margin in 2016 was 17.0%, an increase from the prior year due to a change in the portfolio mix and new volumes arising from the addition of feedstock assets (including PTA, NDC and IPA) in the United States and Spain.

***Spread or Raw Material Margins**

Amount in USD per MT	FY 2015	FY 2016
Industry spread		
Asia PET	117	114
West PET (50:50- North America : Europe)	211	178
IVL spread		
Asia PET	157	149
West PET (IVL Actual Mix)	238	222
Industry spread		
Asia PTA	95	97
West PTA (50:50- North America : Europe)	214	213
IVL spread		
Asia PTA	104	126
West PTA (IVL Actual Mix)	217	217

*Selling price less raw material consumption

IVL normally gets a minor premium over industry margins due to its volume and vast global presence. IVL's actual geography capacity mix also impacts the IVL margin when compared with the industry.

Earnings before Interest Expenses, Income Taxes, Depreciation & Amortization (EBITDA)

THB in Millions	FY 2015	FY 2016	Change (%)
EBITDA⁽¹⁾	19,404.8	27,626.7	42.4%
Add: Inventory loss/(gain) ⁽²⁾	2,552.7	(261.1)	
CORE EBITDA	21,957.6	27,365.7	24.6%
As a percentage of total revenues	9.4%	10.7%	
Add: Eliminations and others ⁽³⁾	(48.3)	(452.2)	
Adjusted CORE EBITDA	21,909.3	26,913.5	22.8%
PET	8,477.2	10,103.8	19.2%
As a percentage of total PET revenue	6.4%	7.5%	
Fibers	6,691.2	7,246.2	8.3%
As a percentage of total Fibers revenue	9.1%	9.9%	
Feedstock	6,740.9	9,563.4	41.9%
As a percentage of total Feedstock revenue	11.2%	10.2%	

⁽¹⁾ EBITDA is calculated from sales revenue adding net foreign exchange gain (loss) and other income, then deducting cost of sales, selling & administrative expenses (excludes depreciation & amortization), management benefits expenses, and adjusting by extraordinary items.

⁽²⁾ Inventory gains (losses) are the gains or losses on the inventories that IVL carries every month, due to the movement in the prices of finished products and raw materials following market movements.

⁽³⁾ Eliminations and others include the amounts attributable to intra-group transactions and the EBITDA of holding companies.

Core EBITDA for the year ended 2016 was THB 27,365.7 million, an increase of THB 5,408.1 million or 24.6% from 2015 and in-line with volumes. Core EBITDA is defined as EBITDA plus Inventory loss/(gain).

PET Core EBITDA

PET Core EBITDA for the year ended 2016 was THB 10,103.8 million, an increase of THB 1,626.6 million or 19.2% from 2015. This increase came largely from our acquisition of MicroPet in India, the full year performance of Bangkok Polyester which was acquired in May 2015, and the nine months of volume from the acquisition in Spain.

Fibers Core EBITDA

Fibers Core EBITDA for the year ended 2016 was THB 7,246.2 million, an increase of THB 555.1 million or 8.3% from 2015. The Company benefited from the full-year earnings impact of the HVA-oriented Performance Fibers acquisition carried out in 2Q15. The higher operating rate at the Company's greenfield necessity fibers plant in Indonesia helped increase fibers production volume in 2016. This primarily helped improve the Core EBITDA margin to 9.9% in 2016 amid lower prices.

Feedstock Core EBITDA

Feedstock Core EBITDA for 2016 was THB 9,563.4 million, an increase of 41.9% from THB 6,740.9 million in 2015. This was due to a change in the portfolio mix and new volumes arising from the addition of feedstock assets (including PTA, NDC and IPA) in the United States and Spain.

Other Revenues

THB in Millions	FY 2015	FY 2016	Change (%)
Interest Income	166.7	124.4	(25.4)%
Net foreign exchange gain/(loss)	48.5	543.1	1,020%
Gain on a bargain purchase	3,625.7	6,698.6	84.8%
Other income	1,594.8	1,459.5	(8.5)%
Total	5,435.6	8,825.5	62.4%

Interest Income

Interest Income for the year ended 2016 was THB 124.4 million, a decrease of THB 42.3 million or 25.4% from 2015. This was mainly due to a decrease in current investments during the year.

Net foreign exchange gain/(loss)

There was a net foreign exchange gain for 2016 of THB 543.1 million, an increase of THB 494.6 million or 1,020% from 2015. This was primarily due to IVL's disciplined approach to hedging receivables and payables. Currency volatilities are also hedged in a natural way due to our global presence, for example USD assets are hedged naturally against USD liabilities. Generally, depreciation in the Thai baht is beneficial to a global company such as IVL as there is a gain on overseas investments, which goes into Translation Reserves in the Shareholders Equity.

Gains on bargain purchases

During 2016, IVL acquired several businesses where the excess of the Group's interest in the net identified assets and liabilities of the companies acquired over cost (recognized values are higher than the consideration transferred) are considered to be gains on bargain purchases, and recognized in the consolidated statement of income in accordance with generally accepted accounting principles for business combinations. A valuation of net identified assets acquired and liabilities assumed is calculated every time to arrive at recognized values. Fair value adjustments are the difference between the carrying amount and the recognized value. In 2016, IVL had gains on bargain purchases of THB 6,698.6 million. The following details are given:

THB in Millions	Net identified assets acquired and liabilities assumed				Recognized values	Total Consideration	Gain on a bargain purchase
	Carrying amounts	Fair value adjustments	Recognized values	Interest acquired (%)			
Companies acquired during the year ended December 31, 2015							
Polyplex Resins San. ve Tic. A.S., Turkey	267.5	144.4	411.9	100%	411.9	210.2	201.7
Performance Fibers Holdings Finance, Inc., USA	3,340.7	1,991.7	5,332.3	100%	5,332.3	6,250.7	-
Bangkok Polyesters Public Company Limited, Thailand	1,468.6	818.6	2,287.2	99%	2,263.8	1,356.2	907.6
CEPSA Chimie Montréal s.e.c, Canada	13,285.5	(2,833.9)	10,451.6	100%	10,451.6	7,992.7	2,458.9
Micro Polypet Private Limited, India	83.0	148.3	231.2	100%	231.2	173.8	57.5
							3,625.7

THB in Millions	Net identified assets acquired and liabilities assumed				Recognized values	Total Consideration	Gain on a bargain purchase
	Carrying amounts	Fair value adjustments	Recognized values	Interest acquired (%)			
Companies acquired during the year ended December 31, 2016							
Chemical complex of BP Amoco Chemical Company, USA	14,491.1	3,526.7	18,017.8	100%	18,017.8	14,728.0	3,289.8
Guadarranque Polyester S.L.U., Spain	7,823.7	3,422.5	11,246.2	100%	11,246.2	7,837.4	3,408.8
							6,698.6

A gain on bargain purchase is considered by management as an extraordinary item which does not arise from the normal operation of the business, but is included in the net profit of the Company. Additional information on each acquisition is provided in Note 4 – Acquisitions of Businesses in the Audited Financial Statements. Net identifiable assets acquired including intangible assets i.e. customer contracts, technology licenses and know-how, trade names and trademarks, were all recognized in the financial statements at fair value, and subject to depreciation, amortization or impairment (if any) in accordance with generally accepted accounting principles, as disclosed in Note 3 – Significant accounting policies in the Audited Financial Statements.

IVL's management expertise and business model allows us to buy companies most of the time at below their fair value as determined by an appraiser. We therefore need to record the gain on bargain purchases. These gains are recorded under property plant & equipment or intangibles or other assets, as applicable.

Other Income

Other income for the year ended 2016 was THB 1,459.5 million, a decrease of THB 135.3 million or 8.5% from 2015. In 2015, IVL recorded insurance claim income from business interruptions as a result of force majeure declared by a major PTA supplier in North America. In 2016, IVL received partial reimbursement of THB 432.9 million in respect of these advance payments against which provision for loss had previously been provided and recorded as other income. Please refer to Note 26 – Other income in the Audited Financial Statements for further details.

Expenses

THB in Millions	FY 2015	FY 2016	Change (%)
Selling expenses	12,443.5	14,637.9	17.6%
Administrative expenses	6,736.5	7,041.1	4.5%
Management benefit expenses	112.9	143.7	27.3%
Total	19,292.9	21,822.7	13.1%

Total expenses for the year ended December 31, 2016 was THB 21,822.7 million, an increase of THB 2,529.8 million or 13.1% from 2015 as a result of higher spending on selling and administrative expenses in-line with our volume growth as well as an increase in depreciation expenses from the Company's two major acquisitions in the United States and Spain. However, during 2015, we had made a provision of THB 609.7 million in administrative expenses against advance payments for

costs relating to the Abu Dhabi project which may not be recoverable. But we received partial reimbursement of THB 432.9 million in respect of these advance payments which was recorded as other income in 2016.

Management benefit expenses increased from last year due to an increase in wages and salaries and an increase in the number of sites and managers through organic and inorganic growth. Please refer to Note 30 – Employee benefit expenses of the Audited Financial Statements for further details on this item.

Research and Development (R&D) Expenses

IVL has a strong R&D platform with 11 centers for innovation around the world. IVL is strongly committed to providing innovative solutions to our customers and focusing on an agenda geared to sustainability. IVL has many high value-added businesses which require R&D, and as a result, IVL has a focused approach to innovation. In 2016, IVL spent THB 356.7 million (2015: THB 357.3 million) on R&D which was booked under appropriate expenses.

Finance Costs

Finance costs for the year ended 2016 was THB 4,222.3 million, an increase of THB 570.2 million from 2015 that was in-line with an increase in overall interest-bearing liabilities.

Share of loss of jointly-controlled entities, net

IVL had a share of loss from joint ventures in the amount of THB 173.1 million and THB 242.2 million for the year ended 2016 and 2015, respectively. A significant decrease in the share of loss from joint ventures was due to improved performance in most of the joint venture companies. Moreover, new joint ventures were acquired/de-consolidated this year, namely, Dhunseri and MicroPet. Please refer to Note 12 – Investment in joint ventures in the Audited Financial Statements for further details.

Income Tax Expense

Income tax expense for 2016 was THB 2,062.2 million, an increase of THB 181.3 million from 2015. This was in-line with an increase in earnings in 2016. However, the effective tax rate (ETR) declined from 21% in 2015 to 11% in 2016 as a result of a decline in earnings from the IVL's American operations due to the shutdown of the EOEG facility in the United States during the first half of 2016 as explained earlier.

Net Profit

THB in Millions	FY 2015	FY 2016	Change (%)
Net profit	6,888.4	16,359.2	137.5%
As a percentage of total revenues	2.9%	6.4%	
Profit attributable to:			
Owners of the Company	6,609.3	16,197.1	145.1%
Non-controlling interests	279.1	162.1	(41.9)%

Net Profit for the year ended December 31, 2016 was THB 16,359.2 million, an increase of THB 9,470.8 million or 137.5% from 2015 due to higher earnings and net extraordinary incomes. Please refer to the explanation of EBITDA above for more details. Net profit for the period included extraordinary items, i.e. gains on bargain purchases, acquisition costs and related transaction expenses incurred on acquisitions completed. These non-recurring items are not from the normal operation of the business.

Financial Position

The Company closely monitors the financial position, and any changes, of various businesses at the group level. An analysis of the financial position is presented below:

Total Assets

As of December 31, 2016 and 2015, IVL had total assets of THB 258,380.5 million and THB 221,640.6 million, respectively. The increase of 16.6% was mainly due to growth in the Company's business from expansions and acquisitions. The major assets are as follows:

Trade Accounts Receivable

As of December 31, 2016 and 2015, IVL reported trade accounts receivable of THB 31,085.5 million, and THB 27,499.6 million respectively, representing 12.0% and 12.4% of total assets. The Company has continued to improve and control its debt management. Each subsidiary takes responsibility to set up and monitor their allowance for doubtful accounts by focusing on amounts that are over 12 months overdue in order to ensure that the allowance is adequate. The allowance for doubtful accounts is in a narrow low-range due to the close follow-up and collections that is conducted on time. The aging analysis for trade accounts receivable is as follows:

	Consolidated financial statements	
	December 31, 2015	December 31, 2016
	(THB in Millions)	
Related parties		
Within credit terms	664.3	709.4
Overdue:		
Less than 3 months	564.7	284.6
Net	1,229.0	994.0
Other parties		
Within credit terms	21,915.5	27,069.8
Overdue:		
Less than 3 months	3,350.2	2,907.7
3-6 months	740.2	57.3
6-12 months	235.7	48.3
Over 12 months	164.1	134.0
	26,405.7	30,217.2
Less: allowance for doubtful accounts	(135.1)	(125.8)
Net	26,270.6	30,091.5
Total	27,499.6	31,085.5

Inventories

As of December 31, 2016 and 2015, IVL reported inventories of THB 40,458.9 million and THB 31,785.6 million, respectively, representing 15.7% and 14.3% of total assets. This increase was in-line with the Company's expansion and business growth in 2016.

Investment in joint ventures

As of December 31, 2016 and 2015, IVL reported investment in jointly-controlled entities of THB 5,529.8 million and THB 1,962.4 million, respectively, representing 2.1% and 0.9% of total assets. The increase mainly resulted from: 1) acquisition of a 50% shared interest in Dhunseri Petglobal Limited in India; 2) selling a 50% shared interest in MicroPet to Dhunseri Petrochem Limited, accounting treatment for this investment has therefore been changed from the consolidation method to take equity method as joint ventures; and 3) increase in shared interest in Polyprima from 43.16% to 47.25%.

Property, plant and equipment (PPE)

As of December 31, 2016 and 2015, IVL reported property, plant and equipment of THB 136,860.3 million and THB 120,365.6 million, respectively, representing 53.0% and 54.3% of total assets. The slight increase resulted from two strategic acquisitions in the United States and Spain, the ongoing Rotterdam PTA expansion in addition to the Gas Cracker in America.

The PET segment saw a decrease of 13.1% in its PPE in 2016 over 2015 to THB 38,868.3 million. This was primarily due to the de-consolidation of MicroPet in India after a reduction in the shared interest from 100% to 50% as a joint venture in September 2016. However, there has been an asset addition in this segment from the acquisition of PET assets in Spain.

The Fibers segment saw a decrease of 1.9% in its PPE in 2016 from 2015 to THB 33,944.0 million. There was no major asset acquisition in this segment. The decline in PPE was mainly as a result of depreciation during the year.

The Feedstock segment saw an increase of 55.9% in its PPE in 2016 from 2015 to THB 63,843.7 million. This was primarily due to two major acquisitions in the United States (including PX, PTA and NDC facilities) and Spain (including IPA and PTA facilities) in 2016 together with the ongoing expansion of PTA at our Rotterdam site.

Other Intangible Assets

As of December 31, 2016 and 2015, IVL reported intangible assets of THB 17,602.2 million and THB 13,581.2 million, respectively, representing 6.8% and 6.1% of total assets. The increase primarily resulted from the acquisition of businesses in the United States and Spain in 2016, e.g. technology licenses and know-how, customer contracts and relationships, trade name and trademarks. IVL recorded additional intangible assets on the acquisitions as fair value, which was appraised by an independent appraiser as higher than the acquisition price.

Loan to related parties

IVL has given certain loans to related parties as per Note 5 – Related parties in the Audited Financial Statements. There are given for various strategic reasons and as of December 2016, these amounts are not material.

Total Liabilities

As of December 31, 2016 and 2015, IVL reported total liabilities of THB 166,565.5 million and THB 138,687.7 million, respectively. The increase in total liabilities resulted from an increase in loans from financial institutions, issuance of debentures, and higher trade accounts payable which were all in-line with the growth in volumes from business expansion and acquisitions.

Trade accounts payable

As of December 31, 2016 and 2015, IVL had trade accounts payable of THB 37,316.1 million and THB 31,149.0 million, respectively. This was in-line with the growth in volumes from business expansion and acquisitions. The payment days for the year ended 2016 and 2015 was 57 days and 51 days, respectively. IVL was able to get extended credits from its suppliers as its volume increased in 2016 from 2015.

Interest-bearing liabilities

As of December 31, 2016 and 2015, IVL reported interest-bearing liabilities of THB 102,105.5 million and THB 83,606.3 million, respectively, representing 39.5% and 37.7% of total liabilities and shareholders' equity.

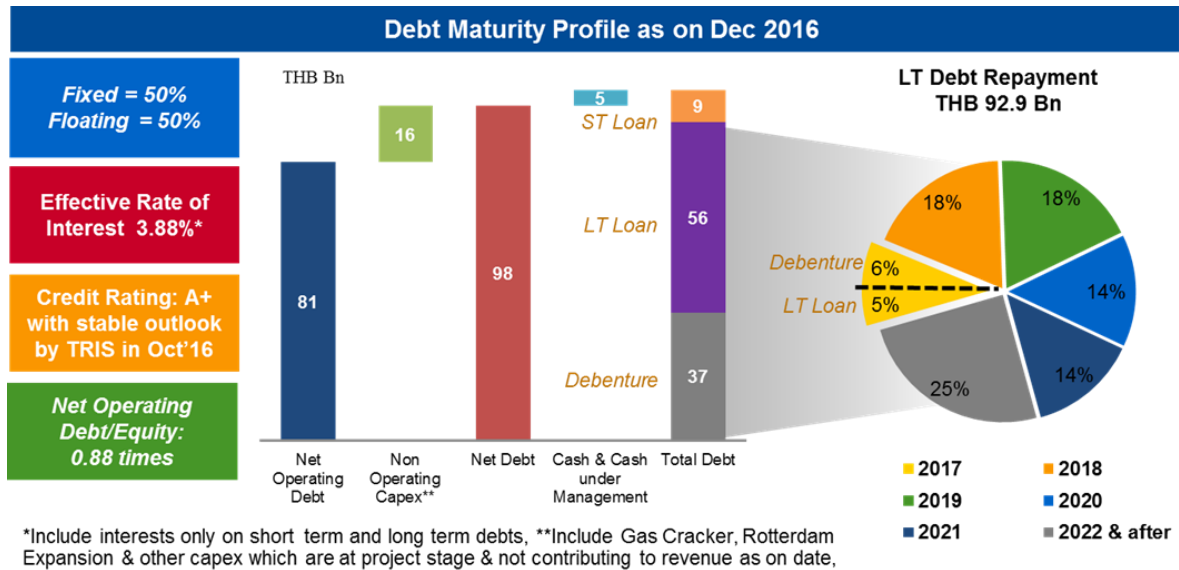
Our net operating debt-to-equity increased slightly from 0.81 times at the end of 2015 to 0.88 times at the end of 2016, after spending on capex and investments of THB 37,177.3 million in 2016. IVL's net operating debt increased from THB 67,296.4 million at the end of December 31, 2015 to THB 81,038.4 million at the end of December 31, 2016, mainly due to payments for acquisitions in 2016.

The table below describes total debt and net operating debt in THB billions:

THB in Billions	2015	2016
Total Debt	84	102
Bank overdraft and short-term loans	12	9
Long-term debt (Current portion)	2	4
Debentures (Current portion)	3	5
Long-term debt (Non-current portion)	34	51
Debentures (Non-current portion)	32	32
Cash & Cash under management	4	5
Cash and cash equivalents	3	4
Current investments and loans given	1	1
Net Debt	79	98
⁽¹⁾ Non-operating Debt (Project Debt)	12	16
Net Operating Debt	67	81
Net debt-to-equity (times)	0.96	1.06
Net operating debt-to-equity (times)	0.81	0.88
Debts with fixed interest %	68%	50%
Credit Rating by TRIS (Reaffirmed in October 2016)	A+	A+
Liquidity	51	51
Unutilized credit line	47	47
Financial Ratios		
Current ratios (times)	1.2	1.3
Debt Servicing Coverage Ratio (DSCR) times	2.3	2.9
Interest coverage ratio (times)	6.1	6.7

Note ⁽¹⁾ Net debt after debt for capex and investments which are not generating revenue and earnings as on date.

The graph below provides the repayment schedule for long-term debt and debentures in THB billions:



Shareholders' equity

As of December 31, 2016 and 2015, IVL reported shareholders' equity of THB 91,814.9 million and THB 82,953.0 million, respectively. The increase in shareholders' equity was mainly due to an increase in retained earnings resulting from the profitability of the Company, net of dividends paid and the decrease in the translation reserve from the translation loss of overseas investments due to a stronger Thai baht in 2016 over 2015. Please refer to "Statement of Changes of Equity" in the Audited Financial Statements for more details.

Cash Flow

IVL generated THB 24,946.2 million of cash flow from operating activities in 2016, slightly improved from THB 24,806.1 million in 2015. This came largely from profits from operations generated in the period offset by marginal outflows of net working capital.

Cash flow used in investing activities of THB 36,382.2 million in 2016 was primarily paid towards the acquisition of the Aromatics Decatur complex in the United States and IVL Spain as well as the expansion of our PTA facility in Rotterdam and US Gas Cracker. Capex and investments were funded by a mix of long-term loans and cash flow from operations.

Cash flow from financing activities of THB 12,222.7 million in 2016 was principally a result of cash proceeds from the issuance of debentures, and short and long-term loans-net of repayment that were used to support business growth. In contrast, there was cash outflow for interest and dividend payments in 2016.

Liquidity

Strong cash flow from operations and a longer average loan maturity led to a high liquidity position for the Company. As at December 2016, IVL had liquidity of THB 51,156.9 million, in the form of cash

and cash under management, plus unutilized banking credit lines. The high liquidity provides us greater flexibility in business operations and to finance accretive growth opportunities.

Key Financial Ratios

Current Ratio

Our current ratio is calculated by dividing total current assets by total current liabilities. The current ratio stood at 1.3 times at the end of 2016, slightly increased from 1.2 times in 2015. This illustrated the strong financial position and liquidity of the Company as well as assurance of the Company's ability to pay off our short-term liabilities.

Return on Equity Ratio (ROE)

Our ROE ratio is calculated by dividing our profit attributable to owners of the Company for the period by the average of the total equity attributable to equity holders of the Company. IVL achieved a return on equity (ROE) of 19.2% and 8.7% in 2016 and 2015, respectively. In addition, IVL achieved core ROE of 12.4% in 2016 compared to 8.3% in 2015, a significant increase of 48.5%. ROE increased in-line with core net profit growth.

Note: For Core ROE% calculation, we use the formula as follows: Core profit attributable to owners of the Company after interest on perp / average of the equity attributable to shareholders of the Company.

Return on Assets Ratio (ROA)

Our ROA ratio is calculated by dividing profit before finance costs and income tax expenses by the average total assets. For the year ended 2016 and 2015, our ROA ratio was 9.4% and 6.0%, respectively. In addition, IVL achieved core ROA of 6.7% in 2016 compared to 5.9% in 2015, representing a 41.1% increase. ROA increased in-line with core net profit growth.

Net Debt-to-Equity Ratio (D/E)

Our Net Interest Bearing Debt-to-Equity Ratio is calculated by dividing our interest-bearing liabilities-less cash and cash equivalents by total shareholders' equity. As of December 31, 2016 and 2015, our net interest bearing debt-to-equity stood at 1.1 times and 1.0 times, respectively. The Company's gearing ratio increased slightly from last year while the Company raised cash through the issuance of debentures and additional long-term loans from financial institutions, which was used in acquisitions, ongoing expansion and working capital needs. However, the debt covenant for most of the debts is not over two times net debt-to-equity.

Debt Servicing Coverage Ratio (DSCR)

Our DSCR is calculated by dividing core EBITDA by annual interest and principal payments on debt. As of December 31, 2016 and 2015, our DSCR was at 2.9 times and 2.3 times, respectively. The

DSCR increased in-line with core EBITDA growth which indicated that operations-generated income is sufficient to cover outstanding debt payments during the year. However, the debt covenant for most of the debts is at least 1.1 times DSCR.