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7 May 2019

The President

The Stock Exchange of Thailand

**Subject: Submission of Quarterly Review Financial Statements and the Management Discussion and Analysis of Indorama Ventures Public Company Limited for the first quarter of 2019 (Revised)**

We are pleased to submit:

1. Consolidated and Company only Quarterly Review Financial Statements for the first quarter of 2019 (a copy in Thai and English)
2. Management Discussion and Analysis (MD&A) for the first quarter of 2019 (a copy in Thai and English)
3. Company's performance report, Form F45-3 for the first quarter of 2019 (a copy in Thai and English)

Please be informed accordingly.

Sincerely yours,

(Mr. Alope Lohia)

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Indorama Ventures Public Company Limited

Company Secretary

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*Indorama Ventures Public Company Ltd*  
*Management Discussion and Analysis*  
*1st Quarter 2019*

## *Highlights*

- Revenue \$3.0 billion (THB 95.8 billion), +26% YoY
- Core EBITDA of \$304 million (THB 9.6 billion), -7% YoY, Core EBITDA margin 10%
- Core Net profit after tax of \$128 million (THB 4.0 billion), -27% YoY
- Core Earnings Per Share of THB 0.67, -32% YoY
- Operating Cash Flow of \$261 million (THB 8.3 billion)

# 1Q 2019 Summary Financials

**Table 1: Core Financials of Consolidated Business**

	Quarterly				Last Twelve Months		
	1Q19	4Q18	1Q18	1Q19 YoY	LTM 1Q19	LTM 1Q18	LTM YoY
\$million (except where stated otherwise)							
<b>Production Volume (kt)</b>	<b>2,966</b>	<b>2,818</b>	<b>2,325</b>	<b>28%</b>	<b>11,060</b>	<b>9,240</b>	<b>20%</b>
Consolidated Revenue <sup>1,2</sup>	3,030	2,788	2,414	26%	11,357	8,811	29%
<b>Core EBITDA<sup>2,3</sup></b>	<b>304</b>	<b>318</b>	<b>326</b>	<b>(7)%</b>	<b>1,419</b>	<b>1,112</b>	<b>28%</b>
PET	145	113	116	25%	617	356	73%
Fibers	77	72	55	39%	261	218	20%
Feedstock	78	136	151	(49)%	540	535	1%
<u><i>New Segments</i></u>							
Integrated PET	192	171	142	35%	841	466	81%
Fibers	69	64	49	43%	232	191	22%
Packaging	16	13	11	54%	53	40	35%
Olefins	3	50	73	(97)%	162	189	(15)%
Specialty Chemicals	19	22	48	(60)%	130	223	(42)%
Core EBIT	178	190	230	(23)%	948	738	28%
<b>Core Net Profit after Tax and NCI<sup>4</sup></b>	<b>128</b>	<b>121</b>	<b>175</b>	<b>(27)%</b>	<b>741</b>	<b>540</b>	<b>37%</b>
Core Net Profit after Tax and NCI (THBm)	4,042	3,974	5,529	(27)%	24,002	17,783	35%
<b>Core EPS after PERP Interest (THB)</b>	<b>0.67</b>	<b>0.66</b>	<b>0.99</b>	<b>(32)%</b>	<b>4.12</b>	<b>3.26</b>	<b>26%</b>
<b>Core EBITDA/ton (\$)</b>	<b>102</b>	<b>113</b>	<b>140</b>	<b>(27)%</b>	<b>128</b>	<b>120</b>	<b>7%</b>
<b>Operating Cash Flow<sup>5</sup></b>	<b>261</b>	<b>250</b>	<b>241</b>	<b>8%</b>	<b>1,010</b>	<b>872</b>	<b>16%</b>
<b>Net Debt to Equity (times)</b>	<b>0.92</b>	<b>0.87</b>	<b>0.61</b>	<b>51%</b>	<b>0.92</b>	<b>0.61</b>	<b>51%</b>

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

<sup>2</sup>Total of each segment may not always tally with consolidated financials due to holding segment

<sup>3</sup>Core EBITDA is Reported EBITDA less Inventory gains/(losses)

<sup>4</sup>Core Net Profit is Reported Net Profit less Inventory gains/(losses) one-time extraordinary items

<sup>5</sup>Operating Cash Flow is after change in net working capital and cash tax, before maintenance capex

## Summary

In 1Q19, IVL achieved an aggregate production of 3 million tons, with operating rate of 85%. Our core EBITDA was \$304 million. The core businesses of Integrated PET, Fibers and Packaging, which constitute 89% of our capacity and contributed to 91% of the core EBITDA delivered strong results.

The integrated PET segment benefitted from higher production volume and higher overall earnings as assets acquired in 2018 and the consolidations of 2018/19 were successfully integrated. These include acquisitions of PTA Portugal, PET (Egypt and Brazil), and the consolidation of PET in India and PTA in Indonesia. EBITDA contribution in this segment improved for the contracted businesses in the Western markets.

In the Fibers segment, we benefitted from M&G Fibras Brazil and the HVA-focused UTT.

The quarter was adversely impacted by the extended shutdown of the EO-EG facility in the US and a further decline in IPA margin.

On the sustainability front, IVL closed Thailand's first ever green loan for \$100 million and €100 million. These are being provided in the forms of positive incentive loans for which the commercial terms are linked to the improvement in IVL's ESG rating.

With strong foundation and ongoing commitment, IVL is poised for ongoing growth going forward.

## 1Q 2019 Performance Highlights

- Production of 3 million tons (+28% YoY; +5% QoQ) with contribution from newly acquired assets in 2018, consolidation of PET in India, consolidation of PTA in Indonesia and high operating rates.
- Core EBITDA of \$304 million (-7% YoY; -4% QoQ), benefitted from higher contribution from Integrated PET, Fibers and Packaging, off-set by production loss in Olefins and lower margin in Specialty Chemicals.
- Core EBITDA margin was 10% (-26% YoY; -12% QoQ).
- Core net profit after tax of \$128 million (-27% YoY; +5% QoQ), higher fall YoY on account of higher interest expenses and depreciation and lower taxes.
- Reduction in effective tax rate following the successful negotiation of tax incentives in Brazil.
- Core Earnings per share of THB 0.67, (-32% YoY; +2% QoQ)

## ***1Q 2019 LTM Performance Highlights***

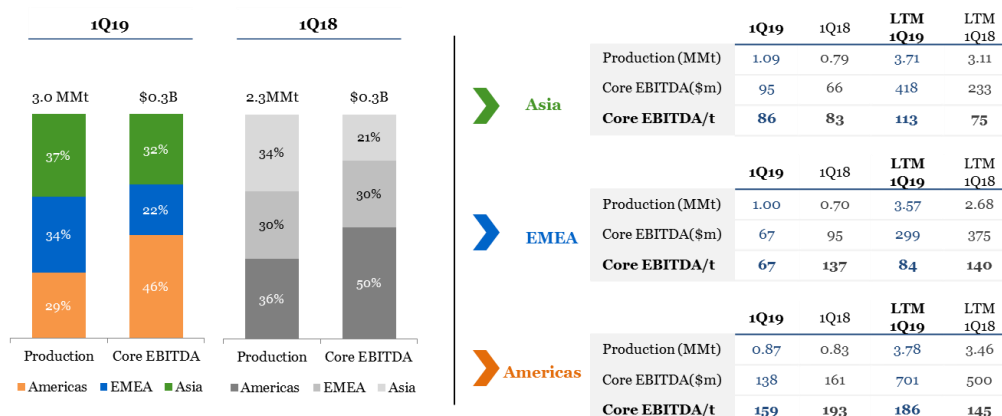
- Core EBITDA of \$1.4 billion (+28% YoY), driven by volume growth from newly acquired assets and improved margin in Integrated PET (Western market contracts)
- Core EBITDA margin was 12% (-1% YoY), wherein improvements in Core businesses were offset by sharp decline in Specialty Chemicals margins.
- Annual production was 11 million tons (+20% YoY), mainly driven by contribution from our acquisitions in 2018 and consolidation of businesses which include the following:
  - PET acquisitions in Brazil and Egypt
  - Recycling acquisitions in France and USA
  - Fibers acquisitions (Avgol, Kordana, Shoeller, M&G Brazil and UTT)
  - Packaging acquisition in Egypt
  - Consolidation of PET in India and PTA in Indonesia

This increase in production was partly off-set by the force majeure of 2 PET lines for a period of 50 days in the Netherlands in 4Q18 and a further period of 13 days in 1Q19. Due to the integrated nature of the site, these shutdowns adversely also impacted production of PTA thus impacting the EBITDA contribution from the EMEA region. PET production at Poland and Alphapet USA were also impacted due to temporary shutdowns as well as an extended shutdown of the EO-EG facility. All these facilities are now back on stream.

- Core Earnings per share of THB 4.12, +26% YoY.
- IVL achieved Operating Cash Flow of \$1.0 billion
- Core net profit after tax and NCI of \$741 million, up 37% YoY.

## Regional Highlights

Figure 1: Regional Performance



### Asia

- Production in Asia went up 38% YoY primarily on account of India PET consolidation & Indonesia PTA consolidation. The EBITDA increase was 44% YoY on account of this volume increase as well as margin improvement. On a LTM 1Q2019 basis, the absolute EBITDA increase is 79% and EBITDA/ton increase is 50% over LTM 1Q2018 (higher than quarterly YoY) due to continuous improvement in margin from 2Q 2017 to 1Q 2019.
- The Integrated PET margin improvement since March 2019 in Asia region is expected to benefit IVL globally especially from the recent weakness in PX Margins.

### Europe

- Production in Europe went up 43% YoY primarily on account of Egypt PET & Portugal PTA volumes which came on stream from Q2/Q3 2018 and are still ramping up. Relatively smaller volume additions also came from fiber assets acquired in 2018 & 2019 (Avgol, Kordana, Schoeller, UTT). The EBITDA however decreased 29% YoY due to depressed margins in IPA business and lower Rotterdam production.
- The higher volumes from Egypt & Portugal PTA did not fully offset the loss from IPA margins as these units were in ramp up stage. Full benefits from these new units will be reflected gradually each quarter in 2019.
- The Europe region for IVL is expected to benefit from ramp up of various units as well as higher margins arising from Asia linked sales.

### Americas

- Production in Americas was up 5% YoY, lower than expected despite Brazil PET addition due to loss of volumes in Olefins business & AlphaPet. The EBITDA however decreased 14% YoY primarily due to loss of higher margin Olefins business of Q1 2018. On a LTM 1Q19 basis, the absolute EBITDA increase is 40% and EBITDA/ton increase is 27% due to structural improvements seen in Integrated PET business over the last eight quarters.



- The Americas region for IVL is expected to remain strong due to Integrated PET margins with some margin off set due to short term weakness in the Olefins business.

**Table 2: Segment Results (New segment)**

	Quarterly				Last Twelve Months		
	1Q19	4Q18	1Q18	1Q19 YoY	LTM 1Q19	LTM 1Q18	LTM YoY
<i>\$million (except where stated otherwise)</i>							
<b>Production Volume (kt)</b>	<b>2,966</b>	<b>2,818</b>	<b>2,325</b>	<b>28%</b>	<b>11,060</b>	<b>9,240</b>	<b>20%</b>
Integrated PET	2,333	2,140	1,702	37%	8,436	6,906	22%
Fibers	357	333	302	18%	1,347	1,146	18%
Packaging	52	48	36	45%	178	131	36%
Olefins	30	133	134	(77)%	412	499	(17)%
Specialty Chemicals	193	164	152	27%	687	558	23%
<b>Operating rate (%)</b>	<b>85%</b>	<b>86%</b>	<b>87%</b>	<b>-226bps</b>	<b>87%</b>	<b>88%</b>	<b>-89bps</b>
Integrated PET	88%	86%	87%	158bps	88%	90%	-200bps
Fibers	91%	89%	97%	-587bps	93%	90%	300bps
Packaging	76%	65%	56%	2,034bps	66%	65%	48bps
Olefins	22%	96%	99%	-7,630bps	75%	91%	-1,580bps
Specialty Chemicals	78%	84%	81%	-248bps	84%	74%	972bps
<b>Consolidated Revenue<sup>1,2</sup></b>	<b>3,030</b>	<b>2,788</b>	<b>2,414</b>	<b>26%</b>	<b>11,357</b>	<b>8,811</b>	<b>29%</b>
Integrated PET	2,102	1,855	1,496	40%	7,602	5,556	37%
Fibers	790	753	646	22%	2,891	2,252	28%
Packaging	85	78	52	63%	282	192	47%
Olefins	68	107	124	(45)%	396	452	(12)%
Specialty Chemicals	269	233	259	4%	1,071	948	13%
<b>Core EBITDA<sup>3</sup></b>	<b>304</b>	<b>318</b>	<b>326</b>	<b>(7)%</b>	<b>1,419</b>	<b>1,112</b>	<b>28%</b>
Integrated PET	192	171	142	35%	841	466	81%
Fibers	69	64	49	43%	232	191	22%
Packaging	16	13	11	54%	53	40	35%
Olefins	3	50	73	(97)%	162	189	(15)%
Specialty Chemicals	19	22	48	(60)%	130	223	(42)%
<b>Core EBITDA Margin (%)</b>	<b>10%</b>	<b>11%</b>	<b>14%</b>	<b>-349bps</b>	<b>12%</b>	<b>13%</b>	<b>-12bps</b>
Integrated PET	9%	9%	9%	-34bps	11%	8%	268bps
Fibers	9%	9%	8%	125bps	8%	8%	-44bps
Packaging	19%	17%	21%	-111bps	19%	21%	-170bps
Olefins	4%	47%	59%	-5,517bps	41%	42%	-108bps
Specialty Chemicals	7%	10%	19%	-1,141bps	12%	24%	-1,147bps
<b>Core ROCE%</b>	<b>9%</b>	<b>10%</b>	<b>17%</b>	<b>-740bps</b>	<b>13%</b>	<b>13%</b>	<b>-40bps</b>
Integrated PET	12%	12%	14%	-191bps	15%	11%	413bps
Fibers	7%	4%	7%	-40bps	6%	7%	-95bps
Packaging	20%	14%	18%	208bps	16%	17%	-108bps
Olefins	(8)%	28%	42%	-5,058bps	23%	21%	143bps
Specialty Chemicals	6%	8%	35%	-2,917bps	15%	42%	-2,707bps

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<sup>2</sup>Total of each segment may not always tally with consolidated financials due to elimination of Intra-company

<sup>3</sup>Core EBITDA is Reported EBITDA less Inventory gains/(losses)

## 1Q 2019 Performance Analysis

### Integrated PET (PX, PTA, PET and Recycling)

This segment accounted for 79% of total production and 63% of core EBITDA in 1Q19. Production volume was 2.3 million tons (+37% YoY; +9% QoQ), driven by the following:

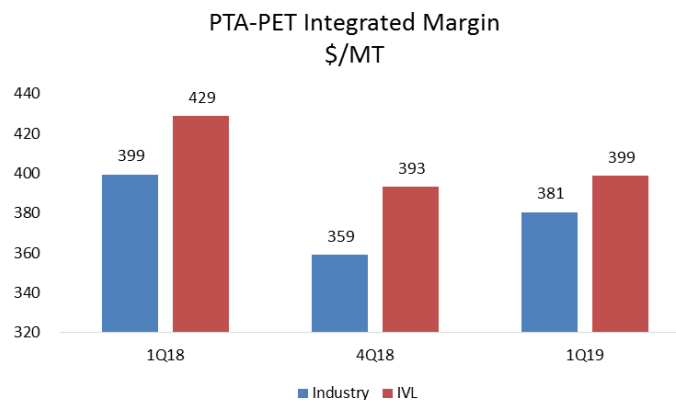
- Higher PET volume contribution from Brazil (2Q18), Egypt (3Q18) and the consolidation of the joint venture in India (1Q19).
- Volume for PTA also increased following the Portugal acquisition (3Q18) and the consolidation of the joint venture in Indonesia (4Q18).

As mentioned earlier, overall production was partially offset by shutdowns in the Netherland and a scheduled turnaround for 68 days at Alphapet in USA during 1Q19. Production of PX was also impacted due to flooding in the Alabama region which led to delayed receipt of its key raw material namely Mixed Xylene, thereby resulting in lower operating rate (26 days).

Core EBITDA was \$192 million (+35% YoY; +12% QoQ). Our core EBITDA was positively impacted by higher volume and improved EBITDA contribution from the contracts in the Western markets. Margins in markets linked to Asian spot prices were adversely impacted in 1Q19, but are showing improvement in 2Q19 due to:

- High PX prices despite volatility in crude oil prices. This has since changed substantially as new PX capacities comes on stream and even more is planned in the quarters to come.
- Weak demand due to pre-buying in December 2018 thus impacting demand in 1Q19. Expectedly, margins are improving led by the demand growth in 2Q19 in anticipation of the summer months ahead.
- In 2018, there was incremental supply of PTA and PET as a result of restart of the shutdown plants in Portugal (PTA), Egypt, Brazil, Mexico, USA (all PET) and additional capacity of PTA in the Netherlands. There was also an additional greenfield PET capacity added in Vietnam. These capacities have all since been absorbed in to the market, both to address the organic growth for the 100% recyclable PET and polyester and the new demand for PTA following China's decision to discontinue the import of recycled PET. Going forward, we do not foresee any new meaningful PTA and PET capacity in 2019, which is leading to commensurate positive impact on chain margins for the now more disciplined markets.

**Figure 2: PTA-PET Integrated Margin (\$/MT)**





## Fibers

Fibers segment accounted for 12% of total production and 23% of core EBITDA in 1Q19. Production was 357 thousand tons (+18% YoY; +7% QoQ), driven by contribution from HVA assets of Avgol (completed 3Q18), Kordana (completed 4Q18), Scholler (completed 4Q18) and UTT (completed 1Q19). The necessity portfolio was enhanced by acquisition of M&G Fibras Brasil (completed 1Q19). Overall production was partially offset by lower HVA volume in Mexico due to shutdown from technical issues during January 2019.

The segment core EBITDA was \$69 million (+43% YoY; +8% QoQ). This was primarily due to higher volume contribution from acquired assets.

Core EBITDA margin was 9% (8% in 1Q18; 9% 4Q18). Margin of the business improved on YoY basis from newly acquired HVA sites resulting in higher EBITDA per ton. 1Q19 benefitted from the lag impact of raw material price in the Personal Hygiene vertical and ability to pass on increased raw material prices in the Mobility vertical.

## Packaging

Packaging segment accounted for 2% of total production and 5% of total Core EBITDA in 1Q19. Production volume was 52 thousand tons (+45% YoY; +8% QoQ). This was mainly due to the additional volumes in all entities, including Egypt, which started contributing in 4Q18. These additional volumes led to core EBITDA of \$16 million (+54% YoY; +27% QoQ). Core EBITDA margin in 1Q19 was 19% (21% 1Q18; 17% 4Q18), slightly lower on YoY basis from higher portion of preform sales in Egypt.

## Olefins (Ethylene, PEO, MEG and related derivatives)

Olefin segment accounted for 1% of total production and 1% of total Core EBITDA in 1Q19. Production was 30 thousand tons (-77% YoY and QoQ). Production was adversely impacted due to the extended shutdown of the EO-EG plant; first for the planned maintenance of 38 days and thereafter due to unforeseen mechanical issues resulting in a shutdown. The plant eventually commenced commercial production on 02 May 2019 thereby losing production (and commensurate earnings) from 24 January 2019 till 01 May 2019. This has a negative impact on this segment for 1Q19 and also for over a month of 2Q19.

Core EBITDA in 1Q19 was \$3 million (-97% YoY; -95% QoQ). The decline in earnings of the segment was due to the EO-EG plant shutdown impact. The US gas cracker, which will provide ethylene feedstock to EO-EG plant, has achieved mechanical completion on 02 May 2019. As mentioned earlier, the EO-EG plant also restarted on 2 May 2019 and the ongoing strength in EO and EO derivatives is expected to provide plant to positively contribute in the forthcoming quarters although earnings from this segment is expected to be lower than expected due to weakness in MEG margins (high inventories and new capacity additions) and low ethane-ethylene spreads in USA.

## Specialty Chemicals (NDC, IPA and Specialty PET)

Specialty chemicals segment accounted for 7% of total production and 6% of total Core EBITDA in 1Q19. Production was 193 thousand tons (+27% YoY; +18% QoQ) as a result of acquisition of Invista Germany (PET HVA) completed in 1Q19 and start-up of IPA (220 thousand tons) facility in Alabama, USA in December 2018.

Core EBITDA was 19 million (-60% YoY; -13% QoQ) while Core EBITDA margin was 7% (19% in 1Q18; 10% in 4Q18). The decline in earnings of the segment on YoY basis was mainly due to depressed IPA margin as production level increased and feedstock prices also increased.

PET HVA continues to contribute to the segment earnings. However, contribution from this business will be adversely impacted in 2Q19 due to an unplanned shutdown lasting for around 45 days. 2020 will be the year that IVL realize full-year contribution from Invista Germany.

## Capital Expenditure Program

We continue to invest in the business to enhance overall production, vertical integration and quality of earnings. IVL balance sheet and cash flow generation are strong, allowing us to invest significantly in our growth engines, through selective growth and turnaround opportunities, leveraging our strengths in core markets and in further enhancing our offering.

**Table 3: Pipeline of Ongoing Projects 2019-2021**

Project	Business	Year	Total Installed Capacity (MMt)
Consolidation of India PET JV	Integrated PET	Completed	0.7
Custom Polymers acquisition	Integrated PET	Completed	0.03
Brazil Fibras and UTT acquisitions	Fibers	Completed	0.2
Invista PET Germany acquisition	Specialty Chemicals	Completed	0.3
Indorama Synthetics (India) Limited (IRSL) acquisition	Fibers	Completed	0.6
Corpus Christi PET/PTA	Integrated PET	2020 - 2021	PET: 1.1, PTA: 1.3
← Debottlenecking projects : On going →			

## Outlook

Our core businesses of Integrated PET, Fibers and Packaging are on track in terms of volume expansion and higher EBITDA contributions. Additional volumes, commensurate EBITDA contribution as well as declining PX prices are expected to be the main drivers for strong performance of Integrated PET chain.

In the Fibers segment, we expect higher utilization rates and earnings per ton as our synergy benefits and operational excellence measures take hold in the acquired businesses.

The Packaging segment is expected to benefit from improving geographic mix and higher operating rate.

Earnings for 1Q19 and LTM were adversely impacted by lower earnings from Olefins & Specialty Chemicals business. Earnings from the EO-EG facility is expected to normalize to 2016-18 average margins in FY 2020. Earnings from the US Gas Cracker (in ramp up mode) is expected to remain low in forthcoming quarters due to weakness in ethane-ethylene spreads in USA. Contribution from the Specialty Chemicals business is also expected to remain below expectation for the rest of FY 2019 due to ongoing weakness in IPA margin.

The strength in the core businesses (Integrated PET, Fibers and Packaging) is likely to remain for the rest of 2019. Earnings from the Olefins and Specialty Chemicals businesses are expected to remain weak for the rest of 2019. This changed ecosystem necessitated a comprehensive review of our 2019 EBITDA Guidance. At this juncture, we believe it may be prudent to lower the previous guidance of core EBITDA for 2019 by 10-15%.

Our M&A projects continue to drive value-accretive growth. In 2018, the underperforming assets added through M&A in PTA and PET have been successfully turned around and have added significant earnings to 2019. This is also the case with the assets acquired in the Fibers segment, most of which are contributing positively to the growth in EBITDA in 2019.

As highlighted in the 2019 Capital Market Day presentation, IVL foresees the ability to invest \$3 to 4 billion of projected free cash flow over the next 3-4 years and aim to invest in the high-growth, high-margin areas, focusing on portfolio enhancements under Packaging, Olefins and Specialty Chemicals segments.

In light of continued growth aspirations, IVL has also embarked on a journey to make the organization ready for the future. Initiatives in this regard include the recent strengthening of the management team with the recruitment of the Chief Strategy Officer and Chief HR Officer, steps being taken to implement digitization programs and standardization of an ERP system.

Growing demand for the 100% recyclable PET is also being addressed through a series of additional initiatives in the Company's recycling strategies and offerings. The Board has recently nominated an Executive Director with the specific remit of addressing the global recycling opportunity.

In view of our strong visibility of cash flows and our strong balance sheet, IVL started paying quarterly interim dividend since 3Q18 and is continuing this practice.

Overall, we believe that with promising opportunities in new growth segments, supported by well-established positions of Integrated PET and Fibers, IVL portfolio is poised for growth and accordingly, we remain confident to double our EBITDA every 5 years.

## **Forward-looking Statements**

The statements included herein contain “forward-looking statements” of Indorama Ventures Public Company Limited (the “Company”) that relate to future events, which are, by their nature, subject to significant risks and uncertainties. All statements, other than statements of historical fact contained herein, including, without limitation, those regarding the future financial position and results of operations, strategy, plans, objectives, goals and targets, future developments in the markets where the Company participates or is seeking to participate and any statements preceded by, followed by or that include the words “target”, “believe”, “expect”, “aim”, “intend”, “will”, “may”, “anticipate”, “would”, “plan”, “could”, “should”, “predict”, “project”, “estimate”, “foresee”, “forecast”, “seek” or similar words or expressions are forward-looking statements.

Such forward-looking statements involve known and unknown risks, uncertainties and other important factors beyond the Company’s control that could cause the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such forward-looking statements. These forward-looking statements are based on numerous assumptions regarding the Company’s present and future business strategies and the environment in which the Company will operate in the future and are not a guarantee of future performance. 2019 and 2021 projections are based on historical 2017-2018 performance and management forecast. The predicted volume is based on legacy and new assets already committed, planned and announced.

Such forward-looking statements speak only as at the date of this document, and the Company does not undertake any duty or obligation to supplement, amend, update or revise any such statements. The Company does not make any representation, warranty or prediction that the results anticipated by such forward-looking statements will be achieved.

## **Definitions**

**Core EBITDA** is after excluding inventory gains/losses from reported EBITDA.

**Inventory gains/losses** in a period result from the movement in prices of raw materials and products from the end of the previous reported period to the end of the current reported period. The cost of sales is impacted by inventory gains/losses wherein inventory gains decrease the cost of sales and inventory losses increase the cost of sales.

**Core Net Profit** is the Reported Net Profit less extraordinary items less tax adjusted inventory gain/loss.

**Net Operating Debt** is Net Debt (total debt less cash and current investments) less cash outflow for the various projects underway which are not yet completed and have not yet started contributing to the earnings.

## **Notes**

We recommend that investors always read the MD&A together with the published financial statements to get complete details and understanding.

The consolidated financials are based on the elimination of intra-company (or intra-business segment) transactions. For this reason, the total of each segment may not always tally with consolidated financials. Similarly segments total may not always match to total due to holdings segment.

The Polyester Chain businesses are generally traded in US\$ and therefore the Company believes in helping its readers with translated US\$ figures. The Company’s reporting currency is THB. THB results are translated into US\$ at the average exchange rates and closing exchange rates where applicable.

The Company has presented the analysis in the MD&A in US\$ as it believes that the business can be explained better in US\$ terms. However THB numbers are also given where needed. Readers should rely on the THB results only.

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Table 4: Segment Results (Old segment)

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PET	1,337	1,092	947	41%	4,657	3,801	23%
Fibers	413	398	363	14%	1,595	1,390	15%
Feedstock	1,216	1,328	1,016	20%	4,809	4,049	19%
West Feedstock	797	896	717	11%	3,330	2,826	18%
Asia PTA	420	432	299	41%	1,479	1,223	21%
<b>Operating rate (%)</b>	<b>85%</b>	<b>86%</b>	<b>87%</b>	<b>-226bps</b>	<b>87%</b>	<b>88%</b>	<b>-89bps</b>
PET	90%	84%	87%	261bps	88%	89%	-51bps
Fibers	89%	89%	95%	-682bps	92%	89%	245bps
Feedstock	80%	87%	85%	-550bps	85%	87%	-203bsp
West Feedstock	75%	86%	84%	-901bps	82%	86%	-360bps
Asia PTA	91%	92%	88%	226bps	91%	89%	196bps
<b>Core EBITDA (\$m)</b>	<b>304</b>	<b>318</b>	<b>326</b>	<b>(7)%</b>	<b>1,419</b>	<b>1,112</b>	<b>28%</b>
PET	145	113	116	25%	617	356	73%
Fibers	77	72	55	39%	261	218	20%
Feedstock	78	136	151	(49)%	540	535	1%
West Feedstock	62	112	148	(58)%	455	521	(13)%
Asia PTA	15	24	3	463%	85	14	490%
<b>Core EBITDA/ton (\$)</b>	<b>102</b>	<b>113</b>	<b>140</b>	<b>(27)%</b>	<b>128</b>	<b>120</b>	<b>7%</b>
PET	109	103	123	(11)%	132	94	42%
Fibers	186	181	152	22%	164	157	5%
Feedstock	64	103	148	(57)%	112	132	(15)%
West Feedstock	78	125	207	(62)%	137	184	(26)%
Asia PTA	36	56	9	301%	57	12	388%
<b>Core EBITDA Margin (%)</b>	<b>10%</b>	<b>11%</b>	<b>14%</b>	<b>-349bps</b>	<b>12%</b>	<b>13%</b>	<b>-12bps</b>
PET	8%	8%	9%	-105bps	10%	8%	214bps
Fibers	9%	9%	8%	120bps	8%	9%	-43bps
Feedstock	7%	11%	16%	-913bps	11%	15%	-390bps
West Feedstock	8%	13%	20%	-1,268bps	13%	20%	-627bps
Asia PTA	4%	6%	1%	302bps	6%	2%	467bps

Table 5: Regional Revenue Breakdown

	Quarterly				Last Twelve Months		
	1Q19	4Q18	1Q18	1Q19 YoY	LTM 1Q19	LTM 1Q18	LTM YoY
<b>Consolidated Revenue<sup>1</sup></b>							
THBm	95,810	91,436	76,143	26%	366,838	290,825	26%
\$m	3,030	2,788	2,414	26%	11,357	8,811	29%
<b>Revenue breakdown by geography<sup>2</sup></b>							
Thailand	5%	6%	7%		6%	6%	
Rest of Asia	21%	19%	19%		20%	18%	
Americas	32%	34%	36%		35%	36%	
Europe	30%	27%	33%		28%	33%	
Rest of the World	12%	13%	6%		11%	6%	

<sup>1</sup> Consolidated financials are based on elimination of intra-company (or intra-business segment) transactions<sup>2</sup> Breakup by customer sales location



**Table 6: Reconciliation of Core Profit After Tax and NCI to Reported Net Profit**

\$million (except where stated otherwise)	Quarterly				Last Twelve Months		
	1Q19	4Q18	1Q18	1Q19	LTM	LTM	LTM
				YoY	1Q19	1Q18	YoY
<b>Core Net Profit after Tax and NCI</b>	<b>128</b>	<b>121</b>	<b>175</b>	<b>(27)%</b>	<b>741</b>	<b>540</b>	<b>37%</b>
Inventory gains (losses)	(38)	(78)	18	(311)%	(40)	17	(328)%
Total tax on Inventory gains/(losses)	3	8	(3)	(214)%	(1)	(2)	(35)%
<b>Net profit, before extraordinary items</b>	<b>93</b>	<b>51</b>	<b>190</b>	<b>(51)%</b>	<b>700</b>	<b>555</b>	<b>26%</b>
Add: Non Operational/Extraordinary income/(expense)	24	18	(6)	(495)%	52	119	(56)%
Acquisition cost and pre-operative expense,	(7)	(10)	(6)	23%	(36)	(20)	83%
Gain on Bargain Purchases, impairments and feasibility study (Net) <sup>1</sup>	26	30	-		85	108	(21)%
Other Extraordinary Income/(Expense)	6	(2)	(0)	(3,856)%	2	30	(92)%
<b>= Net Profit after Tax and NCI</b>	<b>117</b>	<b>69</b>	<b>184</b>	<b>(36)%</b>	<b>752</b>	<b>674</b>	<b>12%</b>

<sup>1</sup> A gain on bargain purchase needs to be accounted for on completion of any acquisition under Thai Accounting Standards

**Table 7: Cash Flow Statement**

\$million (except where stated otherwise)	Quarterly				Last Twelve months		
	1Q19	4Q18	1Q18	1Q19	LTM	LTM	LTM
				YoY	1Q19	1Q18	YoY
<b>Core EBITDA</b>	<b>304</b>	<b>318</b>	<b>326</b>	<b>(7)%</b>	<b>1,419</b>	<b>1,112</b>	<b>28%</b>
Net working capital and others <sup>1</sup>	(0)	(19)	(78)	(100)%	(276)	(171)	62%
Income tax	(42)	(48)	(8)	482%	(133)	(69)	93%
<b>Operating Cash Flow</b>	<b>261</b>	<b>250</b>	<b>241</b>	<b>8%</b>	<b>1,010</b>	<b>872</b>	<b>16%</b>
Net growth and investment capex <sup>2</sup>	(363)	(793)	(119)	206%	(2,413)	(723)	234%
Net working capital on acquired /sold assets	(91)	(54)	-		(183)	(52)	250%
Maintenance capex	(60)	(42)	(22)	167%	(150)	(99)	51%
<b>Cash Flow After Strategic Spending</b>	<b>(253)</b>	<b>(639)</b>	<b>99</b>	<b>(354)%</b>	<b>(1,736)</b>	<b>(2)</b>	
Net financial costs	(33)	(68)	(23)	44%	(164)	(129)	27%
Dividends and PERP interest	(10)	(68)	(8)	21%	(312)	(155)	101%
Proceeds from issue of ordinary shares due to warrants exercised	0	(3)	227	(100)%	264	683	(61)%
<b>Increase/(Decrease) in Net Debt on cash basis<sup>3</sup></b>	<b>(296)</b>	<b>(777)</b>	<b>295</b>	<b>(200)%</b>	<b>(1,948)</b>	<b>398</b>	<b>(590)%</b>

<sup>1</sup> Includes inventory gains/ (losses)

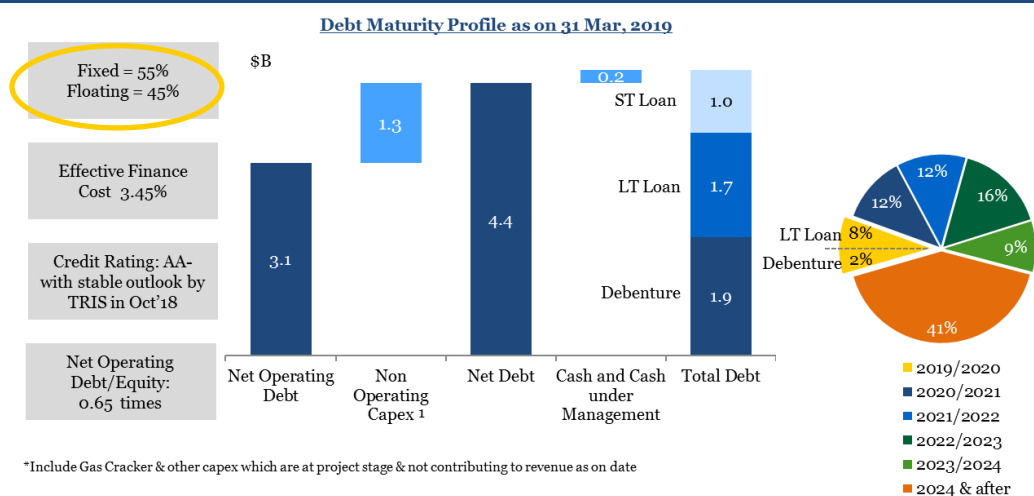
<sup>2</sup> Includes net proceeds from disposals of PPE, other non-current investments and assumed net debt on acquisitions

<sup>3</sup> Includes effect of FOREX changes on balance held in foreign currencies and on the net debt changes over the period of cash flow, due to the increase/decrease in net debt as per statement of financial position might be different

**Table 8: Debt Profile**

\$million (except where stated otherwise)	31-Mar-19	31-Dec-18
<b>Total Debt</b>	<b>4,603</b>	<b>4,215</b>
Bank overdraft and short-term loans	1,012	964
Long term debt (Current portion)	291	269
Debentures (Current portion)	70	93
Long term debt (Non-current portion)	1,390	1,083
Debentures (Non-current portion)	1,840	1,806
<b>Cash &amp; Cash under management</b>	<b>207</b>	<b>165</b>
Cash and cash equivalents	221	172
Current investments and loans given	(14)	(7)
<b>Net Debt</b>	<b>4,397</b>	<b>4,050</b>
Non-operating Debt (Project Debt)	1,298	1,220
<b>Net Operating Debt<sup>1</sup></b>	<b>3,107</b>	<b>2,830</b>
Net debt to equity (times)	0.92	0.87
Net operating debt to equity (times)	0.65	0.60
Debts with fixed interest %	55%	49%
Credit Rating by TRIS	AA-	AA-

<sup>1</sup> Net debt after debt for capex and investments in progress that are not generating revenue and earnings as on date given

**Figure 3: Repayment Schedule of Long Term Debt**

<sup>1</sup> Includes various projects underway which are not yet completed and have not yet started contributing to the earnings

**Table 9: Joint Ventures Performance**

\$million (except where stated otherwise)	Quarterly				Last twelve Months		
	1Q19	4Q18	1Q18	1Q19 YoY	LTM 1Q19	LTM 1Q18	LTM YoY
<b>Joint Ventures Income / (Loss)</b>	<b>(0)</b>	<b>(2)</b>	<b>(1)</b>	<b>(99)%</b>	<b>19</b>	<b>(5)</b>	<b>(516)%</b>
Polyprima, Indonesia <sup>1</sup>	-	-	(5)	(100)%	9	(14)	(164)%
India PET JV	-	(2)	3	(100)%	10	5	128%
Others (FiberVisions, PHP China, Mexico)	(0)	0	1	(101)%	1	4	(88)%

<sup>1</sup> 74% PTA JV, IVL started consolidating Polyprima Indonesia result since 4Q18. IVL has 100% ownership since January 3rd, 2019

Table 10: IVL Consolidated Statement of Income

THBm	Quarterly				Last Twelve Months		
	1Q19	4Q18	1Q18	1Q19	LTM	LTM	LTM
				YoY	1Q19	1Q18	YoY
<b>Reported Financials</b>							
Net sales	95,810	91,436	76,143	26%	366,838	290,825	26%
Other income (expense), net <sup>1</sup>	319	449	934	(66)%	1,334	1,971	(32)%
Total Revenue	96,130	91,885	77,077	25%	368,172	292,797	26%
Cost of sales <sup>2</sup>	83,548	80,723	63,415	32%	309,240	244,299	27%
Gross profit	<b>12,582</b>	<b>11,162</b>	<b>13,663</b>	<b>(8)%</b>	<b>58,932</b>	<b>48,498</b>	<b>22%</b>
Selling and administrative expenses <sup>2</sup>	8,274	7,569	6,064	36%	29,949	23,875	25%
Foreign exchange gain (loss)	99	175	214	(54)%	471	216	118%
<b>EBITDA</b>	<b>8,393</b>	<b>7,937</b>	<b>10,863</b>	<b>(23)%</b>	<b>44,658</b>	<b>37,189</b>	<b>20%</b>
Depreciation and amortization	3,986	4,169	3,051	31%	15,204	12,350	23%
<b>Operating income</b>	<b>4,407</b>	<b>3,768</b>	<b>7,812</b>	<b>(44)%</b>	<b>29,454</b>	<b>24,839</b>	<b>19%</b>
Share of profit/(loss) from JV	(0)	(57)	(42)	(99)%	628	(160)	(492)%
Extraordinary income/ (expenses) <sup>3</sup>	770	588	(194)	496%	1,649	4,037	(59)%
Net interest	(1,341)	(1,293)	(854)	57%	(4,467)	(3,631)	23%
<b>Profit before tax</b>	<b>3,836</b>	<b>3,006</b>	<b>6,722</b>	<b>(43)%</b>	<b>27,264</b>	<b>25,085</b>	<b>9%</b>
Income tax expense	103	768	881	(88)%	3,034	2,664	14%
Current tax expense/(income)	179	512	834	(78)%	3,536	3,171	12%
Deferred tax expense	(77)	256	47	(263)%	(502)	(507)	(1)%
<b>Profit/(loss) for the period</b>	<b>3,733</b>	<b>2,238</b>	<b>5,841</b>	<b>(36)%</b>	<b>24,230</b>	<b>22,422</b>	<b>8%</b>
Non-controlling interests (NCI)	25	(117)	27	(4)%	(129)	151	(185)%
<b>Net profit/(loss) after NCI</b>	<b>3,708</b>	<b>2,355</b>	<b>5,814</b>	<b>(36)%</b>	<b>24,359</b>	<b>22,270</b>	<b>9%</b>
Interest on subordinated capital debentures (PERP) <sup>4</sup>	(259)	(265)	(259)	-	(1,050)	(1,050)	-
<b>Net profit/(loss) after NCI &amp; PERP interest</b>	<b>3,449</b>	<b>2,090</b>	<b>5,555</b>	<b>(38)%</b>	<b>23,309</b>	<b>21,220</b>	<b>10%</b>
Weighted average no. of shares (in Millions)	5,615	5,615	5,345	5%	5,527	5,116	8%
<b>EPS (in THB)</b>	<b>0.61</b>	<b>0.37</b>	<b>1.04</b>	<b>(41)%</b>	<b>4.19</b>	<b>4.15</b>	<b>1%</b>
<b>Core Financials</b>							
EBITDA	8,393	7,937	10,863	(23)%	44,658	37,189	20%
Less: Inventory gain/(loss)	(1,212)	(2,521)	573	(311)%	(1,245)	504	(347)%
<b>Core EBITDA</b>	<b>9,604</b>	<b>10,458</b>	<b>10,290</b>	<b>(7)%</b>	<b>45,904</b>	<b>36,686</b>	<b>25%</b>
Net profit/(loss) after NCI	3,708	2,355	5,814	(36)%	24,359	22,270	9%
Less: Inventory gain/(loss) – tax adjusted	(1,105)	(2,208)	480	(330)%	(1,292)	450	(387)%
Less: Extraordinary income/(expenses)	770	588	(194)	(496)%	1,649	4,037	(59)%
<b>Core net profit after NCI</b>	<b>4,042</b>	<b>3,974</b>	<b>5,529</b>	<b>(27)%</b>	<b>24,002</b>	<b>17,783</b>	<b>35%</b>
Interest on subordinated capital debentures (PERP) <sup>4</sup>	(259)	(265)	(259)	-	(1,050)	(1,050)	-
<b>Core net profit after NCI &amp; PERP interest</b>	<b>3,784</b>	<b>3,709</b>	<b>5,270</b>	<b>(28)%</b>	<b>22,952</b>	<b>16,733</b>	<b>37%</b>
<b>Core EPS (THB)</b>	<b>0.67</b>	<b>0.66</b>	<b>0.99</b>	<b>(32)%</b>	<b>4.12</b>	<b>3.26</b>	<b>26%</b>
Net Operating Core ROCE (before JV's and M&A Annualized) %	9.2%	10.4%	16.8%	-762bps	13.0%	14.0%	-95bps

<sup>1</sup> As per internal classification and includes insurance claim for business interruption loss of profit

<sup>2</sup> As per internal classification and includes depreciation and amortization expenses

<sup>3</sup> As per internal classification and includes gain on bargain purchase on new acquisitions and their related transaction costs and pre-operative expenses

<sup>4</sup> Interest net of tax on THB 15 billion Perpetual Debentures

<sup>5</sup> M&A earnings are annualized for ROCE calculation to appropriately represent the ratio based on restated historical numbers. ROCE calculation is based on THB currency which may not match with other graphs where the calculation is on \$ basis.

**Table 11: IVL Consolidated Statement of Financial Position**

THBm	31-Mar-19	31-Dec-18	31-Mar-19 vs. 31-Dec-18
<b>Assets</b>			
Cash and current investments	7,093	5,713	24%
Trade accounts receivable	43,129	37,637	15%
Inventories	68,601	70,085	(2)%
Other current assets	11,762	10,850	8%
<b>Total current assets</b>	<b>130,584</b>	<b>124,284</b>	<b>5%</b>
Investment	2,378	5,294	(55)%
Property, plant and equipment	214,435	205,182	5%
Intangible assets	42,751	40,349	6%
Deferred tax assets	2,583	2,714	(5)%
Other assets	2,735	1,371	99%
<b>Total assets</b>	<b>395,465</b>	<b>379,195</b>	<b>4%</b>
<b>Liabilities</b>			
Bank OD and short-term loans from financial institutions	32,199	31,272	3%
Trade accounts payable	56,777	54,565	4%
Current portion of long-term loans	9,120	8,627	6%
Current portion of debenture	2,222	3,013	(26)%
Current portion of finance lease liabilities	131	110	19%
Other current liabilities	16,485	16,113	2%
<b>Total current liabilities</b>	<b>116,935</b>	<b>113,700</b>	<b>3%</b>
Long-term loans from financial institutions	43,708	34,640	26%
Debenture	58,531	58,604	(0)%
Finance lease liabilities	524	498	5%
Deferred tax liabilities	17,575	15,788	11%
Other liabilities	5,386	4,109	31%
<b>Total liabilities</b>	<b>242,658</b>	<b>227,339</b>	<b>7%</b>
<b>Shareholder's equity</b>			
Share capital	5,615	5,615	-
Share premium	60,331	60,331	-
Retained earnings & Reserves	63,592	64,018	(1)%
<b>Total equity attributable to shareholders</b>	<b>129,538</b>	<b>129,964</b>	<b>(0)%</b>
Subordinated perpetual debentures	14,874	14,874	0%
<b>Total equity attributable to equity holders</b>	<b>144,412</b>	<b>144,838</b>	<b>(0)%</b>
Non-controlling interests (NCI)	8,396	7,018	20%
<b>Total shareholder's equity</b>	<b>152,808</b>	<b>151,855</b>	<b>1%</b>
<b>Total liabilities and shareholder's equity</b>	<b>395,465</b>	<b>379,195</b>	<b>4%</b>

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