

INDORAMA VENTURES

IVL TB

THAILAND / PETROCHEM & CHEMICALS

BUY

UNCHANGED

Russian gas supply risk is low

- We believe the impact is limited to less than 1%, if not zero, from the gas supply cuts to Poland and Bulgaria.
- IVL generates 15% and 1.5% of its EBITDA from Europe and Poland, and none from Bulgaria after the acquisition of Oxiteno.
- Maintain BUY and our target price of THB70.

TARGET PRICE	THB70.00
CLOSE	THB45.00
UP/DOWNSIDE	+55.6%
PRIOR TP	THB70.00
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	+18.7%

KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	468,108	383,886	374,825	374,369
Net profit	22,247	28,202	30,554	32,488
EPS (THB)	3.96	5.02	5.44	5.79
vs Consensus (%)	-	0.0	0.9	2.2
EBITDA	58,084	59,195	62,760	64,692
Core net profit	21,886	23,553	25,905	27,839
Core EPS (THB)	3.90	4.20	4.61	4.96
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	204.5	7.6	10.0	7.5
Core P/E (x)	11.5	10.7	9.8	9.1
Dividend yield (%)	2.7	5.8	6.2	6.5
EV/EBITDA (x)	7.8	7.0	6.1	5.5
Price/book (x)	1.6	1.4	1.2	1.1
Net debt/Equity (%)	111.0	86.5	63.6	44.3
ROE (%)	15.3	13.7	13.3	12.9

Panic selloff offers good buying opportunity

IVL's share price plunged today by over 5% on investors' concerns over the potentially negative impact of the gas supply cuts to Poland and Bulgaria by Russia following the two countries' refusal to comply and pay for Russian gas in rubles. We believe the impact is limited to less than 1%, if not zero, from the gas supply cuts to Poland and Bulgaria, and see the share price plunge as a strong buying opportunity ahead of the record high earnings we estimate for IVL in 1Q22 and 2022.

Limited impact from Russian gas supply cut to Poland

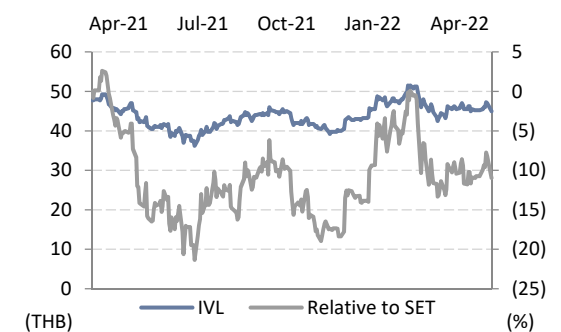
IVL generates only 15% EBITDA from Europe and 1.5% from Poland, and none from Bulgaria after the acquisition of Oxiteno in Apr-22. Poland still has sufficient gas supply, according to Poland's state gas company PGNiG, even if Russia cuts the gas sent to Poland via the Yamal pipeline which further transfers gas through Belarus to the European market. PGNiG bought 53% of its gas imports from Gazprom in 1Q22, but it indicated that it can procure gas from three other sources, including LNG imports, a new gas pipeline connection with Lithuania, and a new pipeline delivering gas from Norway, known as the "Baltic Pipe".

Margin upsides should outweigh EU volume downsides

Setting the downside risk from the European market aside, we believe IVL is now poised for record high quarterly net profits in 2022, starting in 1Q22 for which we project a net profit of THB9.1b. We project IVL's EBITDA to grow from USD1.8b in 2021 to over USD2b in 2022-23, driven by the additional EBITDA from the start-up of its ethane cracker in Nov-21 and the acquisition of Oxiteno's IOD asset in Apr-22. We believe the downside from the European market is very limited for IVL and see a much larger potential upside for its earnings growth in 2022, mainly from higher margins of integrated PET-PTA in the North American and European markets and strong margins for IOD and fibre products.

Strong fundamentals should limit downside in near term

We maintain BUY and our target price of THB70, based on 9.4x 2022E EV/EBITDA. At the closing share price of THB45.50 on 25 Apr-22, IVL was trading at a forward P/E below 12x in 2022-24E, which we think is unjustified against IVL's solid and highly visible earnings growth in 2022.



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(1.1)	(6.7)	0.6
Relative to country (%)	(0.6)	(8.2)	(6.0)
Mkt cap (USD m)	7,372		
3m avg. daily turnover (USD m)	29.6		
Free float (%)	33		
Major shareholder	Indorama Resources (63%)		
12m high/low (THB)	52.00/36.00		
Issued shares (m)	5,614.55		

Sources: Bloomberg consensus; FSSIA estimates



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Investment thesis

We believe IVL is now at an inflection point for its third growth phase, transforming from a high value-added (HVA)-driven, polyethylene terephthalate (PET)/purified terephthalic acid (PTA)-focused product company into a packaging, olefin-integrated company from 2019-23.

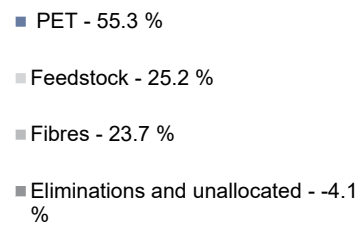
Unlike its last two growth cycles when IVL funded its capacity growth through debt and capital increases using warrants (IVL-W1 and IVL-W2), key growth strategies in IVL's third growth cycle could be driven by: 1) M&A in the global packaging business, non-PET packaging in frontier markets and specialty chemicals for polyester chain products; and 2) backward integration into the olefins business, including an ethane cracker, propylene production, and downstream polyethylene (PE) and polypropylene (PP), as these are key feedstock materials for IVL's growing packaging segment. The integration focus should only be on self-sufficient, non-merchant applications.

Company profile

Indorama Ventures (IVL) was incorporated in 2003 to start up a petrochemical business in Thailand. Initially focusing on wool fibre, the company expanded into the polyester chain, including polyester fibre, PET, and PTA.

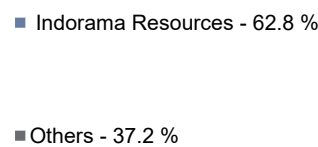
www.indoramaventures.com

Principal activities (revenue, 2021)



Source: Indorama Ventures

Major shareholders



Source: Indorama Ventures

Catalysts

Potential catalysts for IVL include: 1) higher PET and PTA margins; 2) a 10% y-y rising sales volume due to multiple acquired assets in 2018; and 3) an EBITDA margin recovery for HVA products, given the re-pricing of HVA products to reflect higher feedstock costs.

Risks to our call

The key downside risks to our EV/EBITDA-based TP are weaker-than-expected margins for PX-PTA and PET-PTA, lower demand for polyester, and delays in IVL's projects.

Event calendar

Date	Event
May 2022	1Q22 results announcement

Key assumptions

	2022E (USD/tonne)	2023E (USD/tonne)	2024E (USD/tonne)
Utilisation rate (%)	88	89	89
PET margin	341	407	407
PTA-PX margin	147	122	122
MEG-(0.58) ethylene margin	230	230	230
IOD EBITDA	600	580	620

Source: FSSIA estimates

Earnings sensitivity

- We project that every 1% change in PTA-PX margin would result in a net profit change of 1.2%, all else being equal.
- We project that every 1% change in PET-PTA margin would result in a net profit change of 1.3%, all else being equal.
- We project that every 1% increase in average Dubai oil price would result in a net profit change of 0.9%, all else being equal.

Source: FSSIA estimates

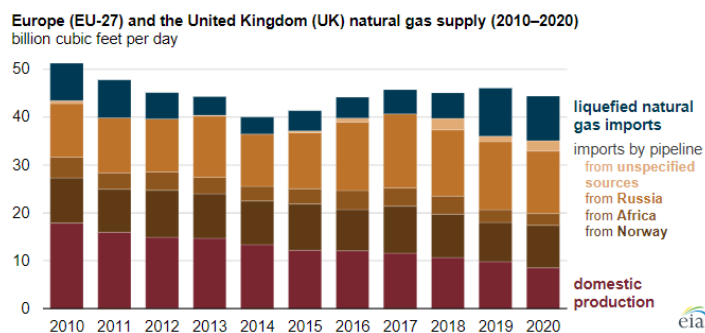
Downside from Russia’s gas supply cuts to Poland and Bulgaria

Europe imports natural gas via both pipeline and LNG, supplying over 80% of the gas supply to the countries of the EU (EU-27) and the UK as of 2020. The gas imports via pipeline accounted for 74% of total gas imported in 2020, while LNG accounted for only 26% in 2020.

Pipeline imports of natural gas into the region come from Russia, Norway, North Africa, and Azerbaijan. Pipeline imports originating in Russia – the largest supplier in the region – grew from about 11b cubic feet per day (bcfd) in 2010 to more than 13 bcfd in 2020 (a low consumption year due to Covid-related impacts).

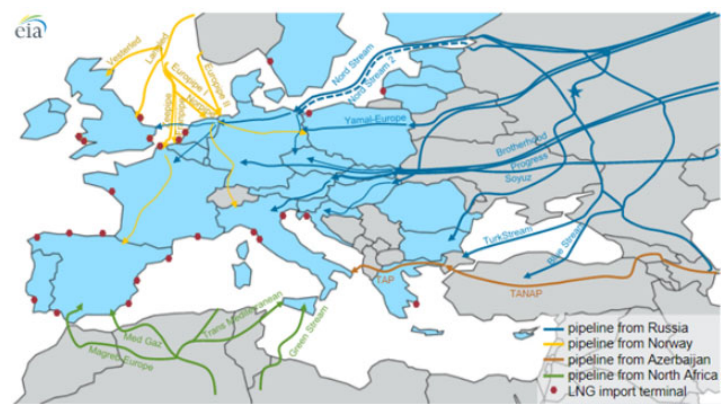
However, since the start of Russia-Ukraine war in Feb-22, the pan-European countries have begun to reduce their gas supply reliance on Russia by many approaches, including signing a long-term purchase agreement to buy LNG from the US, increase the gas supplies from other sources within Europe, and divert gas consumption into other fuels such as oils and renewables.

Exhibit 1: Europe relies primarily on imports to meet its natural gas needs



Source: Energy Information Administration (EIA)

Exhibit 2: Major natural gas delivery routes into European market



Source: EIA

Poland and Bulgaria gas supply cuts from Russia. On Tuesday, 26 April 2022, Russian energy company Gazprom informed Poland and Bulgaria that the gas supplies to both countries will be cut starting Wednesday, 27 April 2022 as both Poland and Bulgaria are treated by Russia as “unfriendly” countries that have refused to pay for their gas purchases in rubles.

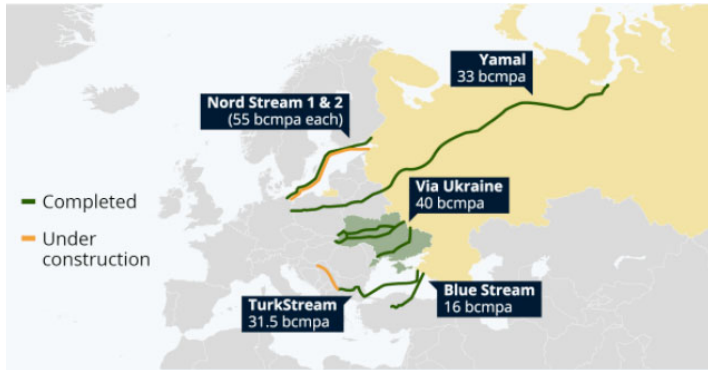
PGNiG, Poland’s state energy company, bought 53% of its gas imports from Gazprom in 1Q22 but it indicated that it can procure gas from other sources. Poland has three alternative sources for gas supplies. First, it can import LNG via its LNG terminal in Swinoujscie. Second, starting on 1 May 2022, a new gas pipeline connection with Lithuania is due to open that will give Poland access to gas from Lithuania’s LNG terminal. Third, a new pipeline delivering gas from Norway, known as the “Baltic Pipe”, has come online since October 2021 and should reach full capacity by the end of 2022, which could replace all Russian deliveries.

In recent years, Poland has reduced its dependence on Russian gas and it now buys LNG from Qatar. Additionally, pipelines connect the country to the European market, and with the winter heating season coming to an end, demand should be lower. Gazprom supplies more than half of all of Poland’s gas imports, and Poland is not the only EU country now seeking to stop buying Russian energy.

Bulgaria, which relies on Gazprom for more than 90% of its gas supply, also indicated that it has taken steps to find alternative sources, but that no restrictions on gas consumption were currently required.

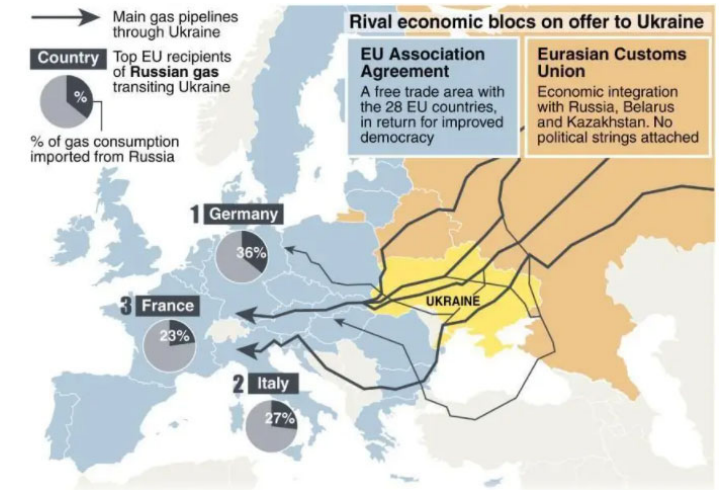
Russia sells and delivers its gas via a number of gas pipelines mainly through Ukraine, Belarus, Poland, and Turkey. For Poland, the gas is delivered via the Yamal gas pipeline to Belarus, Poland, and then to Germany. Poland purchased about 9bcm of gas from Russia and the country aims to completely halt the energy purchases from Russia, including gas and oil, by the end of 2022.

Exhibit 3: Russia's major gas pipelines to Europe



Source: [Statista](https://www.statista.com)

Exhibit 4: Ukraine is torn (buffered) between East and West Europe



Source: [Business Insider](https://www.businessinsider.com)

According to Oilprice.com, after Russia's announcement to cut gas supplies to Poland and Bulgaria, Germany's foreign minister pledged to cease importing Russian oil entirely by the end of 2022 and gradually stop buying gas over the next 1-2 years. Germany buys one-quarter to one-third of its gas from Russia.

Germany also signed a long-term contract to buy LNG from Qatar in March 2022 to reduce the reliance on Russian gas imports, but the new gas supply will come at a much higher price than the Russian gas, possibly 3-4x higher, as the LNG market is now tight after the sanctions the US and EU imposed on Russia for its invasion of Ukraine in February 2022.

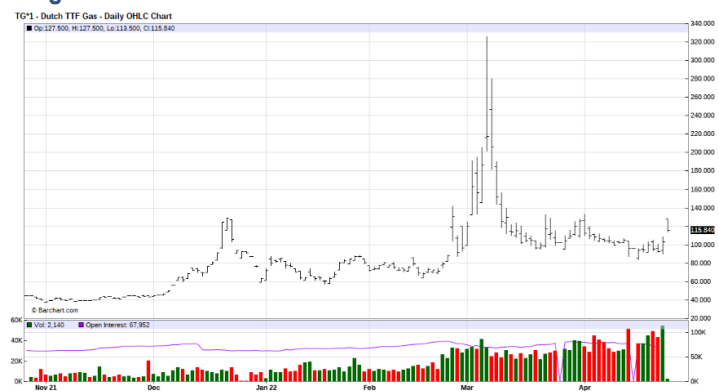
Immediately after Russia's announcement of the gas supply cuts to Poland and Bulgaria, the European benchmark gas price, Title Transfer Facility (TTF), jumped to €115/MWh, but it is still far below the peak price of €326/MWh seen on 7 March 2022 when the gas supply shock hit the market after Russia's invasion of Ukraine.

Exhibit 5: EU gas pipeline networks



Source: [Economist](https://www.economist.com)

Exhibit 6: European TTF benchmark gas price spiked after Russia's announcement to cut gas supply to Poland and Bulgaria



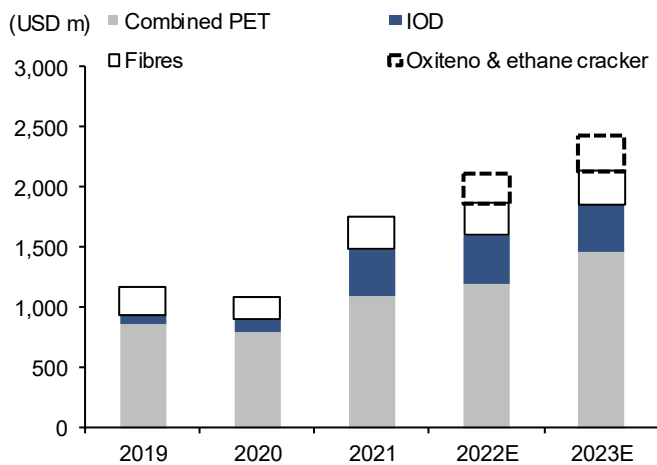
Sources: Bloomberg, BNP Paribas

IOD growth from M&A and combined PET are key growth drivers

Setting the downside risk from the European market aside, we believe IVL is now poised for record high quarterly net profits in 2022, starting in 1Q22 for which we project a net profit of THB9.1b.

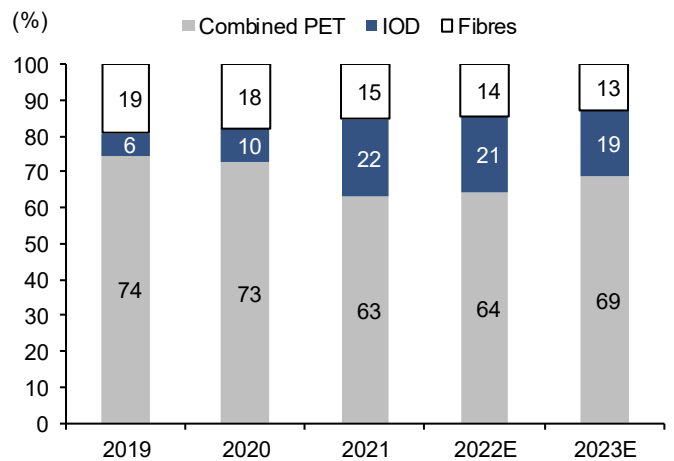
We project IVL’s EBITDA to grow from USD1.8b in 2021 to over USD2b in 2022-23, driven by the additional EBITDA from the start-up of its ethane cracker in Nov-21 and the acquisition of Oxitenos integrated oxides and derivatives (IOD) asset in Apr-22. We believe the downside from the European market is very limited for IVL and see a much larger potential upside for its earnings growth in 2022, mainly from higher margins of integrated PET-PTA in the North American and European markets and strong margins for IOD and fibre products.

Exhibit 7: EBITDA breakdown by segment



Sources: IVL; FSSIA estimates

Exhibit 8: EBITDA breakdown by segment (%)



Sources: IVL; FSSIA estimates

Financial Statements

Indorama Ventures

Profit and Loss (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Revenue	331,513	468,108	383,886	374,825	374,369
Cost of goods sold	(266,558)	(363,002)	(301,658)	(283,953)	(281,599)
Gross profit	64,955	105,107	82,229	90,872	92,770
Other operating income	-	-	-	-	-
Operating costs	(32,724)	(47,022)	(23,033)	(28,112)	(28,078)
Operating EBITDA	32,231	58,084	59,195	62,760	64,692
Depreciation	(20,487)	(20,487)	(20,521)	(21,149)	(21,778)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	11,744	37,597	38,675	41,611	42,914
Net financing costs	(7,362)	(7,202)	(7,149)	(7,155)	(6,066)
Associates	143	160	653	633	633
Recurring non-operating income	1,949	160	653	633	633
Non-recurring items	(758)	361	4,649	4,649	4,649
Profit before tax	5,573	30,916	36,827	39,738	42,130
Tax	1,243	(6,703)	(7,953)	(8,511)	(8,970)
Profit after tax	6,816	24,213	28,874	31,226	33,160
Minority interests	(386)	(1,966)	(672)	(672)	(672)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	6,430	22,247	28,202	30,554	32,488
Non-recurring items & goodwill (net)	758	(361)	(4,649)	(4,649)	(4,649)
Recurring net profit	7,188	21,886	23,553	25,905	27,839
Per share (THB)					
Recurring EPS *	1.28	3.90	4.20	4.61	4.96
Reported EPS	1.15	3.96	5.02	5.44	5.79
DPS	0.10	1.20	2.59	2.78	2.93
Diluted shares (used to calculate per share data)	5,615	5,615	5,615	5,615	5,615
Growth					
Revenue (%)	(6.0)	41.2	(18.0)	(2.4)	(0.1)
Operating EBITDA (%)	(5.2)	80.2	1.9	6.0	3.1
Operating EBIT (%)	(30.8)	220.1	2.9	7.6	3.1
Recurring EPS (%)	(34.7)	204.5	7.6	10.0	7.5
Reported EPS (%)	22.4	246.0	26.8	8.3	6.3
Operating performance					
Gross margin inc. depreciation (%)	13.4	18.1	16.1	18.6	19.0
Gross margin of key business (%)	13.2	18.2	17.3	19.8	20.2
Operating EBITDA margin (%)	9.7	12.4	15.4	16.7	17.3
Operating EBIT margin (%)	3.5	8.0	10.1	11.1	11.5
Net margin (%)	2.2	4.7	6.1	6.9	7.4
Effective tax rate (%)	-79.8	19.2	19.2	19.2	19.2
Dividend payout on recurring profit (%)	7.8	30.8	61.8	60.2	59.1
Interest cover (X)	1.9	5.2	5.5	5.9	7.2
Inventory days	79.5	71.9	98.0	92.7	92.3
Debtor days	37.3	33.8	46.0	42.0	41.5
Creditor days	86.7	82.2	108.0	102.1	101.7
Operating ROIC (%)	4.9	0.9	0.9	1.0	1.0
ROIC (%)	4.6	0.7	0.7	0.8	0.9
ROE (%)	5.6	15.3	13.7	13.3	12.9
ROA (%)	3.7	4.9	4.7	5.2	5.4

* Pre-exceptional, pre-goodwill and fully diluted

Revenue by Division (THB m)	2020	2021	2022E	2023E	2024E
PET	153,889	258,701	176,399	162,510	162,054
Feedstock	100,905	117,776	117,110	121,937	121,937
Fibres	90,601	110,868	109,613	109,613	109,613
Eliminations and unallocated	(13,882)	(19,236)	(19,236)	(19,236)	(19,236)

Sources: Indorama Ventures; FSSIA estimates

Financial Statements

Indorama Ventures

Cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Recurring net profit	7,188	21,886	23,553	25,905	27,839
Depreciation	20,487	20,487	20,521	21,149	21,778
Associates & minorities	-	-	-	-	-
Other non-cash items	(1,002)	(1,001)	(1,001)	(1,001)	(1,001)
Change in working capital	19,603	19,639	16,475	21,732	20,909
Cash flow from operations	46,276	61,011	59,548	67,786	69,524
Capex - maintenance	-	-	-	-	-
Capex - new investment	(16,231)	(16,229)	(13,200)	(13,200)	(13,200)
Net acquisitions & disposals	0	0	0	0	0
Other investments (net)	(9,059)	(9,053)	(9,053)	(9,053)	(9,053)
Cash flow from investing	(25,290)	(25,282)	(22,253)	(22,253)	(22,253)
Dividends paid	(3,088)	(5,474)	(6,737)	(14,559)	(15,601)
Equity finance	0	0	0	0	0
Debt finance	51,695	12,380	5,893	5,893	5,893
Other financing cash flows	(61,091)	(45,368)	(7,368)	(7,348)	(7,348)
Cash flow from financing	(12,484)	(38,462)	(8,213)	(16,014)	(17,056)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	8,502	(2,733)	29,082	29,518	30,215
Free cash flow to firm (FCFF)	28,659.55	42,849.85	44,539.37	52,776.94	54,515.67
Free cash flow to equity (FCFE)	11,589.60	2,741.28	35,819.46	44,077.03	45,815.76

Per share (THB)

FCFF per share	5.10	7.63	7.93	9.40	9.71
FCFE per share	2.06	0.49	6.38	7.85	8.16
Recurring cash flow per share	4.75	7.37	7.67	8.20	8.66

Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	376,464	424,337	437,537	450,737	463,937
Less: Accumulated depreciation	(112,173)	(132,660)	(153,181)	(174,330)	(196,108)
Tangible fixed assets (net)	264,291	291,677	284,356	276,407	267,829
Intangible fixed assets (net)	0	0	0	0	0
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	0	0	0	0	0
Cash & equivalents	18,949	16,215	45,297	74,815	105,030
A/C receivable	33,422	53,172	43,605	42,576	42,524
Inventories	53,938	88,979	72,970	71,247	71,161
Other current assets	13,526	18,493	18,493	18,493	18,493
Current assets	119,835	176,859	180,365	207,132	237,208
Other assets	69,046	73,292	46,416	46,416	46,416
Total assets	453,172	541,828	511,138	529,955	551,453
Common equity	126,655	158,769	184,882	205,527	227,062
Minorities etc.	8,953	12,235	986	1,056	1,114
Total shareholders' equity	135,608	171,003	185,868	206,583	228,176
Long term debt	164,073	169,893	169,893	169,893	169,893
Other long-term liabilities	39,552	43,034	11,897	11,897	11,897
Long-term liabilities	203,625	212,927	181,790	181,790	181,790
A/C payable	65,366	98,049	80,408	78,510	78,414
Short term debt	29,645	36,206	36,206	36,206	36,206
Other current liabilities	18,927	23,643	26,866	26,866	26,866
Current liabilities	113,938	157,898	143,480	141,582	141,486
Total liabilities and shareholders' equity	453,172	541,828	511,137	529,955	551,453
Net working capital	16,593	38,952	27,795	26,941	26,898
Invested capital	349,930	403,922	358,567	349,764	341,143

* Includes convertibles and preferred stock which is being treated as debt

Per share (THB)

Book value per share	22.56	28.28	32.93	36.61	40.44
Tangible book value per share	22.56	28.28	32.93	36.61	40.44

Financial strength

Net debt/equity (%)	128.9	111.0	86.5	63.6	44.3
Net debt/total assets (%)	38.6	35.0	31.5	24.8	18.3
Current ratio (x)	1.1	1.1	1.3	1.5	1.7
CF interest cover (x)	4.8	3.6	7.9	9.0	10.7

Valuation	2020	2021	2022E	2023E	2024E
Recurring P/E (x) *	35.1	11.5	10.7	9.8	9.1
Recurring P/E @ target price (x) *	54.7	18.0	16.7	15.2	14.1
Reported P/E (x)	39.3	11.4	9.0	8.3	7.8
Dividend yield (%)	0.2	2.7	5.8	6.2	6.5
Price/book (x)	2.0	1.6	1.4	1.2	1.1
Price/tangible book (x)	2.0	1.6	1.4	1.2	1.1
EV/EBITDA (x) **	13.5	7.8	7.0	6.1	5.5
EV/EBITDA @ target price (x) **	17.9	10.2	9.4	8.4	7.7
EV/invested capital (x)	1.2	1.1	1.2	1.1	1.0

* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income

Sources: Indorama Ventures; FSSIA estimates

Corporate Governance report of Thai listed companies 2020

EXCELLENT LEVEL										
AAV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AOT	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
BEC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
DV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	OTO	PAP	PCSGH	PDJ	PG	PHOL	PLANB	PLANET
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEAOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
THIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TTB	TMILL	TNDT
TNL	TOA	TOP	TPBI	TQM	TRC	TRC	TSC	TSR	TSTE	TSTH
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		

VERY GOOD LEVEL										
2S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAHA	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	B	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
ESTAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
IMH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
L&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	MITSIB	MK	MODERN	MTI	MVP
NETBAY	NEX	NINE	NTV	NWR	OCC	OGC	OSP	PATO	PB	PDG
PDI	PICO	PIMO	PJW	PL	PM	PPP	PRIN	PRINC	PSTC	PT
QLT	RCL	RICHY	RML	RPC	RWI	S11	SALEE	SAMCO	SANKO	SAPPE
SAWAD	SCI	SCP	SE	SEG	SFP	SGF	SHR	SIAM	SINGER	SKE
SKR	SKY	SMIT	SMT	SNP	SPA	SPC	SPCG	SR	SRICHA	SSC
SSF	STANLY	STI	STPI	SUC	SUN	SYNEX	T	TAE	TAKUNI	TBSP
TCC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
TMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
TPS	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
UPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIJK	WP	XO
YUASA	ZEN	ZIGA	ZMICO							

GOOD LEVEL										
7UP	A	ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
B52	BC	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
CPT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
GSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
KCM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
MDX	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
OCEAN	PAF	PF	PK	PLE	PMTA	POST	PPM	PRAKIT	PRECHA	PRIME
PROUD	PTL	RBF	RCI	RJH	ROJNA	RP	RPH	RSP	SF	SFLEX
SGP	SISB	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP	STARK	STC
SUPER	SVOA	TC	TCCC	THMUI	TIW	TNH	TOPP	TPCH	TIPIP	TPLAS
TTI	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH		

Description

Score Range

Excellent

90-100

Very Good

80-89

Good

70-79

Disclaimer:

The disclosure of the survey results of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey results may be changed after that date. FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such survey results.

* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive; ** delisted

Source: Thai Institute of Directors Association (IOD); FSSIA's compilation

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAHA	AP	AQUA	ARROW
ASK	ASP	AYUD	B	BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG
BGC	BGRIM	BJCHI	BKI	BLA	BPP	BROOK	BRR	BSBM	BTS	BWG
CEN	CENTEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT	CM	CMC
COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS
FTE	GBX	GC	GCAP	GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL
HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS	INET	INSURE	INTUCH	IRPC
ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL
KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO
MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG
MPG	MSC	MTC	MTI	NBC	NEP	NINE	NKI	NMG	NNCL	NSI
NWR	OCC	OCEAN	OGC	ORI	PAP	PATO	PB	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J
SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC
TAE	TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM
THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT	TTB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO
ZEN	TRUE									

DECLARED										
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
BM	BROCK	BUI	CHO	CI	COTTO	DDD	EA	EFORL	EP	ERW
ESTAR	ETE	EVER	FSMART	GPI	ILINK	IRC	J	JKN	JMART	JMT
JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK	PK	PLE
ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY
SUPER	SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA

Level	
Certified	This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already passed examination to ensure independence from external parties.
Declared	This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

Disclaimer:

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, FSS International Investment Advisory Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment results.

Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of June 24, 2019) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Source: The Securities and Exchange Commission, Thailand; * FSSIA's compilation

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Suwat Sinsadok, CFA, FRM, ERP FSS International Investment Advisory Securities Co., Ltd

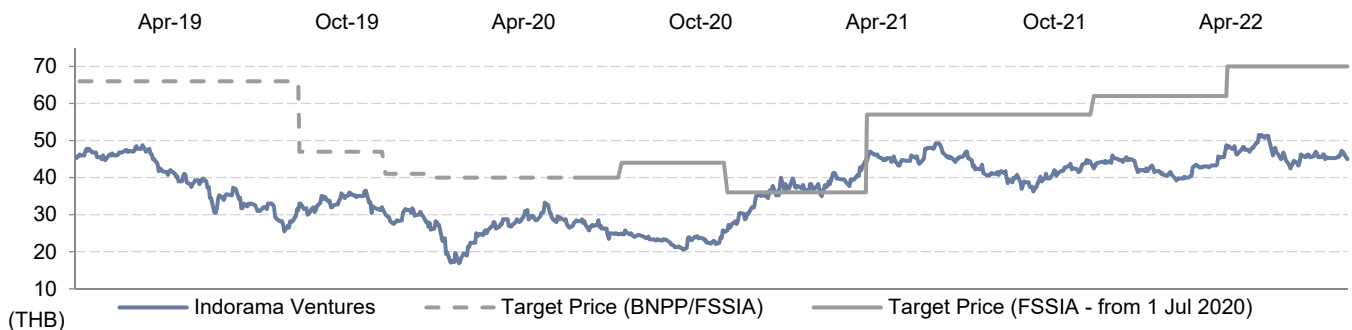
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

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History of change in investment rating and/or target price

Indorama Ventures (IVL TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
02-May-2019	BUY	66.00	27-Feb-2020	BUY	40.00	08-Mar-2021	BUY	57.00
07-Nov-2019	BUY	47.00	07-Aug-2020	BUY	44.00	17-Sep-2021	BUY	62.00
20-Jan-2020	BUY	41.00	06-Nov-2020	BUY	36.00	12-Jan-2022	BUY	70.00

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 09-Jun-2020

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Indorama Ventures	IVL TB	THB 45.00	BUY	The key downside risks to our EV/EBITDA-based TP are weaker-than-expected margins for PX-PTA and PET-PTA, lower demand for polyester, and delays in IVL's projects.

Source: FSSIA estimates

Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finasia Syrus Securities Public Company Limited

FSSIA may incorporate the recommendations and target prices of companies currently covered by FSS Research into equity research reports, denoted by an 'FSS' before the recommendation. FSS Research is part of Finasia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 26-Apr-2022 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as $(\text{target price}^* - \text{current price}) / \text{current price}$.

BUY (B). The upside is 10% or more.

HOLD (H). The upside or downside is less than 10%.

REDUCE (R). The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

Industry Recommendations

Overweight. The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

Neutral. The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

Underweight. The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

Country (Strategy) Recommendations

Overweight (O). Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Neutral (N). Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Underweight (U). Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.