& Sekuritas Indonesia

Surya Esa Perkasa (ESSA)

One step at a time

Taking an initial step to execute blue ammonia project

After the announcement of blue ammonia project back in Mar2021, we finally get to see the first step to realizing this project. Currently, ESSA's blue ammonia project is at its first phase of feasibility study of measuring the GHG emission produced. The CO2-free ammonia project is expected to start its construction by the end of 2023 with an estimated capex of USD150mn-200mn with targeted commercial operation in 2026.

Strong performance in 3Q22

ESSA managed to score another quarterly record high revenue of USD206mn (+7% QoQ) in 3Q22, driven by volume growth of ~43% QoQ as plant utilization reached 113% after a huge turnaround from maintenance back in FY21. The strong 3Q22 revenue brought its 9M22 revenue to USD557mn (+132% YoY). As cash cost decreased by 8% QoQ, its 3Q22 GPM continues to be on the high side at 48.5% (vs 48% in 2Q22). However, higher management fees and other costs dragged its OPM down to 41.45% (vs 45% in 2Q22) and resulted in a 3Q22 net profit of USD38mn (-8% QoQ), the 2nd highest quarterly earnings ever. The 3Q22 profit achievement resulted in ESSA's booking 9M22 earnings of USD105mn (12x YoY). *Refer to Table 1 for more details*

Expect similarly strong 4Q22 before maintenance in 1Q23

Currently, the ammonia plant is operating well beyond our expectation of 100% utilization, a huge turnaround after big maintenance done in 2021. We expect the plant to run optimally at the current rate high rate of 110% in FY22F before entering a short maintenance in 1Q23 (with an expected utilization of 70%). Therefore, we adjusted our FY22/23F utilization assumptions to 110%/95% (from 100%/105%) but retain our FY22F/FY23F ESSA's ammonia ASP assumption of USD885/MT and USD758/MT.

Rolled-forward valuation resulting in 15% lower TP at IDR1,210/sh

We rolled forward our DCF valuation to FY23F with WACC of 12% and 0% terminal growth rate which translates to lower TP of IDR1,210/sh (from IDR1,430/sh), implying a 12.5x FY23F PE and 6x FY23F EV/EBITDA (on its -0.5 std dev 5yr EV/EBITDA). ESSA's strong cash generation and already low gearing level should provide room for ESSA to splurge on the blue ammonia plan and dividend payment. We expect ESSA to deliver earnings of USD142mn & USD101mn in FY22F and FY23F, respectively. Currently, ESSA is trading at 10.3x FY23F PE and 5.2x FY23F EV/EBITDA. Note that our calculation does not include the upside potential from under development blue ammonia project.

FY-ending Dec.	2020A	2021A	2022F	2023F	2024F
Sales (USD mn)	176	303	728	548	470
GP (USD mn)	9	110	341	243	208
OP (USD mn)	(7)	86	300	209	176
NP (USD mn)	(19)	14	142	101	88
EBITDA (USD mn)	40	134	348	257	225
Net debt (USD mn)	376	392	255	88	(76)
OP margin (%)	(4)	28	41	38	38
ROE (%)	(6)	5	28	17	13
Dividend yield (%)	0%	0%	2%	3%	3%
EPS (IDR)	(18)	13	134	97	84
chg. (%, YoY)		(172)	950	(28)	(13)
BPS (IDR)	289	275	481	576	660
DPS (IDR)	-	-	1	40	29
PE (x)	(9.6)	26.3	7.4	10.3	11.8
PB (x)	0.6	1.2	2.1	1.7	1.5
EV/EBITDA (x)	32.8	9.9	3.8	5.2	5.9

Company

Update

Basic Materials

October 14, 2022

12M rating

BUY (Maintain)

12M TP

IDR 1,210 (from IDR1,430)

Upside +21.6%

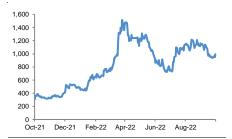
Stock Data

JCI (October 13)	6,880
Stock price (October 13, IDR)	995
Market cap (IDR bn)	15,582.6
Shares outstanding (m)	15,660.9
52-week high/low (IDR)	1,610/300
6M avg. daily turnover (IDR bn)	79.7
Free float (%)	35.4
Major shareholders (%)	
Trinugraha Akraya Sejahtera	23.1
Chander Vinod	13.0

Performance

	1M	6M	12M	
Absolute (%)	-14.8	-29.8	200.4	
Relative to JCI (%)	-8.8	-26.6	211.0	

ESSA share price



Source: Bloomberg

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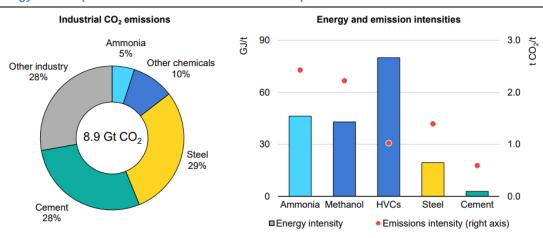
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I. A glimpse of the blue ammonia project

Almost all ammonia manufacturing is based on traditional fossil fuels, particularly natural gas. From there, hydrogen is created through chemical reaction and combined with nitrogen at high pressure and temperature to form ammonia. This method is often called "Grey ammonia" and has a major drawback of emitting GHG. In fact, according to IEA, the global average direct emission of ammonia production ranges from 1.6-2.7MT of CO2 per MT (accounting for around 1.3% of total CO2 emission from energy system).

Fig 1. Energy consumption for and emission from ammonia production



IEA, 2021.

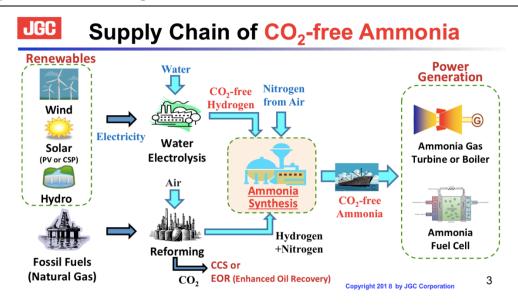
Notes: HVCs = high value chemicals, including ethylene, propylene, benzene, toluene and mixed xylenes. Energy intensities shown on a gross basis to facilitate comparison between products and sectors, i.e. excluding the quantities of steam and other energy carriers that are produced as by-products. Industrial energy consumption includes energy used in blast furnaces and coke ovens and chemical feedstock. Industrial CO₂ emissions include process emissions.

Source: IEA, KISI

Currently, there are two ways to produce CO2-free ammonia:

- Blue ammonia: It is essentially the same way as producing "grey ammonia" with the exception that any CO2 generated during the production is captured and permanently stored back in the soil (CCS).
- 2) **Green ammonia:** Hydrogen used in the production is obtained through electrolysis powered by renewable energy instead of fossil fuel, making it naturally clean ammonia.

Fig 2. The process of manufacturing CO2-free ammonia

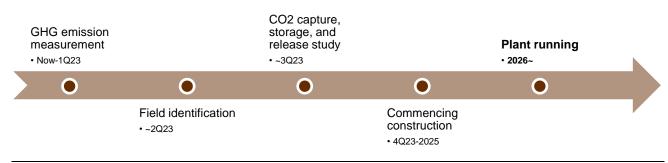


Source: JGC Corporation, KISI

Ammonia produced in these manners could also offer future options for the transition toward net-zero emission, which includes:

- Ideal energy storage, as ammonia can be easily stored in bulk as a liquid at -330c. The stored ammonia can then be transported by pipes, trucks, or ships
- 2) Hydrogen carrier, the carbon-free ammonia can be reconverted into Hydrogen which is a clean-burning fuel with no carbon emission, as opposed to storing hydrogen which is difficult and expensive to store in bulk.
- 3) Zero-carbon fuel, ammonia can be burnt in an engine or used in a fuel cell to produce electricity with ammonia's only byproducts are water and nitrogen

Fig 3. ESSA's blue ammonia project timeline



Source: Company, KISI

Currently, ESSA's blue ammonia project is at its first phase of feasibility study of measuring the GHG emission produced to calculate the carbon intensity values for ammonia products. The CO2-free ammonia project is expected to start its construction by the end of 2023 with an estimated capex of USD150mn-200mn with targeted commercial operation in 2026. We think that this number is reasonable given the similarity with other blue ammonia projects worldwide (see Fig 3.).



Fig 4. Ongoing blue ammonia project worldwide

Company/ projects	Ticker	Ammonia capacity	Operationa I target	Investment cost	Location
CF industries	CF US	1,250,000	2024	USD200mn	USA
CF Industries and Mitsui JV	CF US; 803	1,000,000	2027	USD2bn	USA
Barents Blue project by Horisont Energi	HRGI NO	2,000,000	2030	ТВА	Norway
Air Products	APD US	50 mmscfd	2026	USD4.5bn	USA
Maire Tecnimont S.p.A.	MT IM	1,000,000	2025	USD230mn	USA
OCI N.V.	OCI NA	1,100,000	2025	USD450mn	USA
Qatar Energy Ammonia-7 project	-	1,200,000	2026	USD1bn	Qatar
PT Surva Esa Perkasa	ESSA IJ	700.000	2026	USD150mn- 200mn	Indonesia

Source: Various sources, KISI

Most plants are targeted to commence operation after 2024 and we should see the blue ammonia forming its market by then, alongside with implementation of carbon pricing system in most countries. Japan has also stated its commitment to take 2mn tons of blue ammonia by 2027 with a gradually increasing amount. ESSA should be the ideal supplier as ESSA will be the first manufacturer to produce blue ammonia in Southeast Asia if the project is executed in a timely manner.



II. Strong performance in 3Q22

Table 1. 3Q22 earnings review

in USD mn	3Q21	2Q22	3Q22	QoQ	YoY	9M21	6M22	9M22	YoY	% of FY22F KISI
Revenue	102	192	206	7%	103%	241	351	557	132%	77%
Gross Profit	47	92	100	8%	111%	95	158	258	171%	76%
Operating Profit	42	86	85	-1%	105%	77	144	229	198%	76%
Net Income	19	41	38	-8%	100%	8	67	105	1183%	74%
GPM	46.6%	48.0%	48.5%			39.6%	45.1%	46.4%		
OPM	41.0%	45.0%	41.4%			31.9%	40.9%	41.1%		
NPM	18.6%	21.4%	18.3%			3.4%	19.1%	18.8%		

Source: Company, KISI

2022 has been a good start for ESSA as the significant leap in ammonia price resulted in a 98% YoY jump on ESSA's 9M22 ASP to USD902/MT (from USD457/MT in 9M21). On quarterly basis, however, 3Q22 ASP fell 11% QoQ to USD890/MT (from USD1,001/MT in 2Q22). We believe that the record high ammonia price in 2Q22 was driven by 1) several countries entering spring planting season, hence more demand for fertilizer, and 2) supply-shock from the geopolitical tension. We retain our ESSA's ammonia ASP assumption of USD885/MT in FY22F and therefore imply 4Q22F ASP to be slightly lower than it was in 3Q22 owing to peak winter planting season.

Fig 5. Ammonia & LPG quarterly ASP

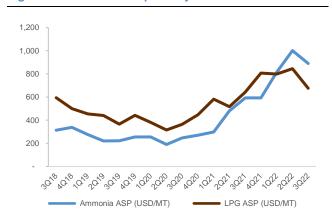
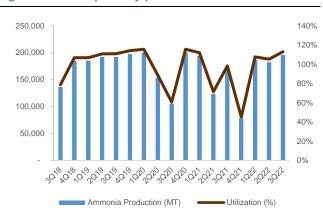


Fig 6. Ammonia quarterly production and utilization



Source: Company, KISI

Source: Company, KISI

Production-wise, ESSA's ammonia plant has been running at a utilization rate that is above our expectations. As of 9M22, its plant produced 564,550 MT ammonia with utilization at 109% and we expect the ammonia plant to run at the same high utilization rate for 4Q22F. Therefore, we adjust our utilization assumption to 110% from 100% for FY22F. We forecast ESSA to post a record-high top-line of USD728mn in FY22F (9M22 revenue was USD557mn, +132% YoY).

Fig 7. Gas cost as a % of cash cost

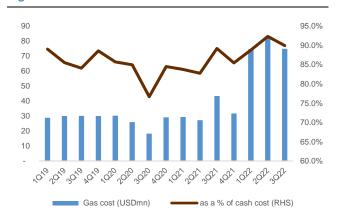
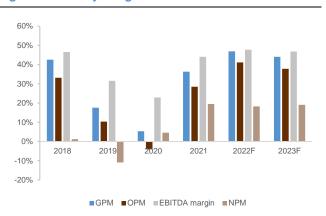


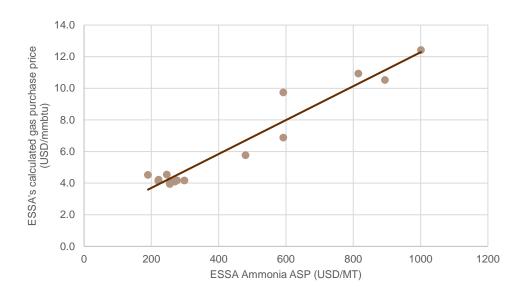
Fig 8. Profitability margin



Source: Company, KISI Source: Company, KISI

On the cost side, gas cost remains to be the biggest cost contributor. Compared to the previous years, gas cost (as a % of cash cost) went up significantly due to the increase in gas price while other costs remain stagnant. 3Q22 cash cost was down to USD74.9mn (-8% QoQ) following the slight downturn in natural gas price. This resulted in a slightly better GPM of 48.5% in 3Q22 vs 48% in 2Q22. We expect 4Q22F natural gas price to remain stable and GPM to stay at relatively the same level.

Fig 9. ESSA gas purchase price and ammonia ASP correlation (1Q19-3Q22)



Source: Various sources, KISI

All in all, ESSA recorded a 3Q22 net profit at USD38mn (+100% YoY, -8% QoQ), a slightly lower QoQ due to higher management fees and other costs, nevertheless operational remains strong. Along with the expected record-high revenue in FY22F, we expect ESSA to book record-high earnings of USD142mn by FY22F as a result of continued strong ASP and production volume in 4Q22F.



On balance sheet, ESSA has also successfully brought down its debt from its significant cash generation in this robust year. 9M22 leverage ratio is down to 0.7x, a significant improvement vs 1.6x as of end 2021. With a lesser burden on the cash flow, ESSA will be able to use its FCF for dividend distribution and capex for blue ammonia project starting FY23F.

Fig 10. Debt level

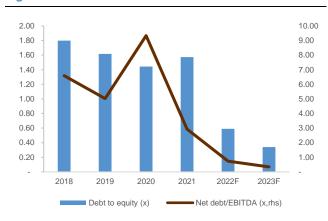
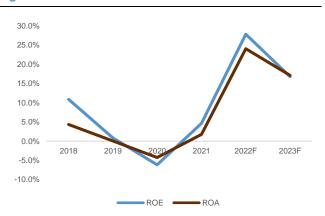


Fig 11. ROE and ROA



Source: Company, KISI

Source: Company, KISI



III. Maintain a positive view on ESSA

Taking into account this year's exceptional plant production performance, we tweaked our ESSA's utilization rate assumptions to 110% by FY22F (from 100% previously). However, for FY23F, we have to adjust down the utilization rate to 95% (from 105% previously) to take into account the expected maintenance period in 1Q23 (at 70% utilization). However, we still maintain our FY22/23F ammonia price assumptions.

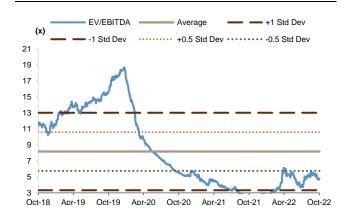
We also adjusted our cost of sales to match ESSA's gas pricing mechanism, USD/IDR assumptions, and toned-down its non-operational costs. These changes our earnings FY22/23F forecast by 5%/(-)4%, post 9M22 results.

Table 2. Assumption changes

		New			Old	
Assumptions	FY22F	FY23F	FY24F	FY22F	FY23F	FY24F
Ammonia plant utilization rate	110%	95%	105%	100%	105%	100%
Ammonia production (MT)	762,850	658,825	728,175	693,500	728,175	693,500
changes	10%	-10%	5%			
ESSA Ammonia ASP assumption (USD/MT)	885	758	590	885	758	674
changes	-	-				
USDIDR assumption	14,800	15,000	15,000	14,500	15,000	15,000
changes	2%	-	-			
Revenue (USDmn)	728	548	470	677	600	508
changes	8%	-9%	-7%			
Gross profit (USDmn)	341	243	208	337	273	208
changes	1%	-11%	-			
Operating profit (USDmn)	300	209	176	294	233	171
changes	2%	-10%	3%			
Net profit (USDmn)	142	101	88	135	105	77
changes	5%	-4%	14%			

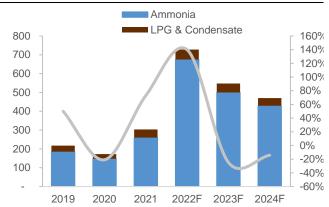
Source: Company, KISI

Fig 12. EV/ EBITDA band



Source: Company, KISI

Fig 13. Revenue driver



Source: Company, KISI



Subsequently, we rolled forward our DCF valuation to FY23F with WACC of 12% and 0% terminal growth rate which translates to a lower TP of IDR1,210/sh (from IDR1,430/sh), implying a 12.5x FY23F PE and 6x FY23F EV/EBITDA (on its -0.5 std dev 5yr EV/EBITDA). ESSA's strong cash generation and already low gearing level should provide room for ESSA to splurge on the blue ammonia plan and dividend payment. We expect ESSA to deliver earnings of USD142mn & USD101mn in FY22F and FY23F, respectively. Note that our calculation does not include the upside potential from under development blue ammonia project.

Table 3. DCF valuation

DCF Valuation Summary		Assumption	
Enterprise value (IDR bn)	23,113	Risk-free rate 7.2°	%
Net cash (IDR bn)	(1,307)	Market Premium 5.0°	%
Equity Value (IDR bn)	21,806	Beta 1.3	3
Minority (IDR bn)	(2,891)	After tax Cost of Debt 6.49	%
Shares outstanding (mn)	15,661	Debt Proportion 25.49	%
Target Price (IDR / share)	1,207.80	Equity Proportion 74.69	%
Target Price (IDR /share - rounded	1,210	Cost of Equity 13.99	%
Target P/E	12.5	Long-term growth 0.0°	%
Current P/E	10.3		
Upside/downside	21.6%	WACC 12.09	%

Source: Company, KISI

Sensitivity analysis shows that every 5% movement in ASP will impact our FY23F earnings estimates by 11.4%. Meanwhile, every 5% change in utilization will affect our FY23F earnings estimates by 6.2%

Table 4. Sensitivity of utilization and ammonia ASP to FY23F earnings

Utilization	Ammonia ASP								
Otimeation	644.5	682.4	720.4	758.3	796.2	834.1	835.1		
90%	62.1	73.0	84.0	94.9	105.8	116.7	116.7		
95%	66.6	78.1	89.6	101.2	112.7	124.2	124.2		
100%	71.0	83.2	95.3	107.4	119.6	131.7	131.7		
105%	75.5	88.3	101.0	113.7	126.5	139.2	139.2		
110%	80.0	93.3	106.7	120.0	133.4	146.7	146.7		
115%	84.4	98.4	112.4	126.3	140.3	154.2	154.2		

Source: Company, KISI

Fig 14. ESSA's peers' comparison

Bloomberg ticker	Mkt Cap	P/E	(x)	P/B (x)	EV/ EBI	TDA (x)	EPS gro	wth (%)	ROE	(%)
	(USD mn)	FY22F	FY23F	FY22F	FY23F	FY22F	FY23F	FY22F	FY23F	FY22F	FY23F
ESSA IJ EQUITY	1015	7.4	10.3	2.1	1.7	3.8	5.2	950.3	(27.7)	27.8	16.8
CF US EQUITY	20,434	5.6	7.2	3.6	2.9	3.8	4.9	333.6	(22.2)	83.7	40.0
YAR NO EQUITY	10,019	4.1	5.4	1.2	1.2	3.0	3.7	102.6	(24.2)	30.7	19.5
IVL TB EQUITY	5,689	5.5	6.3	1.1	1.0	4.2	4.6	55.7	(13.8)	22.6	16.0
AKRN RM Equity	8,515	7.4	10.2	2.5	2.0	5.8	7.7	34.4	(26.9)	0.5	0.5
MOS US Equity	17,305	3.8	4.7	1.3	1.1	2.8	3.4	160.5	(18.7)	38.0	24.0
LXU US EQUITY	1,411	5.1	5.6	2.1	1.6	3.9	4.3	179.0	(9.7)	53.9	31.1
NTR US EQUITY	44,626	5.0	5.7	1.6	1.4	3.8	4.3	167.9	(12.9)	34.7	23.7
SABIC AB Equity	72,557	11.0	13.8	N/A	N/A	6.3	6.9	7.3	(20.1)	13.0	11.3
APD US Equity	50,863	22.0	19.3	1.7	3.2	12.9	11.7	10.8	14.1	16.6	17.2
MT IM Equity	860	9.1	8.0	3.5	1.5	4.8	4.3	16.1	14.2	19.2	20.2
OCI NA Equity	8,667	5.2	8.4	1.7	2.6	2.7	3.6	166.3	(38.1)	61.5	40.2
peers weighted average	240,946	10.4	11.3	1.3	1.5	6.4	6.7	89.3	(12.4)	28.1	19.5

Source: Bloomberg, KISI



Company Overview

PT Surya Esa Perkasa (ESSA) is an Indonesia-based company engaged in refining and processing natural gas to produce liquefied petroleum gas (LPG). ESSA owns and operates one of the largest, privately-owned domestic LPG refineries in South Sumatra, Indonesia.

Established in 2006, ESSA has been a publicly-listed company since 2012. Through its subsidiary, PT Panca Amara Utama (PAU), ESSA became one of the biggest producers of Ammonia in Indonesia. Its ammonia plant has a nameplate capacity of 1,900TPD (ton per day) equipped with KBR Reforming Exchange System and Purifier Technology.

To date, ESSA's LPG production capacity stands at 174TPD (ton per day) and condensate production capacity at 410 bpd (barrels per day). Its products consist of:

- LPG, usually used as kitchen appliance fuel (mainly gas stoves) and automotive fuel
- 2. Condensate (Pentane and heavier hydrocarbons), used as raw material for paint, thinner, glue, tire vehicles, and light Naptha
- 3. Ammonia, mainly used as raw material for fertilizer production (~80% of the market). It can also be used in pharmaceutical, food & beverage, textile, industrial & household cleaning, water & wastewater treatment, metallurgical processes, pulp & paper, leather, rubber, and others. In the future, it has potential use as fuel for its high hydrogen content and zero CO2 emissions.

PT Trinugraha Akraya Sejahtera Chander Vinod Laroya Public <5% 63,88% 23 10% 13.02% 100% PT Surya Esa Perkasa Tbk. 99,99% 0.54% 99,99% PT Ogspiras Basya Pratama PT Sepchem 59.46% PT Panca Amara Utama * July 31, 2022

Fig 15. ESSA corporate structure

Source: Company, KISI



Balance sheet

FY-ending Dec. (USD mn)	2020A	2021A	2022F	2023F	2024F
Current assets					
Cash & cash equivalent	74	81	46	116	204
Accounts & other receivables	2	20	29	29	22
Inventories	22	32	43	55	44
Others	5	25	60	45	39
Non-current assets					
Fixed assets	619	574	534	491	447
Other non-current assets	70	77	185	139	119
Total assets	792	809	896	875	875
Current liabilities					
Accounts & other payables	12	24	38	34	28
ST debt & bond	10	21	-	-	-
Current portion of LT debt	70	48	90	72	52
Others	3	4	33	23	20
Non-current liabilities					
LT debt & financial liabilities	370	404	211	133	77
Provisions	9	4	9	7	6
Other non-current liabilities	6	3	7	5	4
Total liabilities	480	509	388	274	187
Controlling interest					
Capital stock	106	106	106	106	106
Additional paid-in capital	-	-	-	-	-
Retained earnings	90	107	242	300	358
Minority interest	115	87	161	195	225
Shareholders' equity	312	301	509	602	689

Cash flow

FY-ending Dec. (USD mn)	2020A	2021A	2022F	2023F	2024F
C/F from operating	(24)	12	79	181	169
Net profit	(19)	14	142	101	88
Depreciation	47	47	48	48	48
Net incr. in W/C	20	(38)	(8)	(12)	14
Others	(72)	(12)	(102)	43	19
C/F from investing	(23)	(3)	(7)	(5)	(4)
CAPEX	(23)	(3)	(7)	(5)	(5)
Investment in JV	-	-	-	-	1
C/F from financing	(26)	(2)	(107)	(105)	(77)
Chg. in equity	28	3	(7)	-	-
Chg. in debts	(49)	23	(172)	(96)	(76)
Dividends	-	-	(1)	(43)	(30)
Others	(6)	(28)	74	34	29
C/F from others	-	-	-	-	-
Increase in cash	(74)	7	(35)	71	88

Income statement

-					
FY-ending Dec. (USD mn)	2020A	2021A	2022F	2023F	2024F
Sales	176	303	728	548	470
COGS	(166)	(193)	(387)	(305)	(262)
Gross profit	9	110	341	243	208
SG&A expense	(17)	(24)	(41)	(34)	(31)
Operating profit	(7)	86	300	209	176
Interest Income	1	0	1	1	1
Interest expense	(35)	(78)	(29)	(21)	(14)
Others (net)	2	2	5	3	3
Other non-operating profit	1	2	3	4	5
Gains (Losses) in associates, subsidiaries and JV	-	-	-	-	-
Earnings before tax	(39)	10	276	192	167
Income taxes	6	4	(61)	(42)	(37)
Net profit after controlling interest	(19)	14	142	101	88
Non-controlling interest	14	(0)	(74)	(49)	(42)
Other comprehensive profit	-	-	-	-	-
Total comprehensive profit	-	-	-	-	-
Total comprehensive profit of controlling interest	-	-	-	-	-
EBITDA	40	134	348	257	225

Key financial data

FY-ending Dec.	2020A	2021A	2022F	2023F	2024F
per share data (IDR)					
EPS	(18)	13	134	97	84
BPS	289	275	481	576	660
DPS	-	-	1	40	29
Growth (%)					
Sales	(20.9)	72.9	139.9	(24.8)	(14.2)
OP	(1.3)	(13.1)	2.5	(0.3)	(0.2)
NP	(825.0)	(173.0)	914.6	(28.6)	(13.0)
EBITDA		232%	160%	-26%	-12%
Profitability (%)					
OP margin	(4.1)	28.5	41.2	38.1	37.5
NP margin	(10.9)	4.6	19.5	18.5	18.7
EBITDA margin	-	44.1	47.8	46.9	47.8
ROA	(2.4)	1.7	15.8	11.6	10.1
ROE	(6.1)	4.6	27.8	16.8	12.8
Dividend yield	0%	0%	2%	3%	3%
Dividend payout ratio	0%	0%	10%	30%	30%
Stability					
Net debt (USD mn)	376	392	255	88	(76)
Intbearing debt/equity (%)	1.4	1.6	0.6	0.3	0.2
Valuation (X)					
PE	(9.6)	26.3	7.4	10.3	11.8
РВ	0.6	1.2	2.1	1.7	1.5
EV/EBITDA	32.8	9.9	3.8	5.2	5.9

Surya Esa Perkasa (ESSA) Company update



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