

BÁO CÁO TRIỂN VỌNG NGÀNH NĂM 2022

FERTILIZER INDUSTRY





SUMMARY

A. About the world fertilizer market:

High gas prices caused a wave of fertilizer capacity cuts in Europe, which reduced the world fertilizer supply.

- Natural gas prices in the US and Europe tend to increase rapidly again when the gas crisis in Europe is taking place more and more seriously, the price of natural gas in Europe is currently 4.5 times higher than svck. The sky-high energy prices have forced fertilizer companies to reduce production scale, even to suspend operations.
- Coal prices in China tend to move sideways after a sharp correction from peaks in March and April. Currently Chinese coal is anchored at \$171/ton (+17% YoY, +24% YTD).

Urea price variation in markets around the world. Urea has adjusted, analyzed developments in the regions.

- Urea prices in the US, Middle East and Baltic Sea peaked in April, then bottomed in June and recovered from the bottom in June. Currently, Urea in the US trades around \$710/ton (-9% YTD), +43% YoY) respectively +51% from the bottom.
- Urea prices in China and India maintained a downward trend until March, then returned and peaked in June, then
 maintained a downtrend until the end of August. Chinese urea is currently recovering slightly and is priced at about
 \$480. /ton (-43% YTD, +4 YoY).

A. About the domestic fertilizer market:

Changes in domestic urea prices and input material prices

<u>Domestic urea prices and input material prices (Singapore FO oil)</u> are moving in favor of gas companies such as DPM and DCM. The average Urea price in 8M/2022 is >60% higher than the average in 2021, this figure for Singapore FO oil is only 38%. Currently, the domestic urea price is around 14,350 VND/kg (~ 610 USD/ton), +5% compared to the end of August.

China - Vietnam's main fertilizer import market loosened exports from June 2022, however, the export volume is still low, svck 2021 and 2020. In August 2022, the amount of fertilizer imported from China decreased by 42% svck, reaching ~150,000 tons.

Update business results in the first 6 months of 2022:

Fertilizer businesses are positive in 1H/2022 thanks to: (1) The average selling price of main products increased sharply and faster than the input gas price and **(2)** with the high consumption of the main product, Urea, helped the profit of fertilizer enterprises. sudden growth. Specifically, in the first half of 2022, the average domestic urea price is 85% svck higher while this increase for FO oil is 57% svck and the urea consumption volume of DPM and DCM in 1H/2022 is higher than the same period last year. period is 8% YoY and 3% YoY, respectively.

Business outlook for the last 6 months of 2022: BSC maintains a POSITIVE view in 2022 for the fertilizer industry based on (1) improved fertilizer demand at the start of the year's biggest crop and improved rice prices stimulate people to use fertilizers and (2) signs of recovery in world Urea prices due to the gas crisis Burning in Europe and new bids from India are expected to boost domestic urea price recovery. We believe that Urea price recovery and improved consumption volume will be positive factors for fertilizer businesses in 2H/2022.

Business Outlook 2023: BSC holds a **NEUTRAL** view on the fertilizer industry in 2023 due to the high selling price base in 2022. BSC expects urea price to cool down from 2023 but a new price level will be established.

Investment perspective: BSC maintains its **POSITIVE** view in 2022 for the fertilizer industry and recommends **BUY** for DPM and **POSITIVE** for DCM.

Figure 1: Estimated business results of some fertilizer enterprises

Stock	Net revenue 2022	% YoY	Profit after tax 2022	% YoY	EPS 2022 (VND/cp)			ROA 2022	ROE 2022	Price 19/09/2022	Target price	Upside
DPM	20,182	58%	5,548	78%	14,032	3.8	1.6	33%	43%	48,500	63,100	30%



DCM 14,528 44% 3,102 70% 5,860 6.2 2.0 28% 36% 34,450 40,200 17%

Source: BSC Research

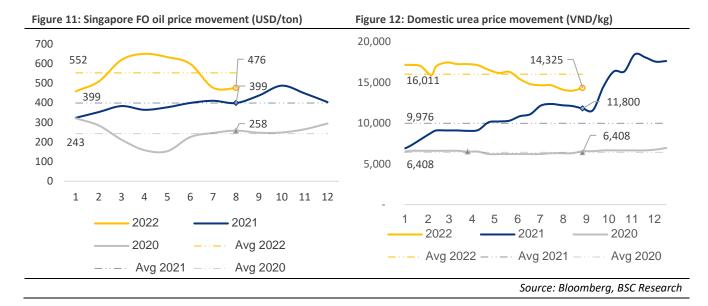


INTERNATIONAL FERTILIZER MARKET OVERVIEW

DOMESTIC FERTILIZER MARKET

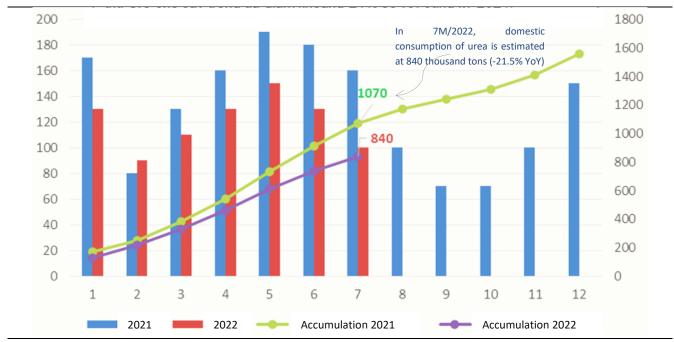
Changes in domestic urea prices and input material prices

<u>Domestic urea prices and input material prices (FO Singapore) are moving in favor of nitrogen gas producers such as DPM and DCM.</u> The average Urea price in 8M/2022 is >60% higher than the average for the whole year of 2021 while this figure for Singapore FO oil is only 38%. Currently, the domestic urea price is trading around VND 14,325/kg (+21.4% YoY) while the Singapore FO oil price is 19% higher than the 2021 svck.



Urea consumption demand in 2022 tends to decrease compared to the same period in 2021, especially in the second quarter of 2022

Figure 13: Domestic urea demand decreased compared to the same period in 2021 (thousand tons)





Domestic demand for urea in 2022 tends to decrease, especially, domestic demand dropped significantly in the second quarter. Accumulated in 7M/2022, domestic consumption of about 840 thousand tons of Urea is about 21% lower than the 2021 average. , reaching 1,070 thousand tons of Urea.

The demand for fertilizer tends to decrease in the second quarter due to: (1) the price of rice is anchored at a low level and recovering slowly at the same time (2) the summer-autumn fertilizer season is high (April - May). fertilizer levels remained high causing farmers to reduce their use.

Specifically: the price of rice continuously decreased and made a bottom in early April, about 384 USD / ton, while the price of urea peaked in April 2022, about 930 USD / ton, this caused many farmers to reduce fertilizing, even leave the field.

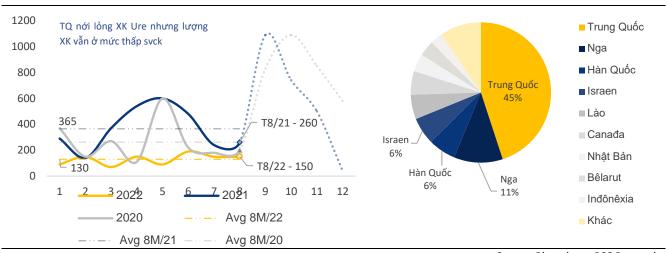
BSC expects rice prices in 2H/2022 to improve and boost domestic fertilizer demand thanks to: (1) India - the world's largest rice exporter bans and restricts the export of certain types of rice and (2) drought and bad weather conditions in some rice-growing countries reduce yields. The price of 5% broken rice in Vietnam has increased by nearly 5% right after the announcement of India's export ban by 20 USD/ton and is expected to continue to increase.

China - Vietnam's main fertilizer importer has loosened exports but still at a low level

After the end of the export restriction policy to stabilize the domestic fertilizer price at the end of May 2022, China has relaxed fertilizer exports from June 2022, but the export volume is still low compared to the previous period. In the same period of 2021 and 2020. On average, in 8M/2022 China exported 130 thousand tons of Urea, this level is lower than the same period in 2021 and 2020 by -50% and 64% respectively.

Figure 14: China's monthly export urea output ('000 tons)

Figure 15: Fertilizer import structure of Vietnam 7M/2022



Source: Bloomberg, BSC Research

Despite the restriction on fertilizer exports, in 7M/2022 China is still the leading supplier of fertilizer to Vietnam, accounting for 48.6% of the country's total fertilizer imports, reaching 945,809 tons (-24.3% YoY).) with an average price of USD 409/ton (+50.6% YoY). Next, Russia ranked second, accounting for 7.7% of the total volume with 149,457 tons (-39% YoY) with an average price of 647 USD/ton (+100.6% YoY).

Fertilizer imports from China decreased in July after 3 consecutive months of increase from April to June. Specifically, in July 2022, Vietnam's fertilizer imports from China decreased by -21.8% in volume and decreased. -7.4% in price compared to June 2022, reaching 107,652 tons (-48.9% YoY) with an average price of 391.4 USD/ton (+41.2% YoY).

China's fertilizer export policy has been loosened since June but exports are still tightly controlled, although traders are ready to quote export prices, but the implementation still faces many difficulties. BSC expects the Chinese Government to continue to apply control measures and limit fertilizer exports when the country enters the largest planting season of the year from October to December, helping to limit fertilizer supply. fertilize and support domestic urea price.



UPDATE 1H2022 business results

Business results of fertilizer enterprises are positive in 1H/2022 thanks to: (1) The average selling price of main products increased sharply and increased faster than the input gas price and (2) high consumption of the main product, Urea, helped the profit of fertilizer enterprises to grow. mutation.

In the first 6 months of the year, fertilizer businesses recorded positive business results with net revenue and gross profit margin both growing strongly compared to the same period in 2021. Specifically:

- DPM recorded 6M/2022 net profit and NPAT of 10,844 billion VND (+122% YoY) and 3,405 billion VND (+298% YoY) respectively with profit margin improving from 28% to 44%.
- DCM recorded 6M/2022 net profit and NPAT of VND 8,160 billion (+93% YoY) and VND 2,563 billion (+490% YoY) with profit margin improving from 19% to 41%.

Specifically, in the first half of 2022, the average domestic urea price is 85% svck higher while this increase for FO oil is 57% svck and the urea consumption volume of DPM and DCM in 1H/2022 is higher than the same period last year. period is 8% YoY and 3% YoY respectively.

Tight fertilizer supply due to the Russia-Ukraine war and export bans caused fertilizer prices to climb in the first quarter, helping DPM and DCM record record revenue and profit margin. In the second quarter, the business results of enterprises recorded a deceleration compared to the first quarter due to the adjustment of the urea price, but still reached a high level in 2021, the average urea price in the second quarter was still 66% higher than the 2021 price.

Figure 16: DPM and DCM's 6M/2022 business results (VND billion)

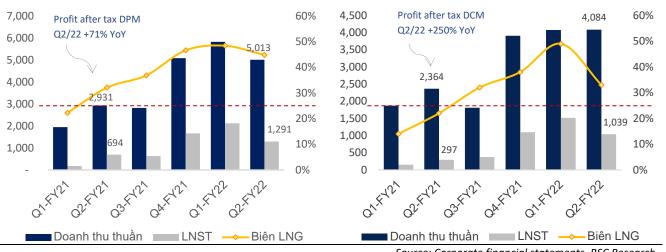
Ch? Min				DPM						DCM		
Chỉ tiêu	Q1/22	%YoY	Q2/22	%YoY	1H/22	%YoY	Q1/22	%YoY	Q2/22	%YoY	1H/22	%YoY
Net revenue	5,829	200%	5,013	71%	10,844	122%	4,075	118%	4,084	73%	8,160	93%
Gross profit	2,823	552%	1,930	105%	4,758	247%	1,977	640%	1,353	162%	3,337	326%
Gross profit margin	48%	+26 đpt	39%	+6 đpt	44%	+16 đpt	49%	+34 đpt	33%	+11 đpt	41%	+22 đpt
Profit after tax	2,114	11.38x	1,279	87%	3,405	298%	1,516	8.98x	1,039	268%	2,563	490%
% Export sales / net sales					25%	+24 đpt					50%	+23 đpt

Source: DPM, DCM, BSC Research

Figure 17: DPM's quarterly results (VND billion)

Figure 18: DCM's quarterly results (VND billion)





Source: Corporate financial statements, BSC Research

FERTILIZER INDUSTRY OUTLOOK AT THE END OF 2022 AND 2023

BSC maintains a positve view on the fertilizer industry in 2022 thanks to the high selling price level over the same period despite the decelerating growth rate compared to 1H/2022.

BSC realizes that the business results of fertilizer enterprises depend heavily on fluctuations in commodity prices, especially Ure prices and FO oil prices. Domestic Ure prices have undergone a correction from June to August and BSC expects domestic Ure prices to recover from now until the end of the year thanks to (1) improved fertilizer demand when entering the biggest crop of the year and improved rice prices stimulate people to use fertilizers and (2) world Ure prices show signs of recovery due to the gas crisis in Europe and new Indian bids are expected to boost the recovery in domestic urea prices.

(1) Expect fertilizer demand to recover thanks to winter-spring season – the main crop of the year

BSC expects the recovery in rice prices to boost the sown area of the Winter Spring rice crop (the main crop of the year) and support fertilizer demand, especially Ure. BSC expects rice prices to be supported by: (1) the conflict with Russia, so Ukraine does not export wheat, leading to high grain and food prices, causing customers to switch to buying rice from Asian countries, including Vietnam; (2) the demand for rice reserves of many countries increases in the face of fears of a prolonged Russia-Ukraine conflict causing wage prices to rise and (3) the global supply of rice decreases due to inclement weather in major exporting countries such as India, China and Bangladesh.

(2) World Ure prices recover thanks to declining world supply and improved demand are expected to support domestic Ure prices to recover by the end of 2022

BSC expects that in Q4/2022, the world supply of urea will decline thanks to: (1) high natural gas prices in Europe along with rising production costs, causing fertilizer producers in this region to cut production and (2) China enters the main crop of the year, so export policy will continue to maintain control as it is now. at, respectively, a decrease of 20-25% of Ure export volume compared to 2021.

At the same time, India continues to open large tenders for its Kharif crop at the end of the year, which is expected to improve world Ure demand and support the recovery of world Ure prices. Most recently, at the end of August, India opened a new tender with 1 million tons of urea and the price of Ure in other regions of the world has increased by 2-5%. At the end of August, Ure prices in Vietnam increased sharply, with the highest increase up to 850 VND/kg, equivalent to an increase of about 40 USD/ton.

BSC's estimates are based on assumptions

Figure 19: Key assumptions in BSC estimates

	2021	2022	2023	%YoY 2022	%YoY 2023
Average FO oil price (USD/ton)	410	530	450	+29%	-15%
Average Ure selling price (VND/kg)	10,543	15,011	12,009	+42%	-20%



Average NPK selling price (VND/kq) 10,616 15,858 11,100 +150% -30%

Source: BSC Research

Business Outlook 2023: BSC believes that the high level is the biggest challenge to the growth of fertilizer enterprises in 2023 and Ure prices will cool down from 2023, but new price levels will be established.

BSC expects prices of urea-producing materials such as coal and natural gas to cool down in the long term as global energy costs normalize in the long term and Europe will find alternative natural gas supplies to Russia.

BSC expects Ure prices to adjust from 2023, but the decline in fertilizer supply in Europe will support Ure prices to establish a new price level, respectively, we expect Ure prices to fluctuate around 400-550 USD/ton in the period 2023-2024. We believe that European natural gas prices will set a new price level in the period of 2023 - 2024 due to the large cost of building natural gas to replace the supply from Russia. This will cause the global supply of fertilizer to decline as the cost of producing fertilizer in Europe increases, some fertilizer plants will cut production or close permanently.



Figure 20: Summary of some indicators of DPM and DCM

	2022	2023	%YoY
PM			
Net revenue	20,182	16,093	-20%
NI	5,548	3,514	-37%
EPS	14,032	8,933	-36%
P/E fw	3.4x	5.8x	
CM			
Net revenue	14,528	11,584	-20%
NI	3,102	2,079	-33%
EPS	5,860	3,927	-33%
P/E fw	5.9x	9.4x	
year average P/E for some of its	peers in the region		12.75
			Source: BSC Research

DPM and DCM currently have attractive valuations with a 2023 P/E of 3.7x/5.8x and 6.2x/9.4x, respectively, an attractive P/E compared to the 5-year average P/E of its peers in the region of 12.75 times.

INVESTMENT PERSPECTIVE - POSITIVE

BSC maintains a positive 2022 outlook on the fertilizer sector based on (1) expectations of Ure prices recovering due to the natural gas crisis in Europe and major Indian tenders at the end of the year and (2) improved domestic Ure demand as it enters the main crop of the year. We believe that a recovery in Ure prices in late 2022 and improved consumption volumes will be positive factors for DCM and DPM and open up investment opportunities for these stocks.

Figure 21: Estimation of business results of some fertilizer enterprises

Stock code	Net revenue 2022	% YoY	NI 2022	% YoY	EPS 2022 (VND/cp)	P/E fw	P/B fw	ROA 2022	ROE 2022	Price on 19/09/2022	Target price	Upside
DPM	20,182	58%	5,548	78%	14,032	3.4	1.6	33%	43%	48,500	63,100	30%
DCM	14,528	44%	3,102	70%	5,860	5.9	2.0	28%	36%	34,450	40,200	17%
											Source: BSC	C Research



Recommendatio ns	BUY		PETROLEUM FERTILIZER AND CHEMICAL JOINT STOCK COMPANY (HSX: DPM) IIGHEST NET PROFIT EXPECTATIONS IN HISTORY					
Current price:	48,500	Date of writting:	19/09/2022	Shareholder structure				
Target price:	63,100	Outstanding shares (mil)	391	PVN	59.6%			
Dividend yield:	50%	Capitalization (VND bil)	20,741	Nghe An Agricultural Supplies	4.8%			
Potential upside:	<u>30%</u>	Average liquidity (mil)	2.98	Truswell Securities	2.7%			
		Foreign ownership	15.37%					

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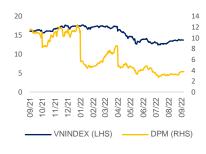
Recommended price:

Stop loss price:

DPM and VNI price comparision



DPM and VNI P/E comparision



PRICING

BSC recommends BUY for DPM shares with a target price of VND 63,100/share for 2022, equivalent to an upside of 30% compared to the closing price on September 19, 2022 based on the P/E method with a target ratio of 4.5x.

FORECAST BUSINESS RESULTS

BSC forecasts that DPM's **DTT and LNST in 2022 will reach VND 20,182 billion (+58% YoY) and VND 5,548 billion (+78% YoY),** respectively. EPS 2022F = 14,032 VND (+81%YoY) and P/E fw = 3.4x; P/E fw 2023 = 5.8x Based on the assumption:

- (1) The average selling price of Ure in 2022 will reach 15,011 VND/kg (+42% YoY);
- (2) Ure consumption reached 865 thousand tons (+15.5% YoY);
- (3) Gross BLN improved to 41% (compared to a high background level in 2021 of 37%).

INVESTMENT PERSPECTIVE

- Selling prices remained high and business output grew positively;
- Factors to watch that have not yet been included in the valuation: VAT refund when the law is amended;
- The business maintains regular annual cash dividends with a high payout ratio.

RISK

- Input gas prices rose faster than forecast and selling prices fell more sharply than forecast;
- High fertilizer prices motivate farmers to reduce fertilization, causing domestic demand to recover slowly;
- NPK factory capacity achieved lower efficiency and the selling price decreased compared to forecasts.

BUSINESS UPDATES

- DPM's DTT and LNST in Q2/2022 reached VND 5,013 billion (+71% YoY) and VND 1,279 billion (+87% YoY) respectively thanks to: (1) the average selling price increased sharply over the same period and (2) Ure consumption increased slightly by 7.9% YoY.
- **DPM adjusts the 2022 plan: (1)** DTT and LNST are VND 17,239 billion (+4% YoY) and VND 3,473 billion (+9% YoY) respectively; **(2)** Ure and NPK output of 865 thousand tons (+4%YoY) and 165 thousand tons (+2%YoY) respectively, and **(3)** raised the 2021 dividend plan from 10% to 50% and maintained a 2022 cash dividend of 50%.

2021

12,786

4,786

3,117

7,749

405%

-15%

2022F

20,182

8,213

5,548

14,032

81%

-29%

2023F

16,093

5,507

3,514

8,933

-36%

-35%

	2021	2022F	VNINDEX		2020
PE (x)	3.67	3.78	13.7	Revenue	7,762
PB (x)	1.04	1.61	2.1	Gross profit	1,730
PS (x)	0.87	1.03	1.8	NI	691
ROE (%)	30%	43%	15.6	EPS	1,535
ROA (%)	25%	33%	2.5	EPS growth	78%
FV/ FBITDA (x)	1.49	1.59	12.9	Net debt/ Fauity	-12%



Recommendations	BUY		A MAU PETROLEUM FERTILIZER JOINT STOCK COMPANY (HSX: DCM) JREA PRICE RECOVERY DRIVES PROFIT						
Current price:	34,450	Date of writting:	19/09/2022	Shareholder structure					
Target price:	40,200	Outstanding shares (mil)	529	PVN	75.6%				
Dividend yield:	18%	Capitalization (VND bil)	19,376	PVFC CAPITAL	5.0%				
Potential upside:	<u>17%</u>	Average liquidity (mil)		KOREA INVESTMENT MGM	1.8%				
		Foreign ownership	8.6%		1				

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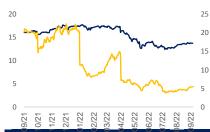
Recommended price:

Stop loss price:

So sánh giá DCM và VN- Index



So sánh P/E của DCM và VN index



PRICING

BSC recommends BUY for DCM shares with a target price of VND 40,200/share

for 2022, equivalent to an upside of 17% compared to the closing price on September 19, 2022 based on the P/E method with a target ratio of 6.8x.

FORECAST BUSINESS RESULTS

BSC forecasts that DCM's **DTT and LNST** in 2022 will **reach VND 14,528 billion (+44% YoY) and VND 3,102 billion (+70% YoY),** respectively. EPS 2022F = 5,860 VND (+91%YoY) and P/E fw = 5.8x; P/E fw 2023 = 9.4x Based on the assumption:

- (1) The average selling price of Ure in 2022 will reach 15,011 VND/kg (+42% YoY);
- (2) Ure consumption reached 850 thousand tons (+10% YoY);
- (3) Gross BLN improved to 36% (compared to 29% in 2021).

INVESTMENT PERSPECTIVE

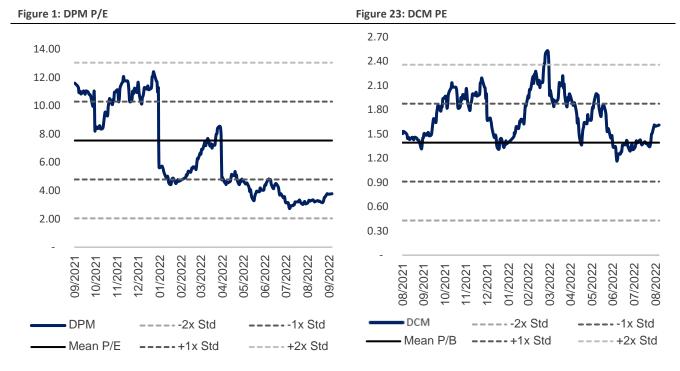
- Selling prices remained high and business output grew positively;
- Factors to watch that have not yet been included in the valuation: VAT refund when the law is amended;
- Ure factory will be depreciated from 2024, significantly reducing production costs **RISK**
- Input gas prices rose faster than forecast and selling prices fell more sharply than forecast;
- High fertilizer prices motivate farmers to reduce fertilization, causing domestic demand to recover slowly;
- NPK factory capacity achieved lower efficiency and the selling price decreased compared to forecasts.

BUSINESS UPDATES

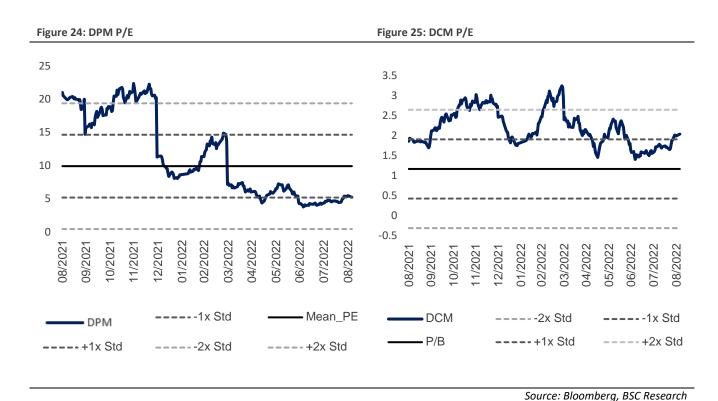
- DCM's DTT and LNST in Q2/2022 reached VND 5,013 billion (+71 %YoY) and VND 1,279 billion (+87% YoY) respectively thanks to: (1) the selling price of Ure increased by 79% YoY to compensate for a slight decrease in output of 6.6% YoY and (2) the selling price increased faster than input costs to help improve BLNG.
- Business plan 2022: (1) DTT and LNST are VND 9,060 billion (- 8% YoY) and VND 512 billion (-72% YoY) respectively; (2) Ure and NPK production is 850 thousand tons and 80 thousand tons, respectively.
- DCM adopts a cash dividend payment of VND 1,800 per share, equivalent to a dividend yield of 4.3% and a dividend payout rate of 52%.

VNINDEX (LHS) -	2021 (RHS	2022F	VNINDEX		2020	2021	2022F	2023F
PE (x)	9.9	6.2	13.7	Revenue	7,561	9,870	14,528	11,584
PB (x)	1.3	2	2.1	Gross profit	1,317	2,854	5,230	3,506
PS (x)	1.2	1.4	1.8	NI	661	1,823	3,102	2,079
ROE (%)	28%	38%	15.6	EPS	1,017	3,073	5,860	3,927
ROA (%)	20%	28%	2.5	EPS growth	71%	202%	91%	-33%
EV/ EBITDA (x)	4.1	2.2	12.9	Net debt/ Equity	29%	27%	-9%	-15%





Source: Bloomberg, BSC Research





Disclosure

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