

# PETROVIETNAM CA MAU FERTILIZER JSC (DCM)

September 14, 2015

## INITIATING COVERAGE: **BUY**



Current price	(9/11/2015)	VND	12,900
Long-term value			UNDervalUED
Target price		VND	15,000
Short-term trend			NEUTRAL
Resistance level		VND	13,600
Support level		VND	12,700
Bloomberg ticker:	<b>DCM VN</b>	Exchange:	HSX
Industry:			Fertilizer, chemicals
Beta			N/A
52w high / low (VND)		13,900/	12,000
Outstanding shares			529,400,000
Market cap (VNDbn)			6,829
Free-float (mn shares)			128,461,000
LTM Avg trading volume			686,827
Foreign-owned Ratio (%)			3.34%

		Div.Yield	EPS (VND)
2015 VPBS forecast		6.2%	1,238
2014		N/A	1,438
2013		N/A	N/A
2012		N/A	N/A

	2012-14	2015F	2015-18*
	CAGR	VNDbn	CAGR
Revenues	21.8%	5,539	0.4%
EBITDA	13.5%	2,305	-3.3%
Net income	5.4%	705	6.0%

(\*): DCM will no longer receive subsidy for gas price and thus there will be a big decrease in earnings from 2019

LTM:	DCM	Peers*	VNI
PE	8.48	8.58	11.08
P/B	1.14	1.52	1.70
EV/EBITDA	4.25	3.87	8.34
Debt/ Equity	1.25	0.13	1.01
Profit margin	14.8%	10.1%	11.1%
ROA	5.4%	14.0%	2.8%
ROE	14.9%	21.0%	15.7%

(\*) Selected peers include the Vietnamese listed companies in the chemical and fertilizer industry.

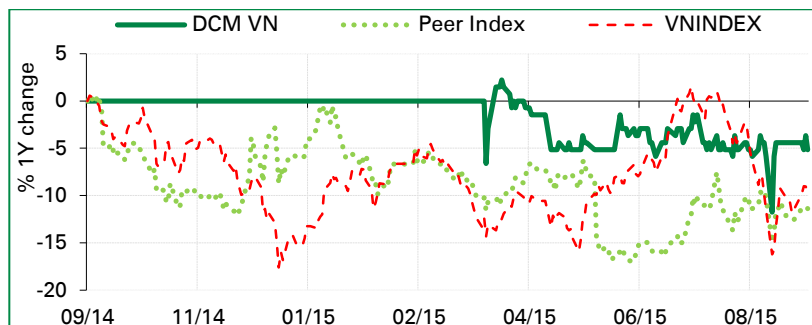
### Company description:

DCM is a state-owned enterprise under Petrovietnam Oil and Gas Group, established in 2011. The company was equitized in 2014, and listed on the HSX in March 2015.

Business activities: producing and trading granular urea (93 percent of revenue) and liquid ammonia (2 percent), and trading other chemicals and fertilizer (5 percent).

2014 results: net revenue of VND6,044 billion (USD276 million) and net income of VND819 (USD37.4 million)

1H2015 results: total assets of VND15,246 billion (USD696 million), total equity of VND6,000 billion (USD274 million), net revenues of VND2,834 billion (USD129.5 million), and net income of VND448 billion (USD20.5 million)



We initiate coverage of PetroVietnam Ca Mau Fertilizer JSC (DCM) with a long-term **BUY** recommendation. The current trend is flat, but the shares offer strong potential for long-term gains.

### Investment thesis:

- ❖ **Growth is constrained by capacity:** DCM's current manufacturing facilities are already operating at more than 100 percent of designed capacity. Furthermore, it will be difficult for the company to add new capacity because depreciation expenses and high leverage from the previous expansion are already quite high. DCM expects to gradually expand capacity of current plant and add new products from 2017.
- ❖ **Focusing on strategic market, avoiding price competition locally:** About 50 percent of urea volume is sold in the Southwest area of Vietnam where DCM has a favorable location to develop distribution channels. DCM has competition only from imported products when supplying urea for local NPK producers.
- ❖ **Subsidy from PVN supports cash flows:** PVN guarantees to offer gas to DCM with favorable pricing so it can maintain ROE at 12 percent through 2018. The subsidy will help DCM generate cash flow to repay most of its debt by 2019. From that point, reduced leverage will allow the company to continue generating good cash flows to shareholders.
- ❖ **Less impacted by downtrend of urea price:** The subsidy from PVN will also offset the continuing trend of falling urea prices due to global and local surplus supply.
- ❖ **Increasing equity value:** Earnings are expected to be quite stable through 2018 and DCM will still suffer high depreciation expenses for another few years thereafter. We expect equity value to increase steadily due to reducing debt value over several years, but significant change in earnings will only appear after urea plant machinery has been fully depreciated.
- ❖ **Attractive dividend yield:** DCM plans to pay a dividend of eight percent on par, leading to a dividend yield of 6.2 percent. The yield is equal to bank deposit rates, which are currently falling, and offers regular income for long-term investors.

Please see important disclosure information at the end of this report

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# FERTILIZER INDUSTRY OVERVIEW

## GLOBAL FERTILIZER INDUSTRY <sup>(1)</sup>

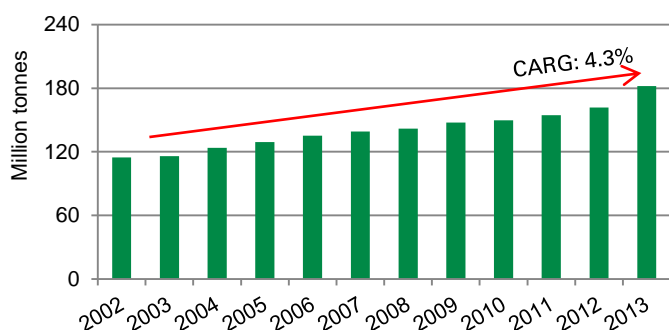
### China is the biggest urea producer and exporter in the world

*Urea market is highly concentrated, with China and India making up over half of the total global urea production and demand.*

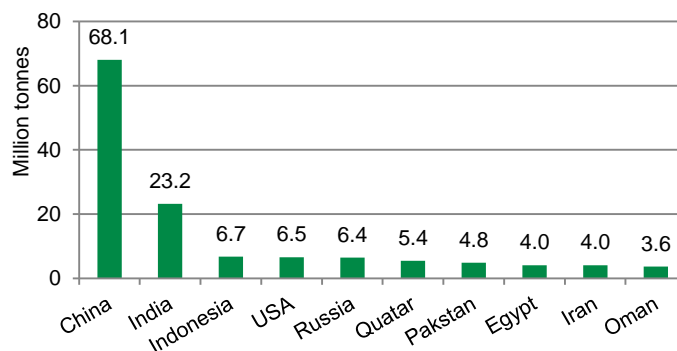
According to the International Fertilizer Industry Association (IFA), in 2013 global total urea production volume was about 170 million tonnes, and China was the largest urea producer accounting for 40 percent. Most urea production in China is consumed domestically (accounting for 35 percent of total world urea demand), but China still maintains the largest urea export position with a global share of 19 percent.

India is the second largest urea producer, accounting for 14 percent of total global volume, but it is also the largest urea importer, creating about 18 percent of global urea demand.

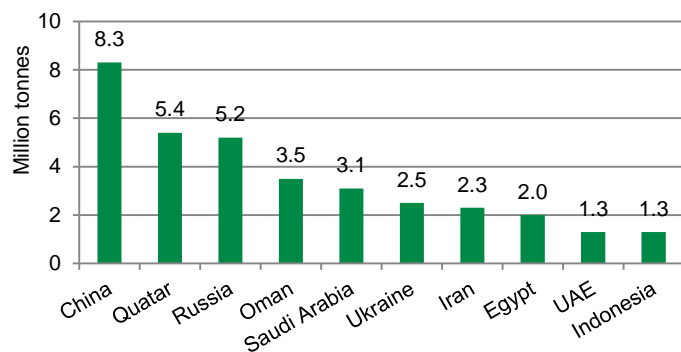
World urea production



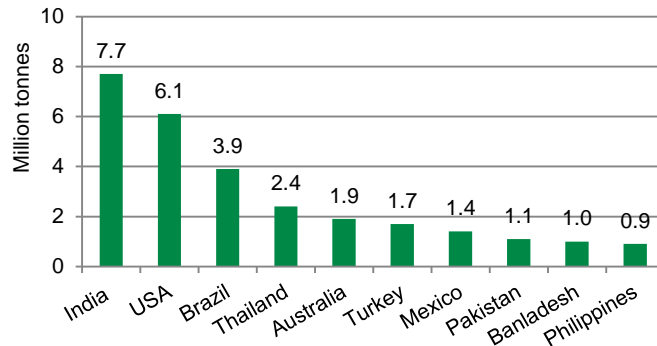
10 largest urea producers (2013)



10 largest urea exporters (2013)



10 largest urea importers (2013)



Source: IFA, Yara Fertilizer Industry Handbook (December 2014)

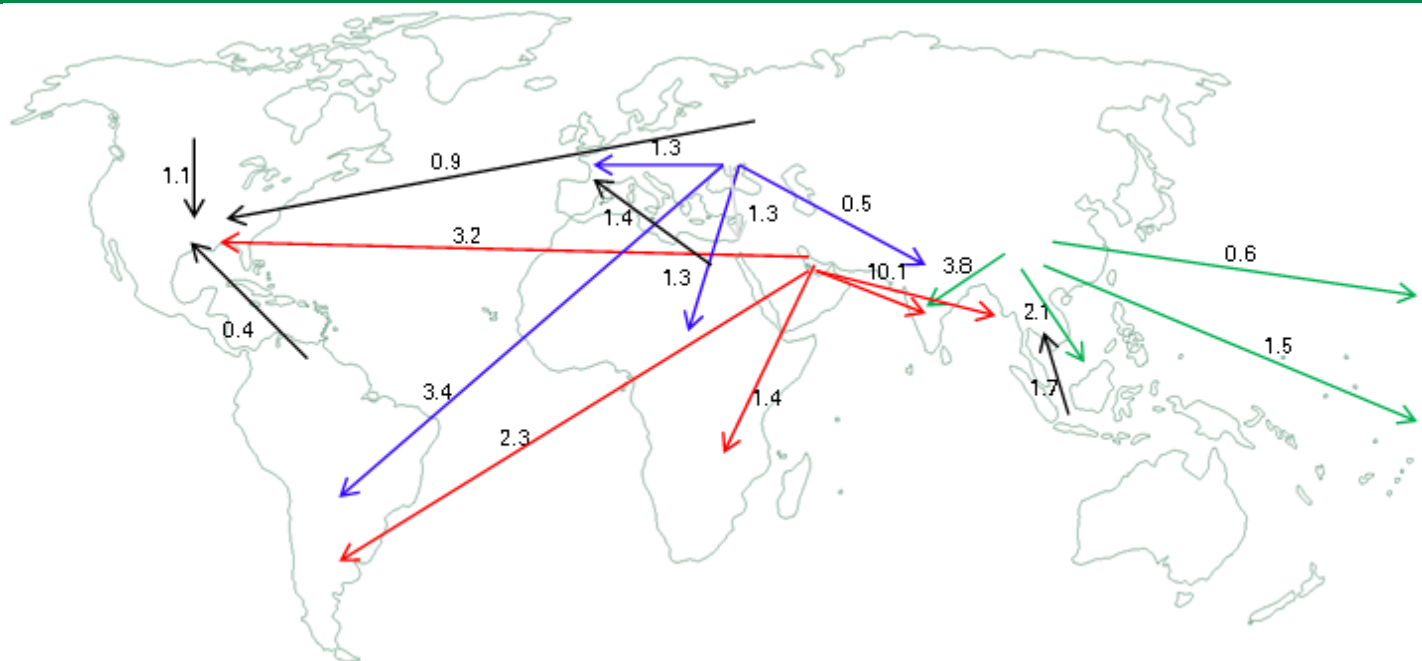
### Black Sea and Arab Gulf primarily determine the global urea price...

*Urea from the Black Sea and Arab Gulf is widely traded and determines the global urea price.*

The urea industry is highly global due to its transportability, while urea prices have minimal differences between markets after adjusting for transportation costs and import/export taxes. Gas-based urea production is the most popular technology in the world and the main urea exporters are gas-rich countries or regions. The Black sea and Arab Gulf are the two main urea-producing regions, along with China. However, the domestic urea demand in these two areas is very small; almost all of its urea production is used for export. Accordingly, these urea products are widely traded around the world and affect the global urea price.

<sup>1</sup> Please refer to the appendix at the end of this report for more information about fertilizer products.

## Main urea trade flows in 2013



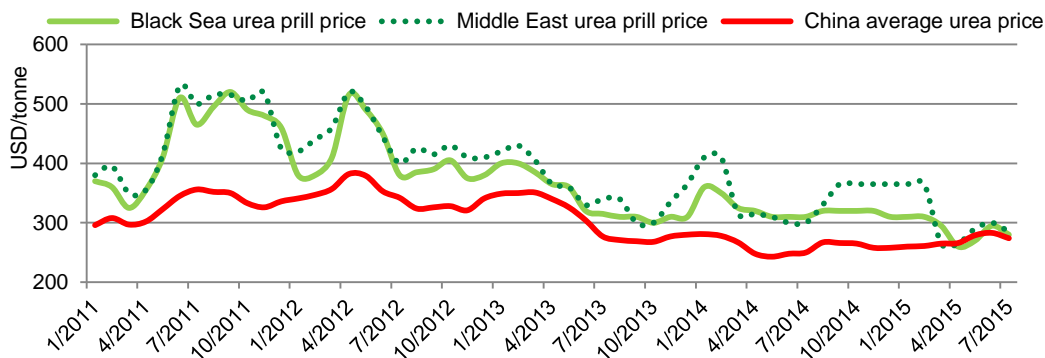
*Note:* Green arrows: urea exported from China; Red arrows: urea exported from Arabian Gulf; Blue arrows: urea exported from Black Sea; Black arrows: urea exported from other areas. Unit: million tonnes. Source: IFA, Yara Fertilizer Industry Handbook (December 2014)

## ...and China sets the urea price floor

*Urea from China feeds any remaining gap between global demand and supply.*

Chinese urea products set the floor for global urea prices as China is the least expensive urea producer and supplies any remaining gap between global urea demand and supply. Urea from China cannot flow outside the country without a higher price than domestically, so this price, with added import/export taxes and transportation costs, is considered the floor price for urea around the world.

## Comparison of urea prices in major markets



Source: Bloomberg

*Urea prices are highly correlated with crop and anthracite prices.*

*Anthracite prices in China – not oil – affect global urea prices. Gas-based urea producers benefit greatly when oil prices decrease.*

### **Crop and anthracite prices are the two key drivers of fertilizer and urea prices**

Crop prices are driven by food demand; any increase in crop prices leads to demand to expand crop areas or increase crop yields and quality. Demand for fertilizer then rises, and fertilizer prices, as well as urea prices, therefore increase.

We calculate that the correlation between the Black Sea urea price and wheat prices in the United States is 0.5, based on monthly data from January 2008 through July 2015, but the correlation reaches its highest value at 0.62 when using the same data but with a three-month lag from wheat prices to urea prices (assuming that wheat prices drive urea prices). Applying the same method and period for corn prices in the United States and urea prices in the Black Sea, the correlation between them is 0.56 but reaches its highest level at 0.60 applying a one-month lag. These correlations are significant but not strongly linear.

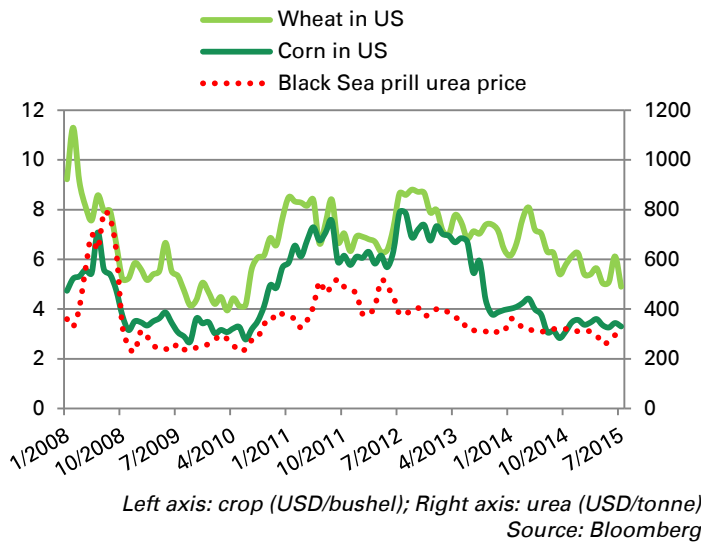
We believe that the correlations are particularly effective when crop prices go up and support urea prices. In contrast, when crop prices decline, urea prices cannot experience a parallel fall because of production cost issues.

Although gas-based urea production is the most popular technology in the world, the majority of urea producers in China apply coal-based technology (anthracite in particular) due to the availability of coal (China is the world's biggest coal producer, accounting for 46 percent of global coal production in 2013 – source: World Coal Association). Urea prices in China bring a global impact as noted above, and anthracite prices in China are the key driver for the movement of urea prices in China.

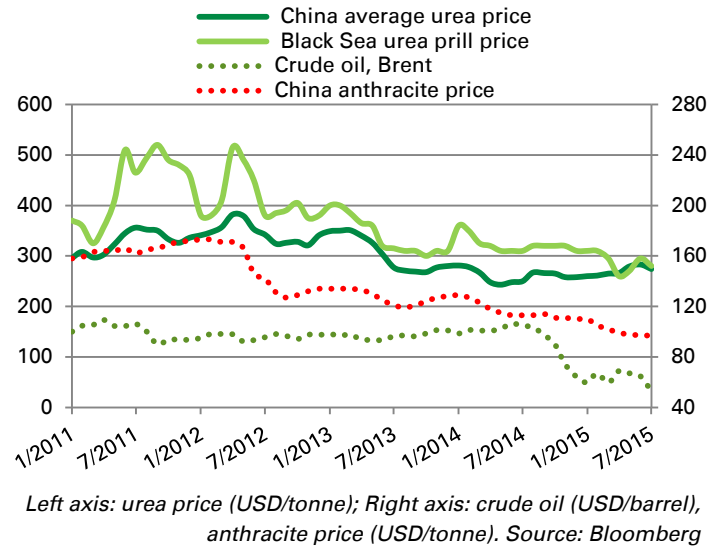
According to monthly historical data for urea prices in China, including Brent crude oil prices and anthracite prices in China from January 2011 to July 2015, we identify a correlation between the China urea price and Brent crude oil price of just 0.30, while the correlation between the China urea price and the China anthracite price is high at 0.77. This urea-anthracite correlation reaches its highest value at 0.85 when using three-month-lagging data. Applying the same method and time period for urea prices in the Black Sea and anthracite prices in China, the correlation is 0.82, and highest at 0.84 when using three-month-lagging data. The correlation between urea price in the Black Sea and Brent crude oil is not particularly high, at 0.37, and highest at 0.47 when using three-month-lagging data.

From the above analysis and the fact that China urea sets the floor price for global urea, we believe that anthracite prices in China, rather than crude oil prices, affect the global urea price, and we assume that gas-based urea producers will benefit greatly when oil prices decrease.

## Urea price vs. crop prices



## Urea price vs. crude oil price and anthracite price



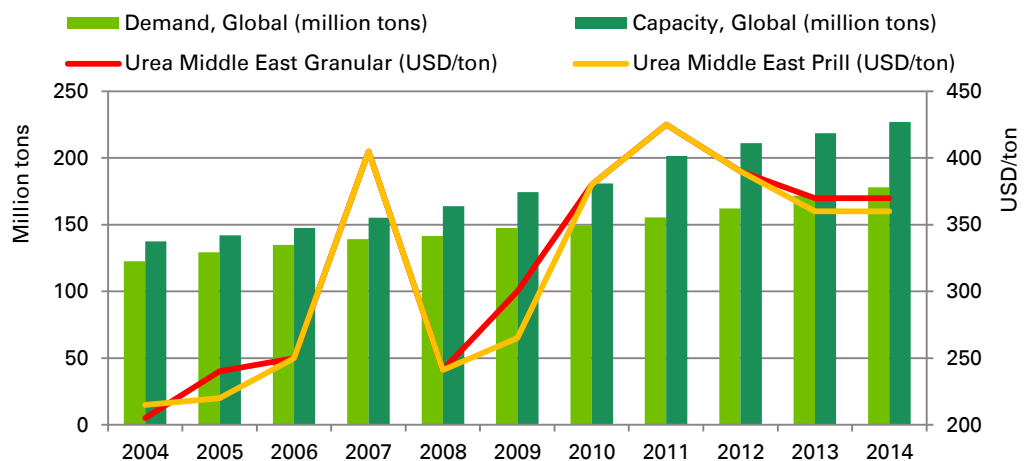
*The urea industry will continue to experience an oversupply situation, prolonging the downward trend of global urea prices.*

### Urea price is still on a downward trend due to an oversupply situation

The price of urea is expected to continue its downtrend due to global oversupply of urea. In 2014, according to the IFA and International Fertilizer Development Center (IFDC), total world urea capacity was estimated at 227 million tonnes per year while demand was 178 million tonnes per year. According to IFA, the situation will be unchanged over the next four years, and by 2018 the capacity is forecast to increase to 245 million tonnes while demand is forecast to be 202 million tonnes.

There is very little difference between the global prices of prilled urea and granular urea. Over the last two years, the price of granular urea was 2.8 percent higher than prilled urea.

### Global urea price trend, demand and capacity



## VIETNAM FERTILIZER INDUSTRY

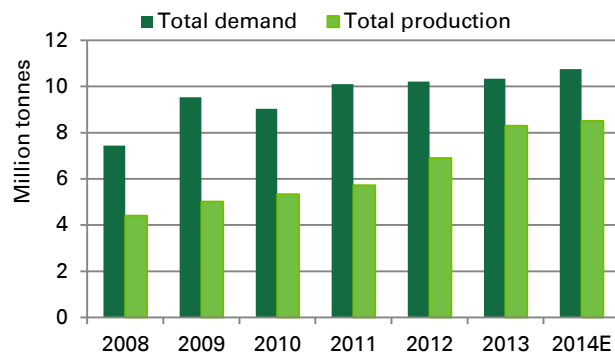
### Vietnam must import some types of fertilizer every year

*Domestic production meets all domestic demand for urea, NPK, and phosphate, and 30 percent of DAP. All SA and potassium demand must be met by imports.*

In the period from 2008 to 2014, total domestic fertilizer demand grew at a compound annual growth rate (CAGR) of 6.4 percent, and supply at a CAGR of 11.6 percent. In 2014, according to the Vietnam Ministry of Agriculture and Rural Development (MARD) total demand was about 10.76 million tonnes, including 4 million tonnes of NPK, 2.2 million tonnes of urea, 1.8 million tonnes of phosphate, 960 thousand tonnes of potassium, 900 thousand tonnes of SA, and 900 thousand tonnes of DAP.

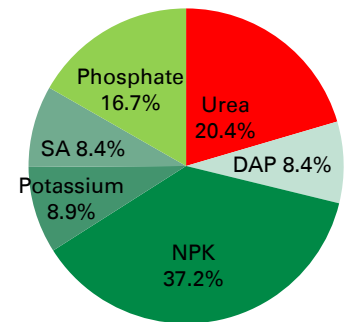
At present, domestic production can meet all demand for urea (production capacity significantly exceeds demand), NPK, and phosphate. All demand for SA and potassium must be met by imports, while domestic production of DAP meets 30 percent of demand.

Vietnam fertilizer demand and supply



Source: MARD, VPBS

Fertilizer demand by product

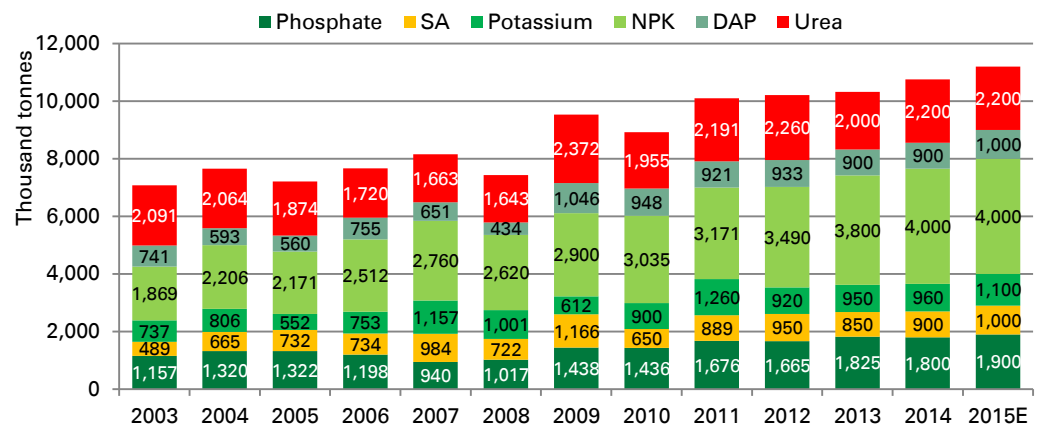


Source: MARD, VPBS

### Demand for fertilizer has increased slowly over the last five years

The growth rate of fertilizer demand has slowed in recent years. Its CAGR was 3.9 percent from 2003 to 2014, but was just at 2.1 percent from 2011 to 2014.

Demand for fertilizer by year



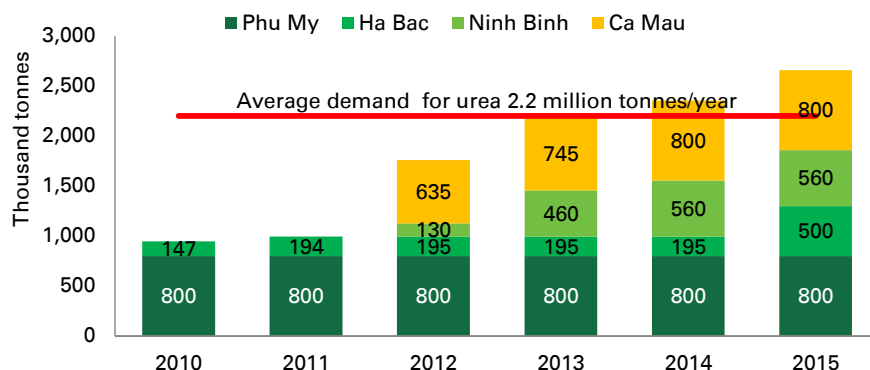
Source: MARD, DPM



## Capacity for urea exceeds demand

Total domestic urea demand was about 2.2 million tonnes in 2014 while domestic supply capacity is 2.66 million tonnes at present. Urea products are produced by four factories: Petrovietnam Camau Fertilizer JSC (DCM) (800,000 tonnes/year), Petrovietnam Fertilizer and Chemicals Corporation (DPM) (800,000 tonnes/year), Ninh Binh Nitrogenous Fertilizer Company Limited (560,000 tonnes/year), and Ha Bac Nitrogenous Fertilizer & Chemicals Company Limited (500,000 tonnes/year).

### Urea supply capacity



Source: MARD, DPM, VPBS

### Urea producers in Vietnam

Company	Capacity (tonnes/year)
Ca Mau fertilizer	800,000
Phu My fertilizer	800,000
Ha Bac fertilizer (*)	500,000
Ninh Binh fertilizer	560,000
<b>Total capacity</b>	<b>2,660,000</b>

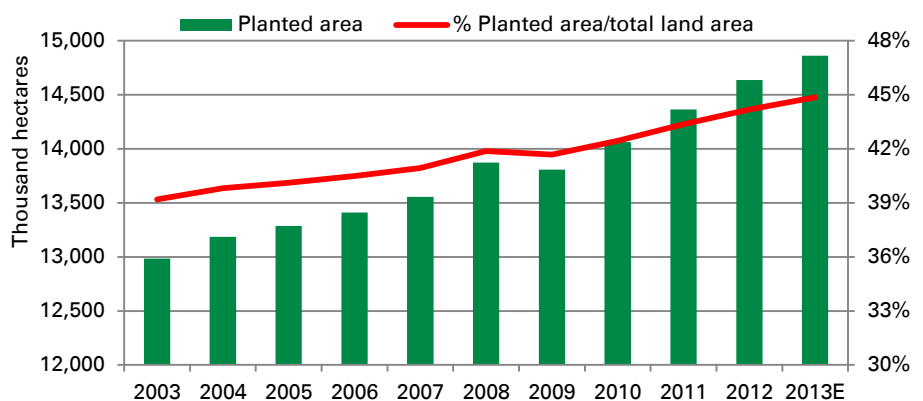
\* Before June 2015, capacity was 195,000 tonnes/year

Source: MARD, DPM, VPBS

## Vietnam fertilizer demand should grow slowly due to sluggish expansion of planted areas and current high levels of fertilizer usage

From 2000 to 2013, planted areas in Vietnam expanded slowly with a CAGR of 1.25 percent. Vietnam has a higher fertilizer consumption rate (297 kilograms of fertilizer per hectare of arable land in 2012) than other countries in the region except Malaysia (1,570 kilograms per hectares), and a rate higher than the global average (141 kilograms per hectare), thus the potential for increasing fertilizer consumption should be low in the future.

### Planted area by year



Source: Vietnam GSO, World Bank, VPBS

### Fertilizer consumption

	2010	2011	2012
<b>Vietnam</b>	<b>323.3</b>	<b>311.5</b>	<b>297.1</b>
Thailand	162.2	161.5	153.2
Malaysia	2,197.0	2,062.7	1,570.7
Indonesia	181.5	198.4	194.8
Cambodia	11.5	15.5	16.6
China	579.9	558.3	647.6
India	179.1	177.9	163.7
Japan	259.8	268.3	259.1
World	136.0	137.7	141.3

(kilograms per hectare of arable land)  
Source: Vietnam GSO, World Bank



## COMPANY OVERVIEW

### HISTORY

*A member of Vietnam Oil & Gas Group and officially in operation since 2012.*

PetroVietnam Ca Mau Fertilizer Joint Stock Company – PVCFC (DCM), a member of Vietnam Oil & Gas Group – PetroVietnam (PVN), was established on March 9, 2011 and officially commenced operations in 2012. On March 11, 2014, the company was equitized in December 2014, and listed on the Ho Chi Minh Stock Exchange (HSX) in March 2015.

DCM currently specializes in producing granular urea fertilizer. The company also produces ammonia, and trades in other fertilizers and related petroleum chemical products.

Milestones	
2008	Commencement of urea factory construction
2011	Establishment of PetroVietnam Ca Mau Fertilizer Company Limited, 100 percent owned by PVN
2012	Launched operations and provided commercial products to the market
2013	Produced one million tonnes of products in July
2014	Equitized and transformed into PetroVietnam Ca Mau Fertilizer JSC
2015	Listed on HSX with ticker of DCM

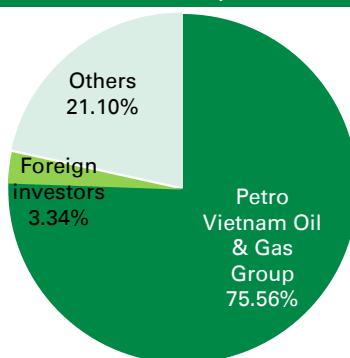
*Source: DPM*

### SHAREHOLDERS AND OWNERSHIP

The ownership structure of DCM is highly concentrated, with a 75.56 percent stake held by PVN. PVN is also the parent company of DPM, of which PVN currently owns 61.38 percent. DPM has nearly the same business as DCM. DPM also produces urea from gas, and urea revenue makes up over 70 percent of its net revenues.

Foreign investors account for only 3.34 percent ownership of DCM.

DCM ownership structure as of September 11, 2015



*Source: Bloomberg*

## SUBSIDIARIES AND AFFILIATES

DCM has only one subsidiary - PetroVietnam Packaging JSC (PBP) with registered capital of VND32.6 billion (USD1.5 million), of which DCM currently owns 51.03 percent. PBP produces packaging products (annual capacity of 20 million units), of which about 95 percent are provided to DCM.

## MANAGEMENT

With the controlling position in terms of ownership, PVN takes the leading role in determining development strategies as well as allocating key personnel within DCM, in line with PVN's development plan. DCM's Boards of Directors and Management include people with extensive experience in the oil & gas and petrochemical industries.

### List of members of the Board of Directors, Board of Management, and Supervisory Board

Board of Directors	Title	Experience/Qualification	Ownership
Nguyen Duc Thanh	Chairman	Construction Engineer. Bachelor of Industry Management. Master of Technology Science. Appointed in 2011.	0.00%
Bui Minh Tien	BOD member, CEO	Bachelor of Physical Science and Business Administration. Master of Business Administration. Appointed in 2013. DPM's chairman in 2011-2013.	0.00%
Tran My	BOD member	Industrial Economic Engineer. Appointed in 2011.	0.00%
Tran Chi Nguyen	BOD member	Bachelor of Law and Accounting. Appointed in 2011.	0.00%
Tran Thi Binh	BOD member	Engineer of Oil and Gas Processing Technology.	0.02%
Board of Management			
Bui Minh Tien	BOD member, CEO	Bachelor of Physical Science and Business Administration. Master of Business Administration. Appointed in 2013. Chairman of DPM from 2011 to 2013	0.00%
Nguyen Duc Hanh	Deputy CEO	Economic Power Engineer. Joined DCM in December 2012	0.01%
Van Tien Thanh	Deputy CEO	Mechanical Agroforestry Engineer. Appointed in 2011.	0.01%
Hoang Trong Dung	Deputy CEO	Chemical Technology Engineer. Post-Graduate Economic Management. Appointed in 2011	0.00%
Le Ngoc Minh Tri	Deputy CEO	Bachelor of Corporate Accounting. Chief accountant from 2011 to June 2015; Deputy CEO from June 2015.	0.00%
Vu Thuy Tuong	Chief accountant	Appointed in June 2015	0.00%
Supervisory Board			
Phan Thi Cam Huong	Head of Supervisory Board	Bachelor of Economics majoring in State Finance.	0.00%
Nguyen Thanh Hao	Member	Bachelor of General Accounting. Master of Business Administration.	0.00%
Lam Van Chi	Member	Bachelor of College Information Technology. Countryside Construction Engineer.	0.00%

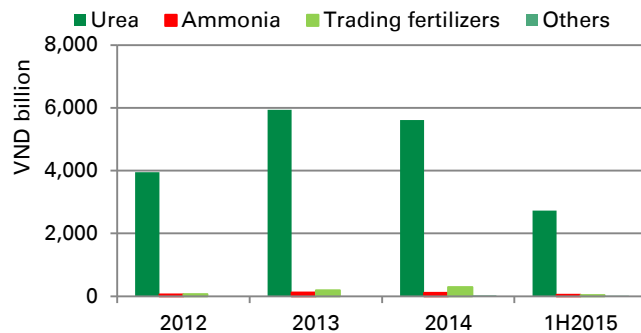
Source: 2015 prospectus report; Ownership in 1H2015 management report

## BUSINESS ACTIVITIES

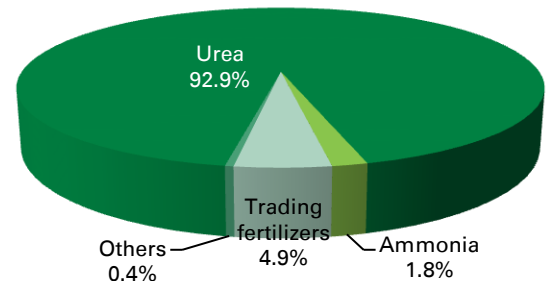
### MAIN PRODUCT IS UREA

DCM's main product is granular urea, contributing 93 percent of total revenue in 2014. The volume of urea production has increased over the last three years since the factory was officially put into operation in 2012.

Revenue structure



Revenue breakdown in 2014



Source: DCM, VPBS

#### Urea

There are two types of urea products: prilled urea and granular urea. Granular urea has a slower resolution and less evaporative characteristics which make it better in terms of cost saving; however, using prilled urea can bring more rapid results with trees. Prilled urea is not preferred to granular as an input to NPK production as prilled urea is softer and more delicate than granular.

DCM's granular urea is ranked as one of the best in the domestic market as it utilizes the most advanced urea production technology in the world at present. DCM is also the only granular urea producer among three prilled urea producers in Vietnam. Before 2012, all granular urea for NPK production in Vietnam had to be imported, but most has been supplied by DCM since its urea factory was put into operation.

#### Ammonia

DCM also produces ammonia, which is a precursor to urea in the production process. Production depends on the actual demand of urea in the market, such that DCM can consider how much ammonia to transform to urea.

**Others** (Including trading other fertilizers, packaging products, and other services)

Packaging products are produced by PetroVietnam Packaging JSC (HNX: PBP). Total capacity is 20 million units per year.

DCM also provides other services such as designing, setting up, and maintaining electrical systems, and chemical inspection and analysis services, though revenue from this segment is still minimal.

*DCM produces granular urea, applying the most advanced technology in the world at present. DCM's urea is preferred for use in NPK production.*

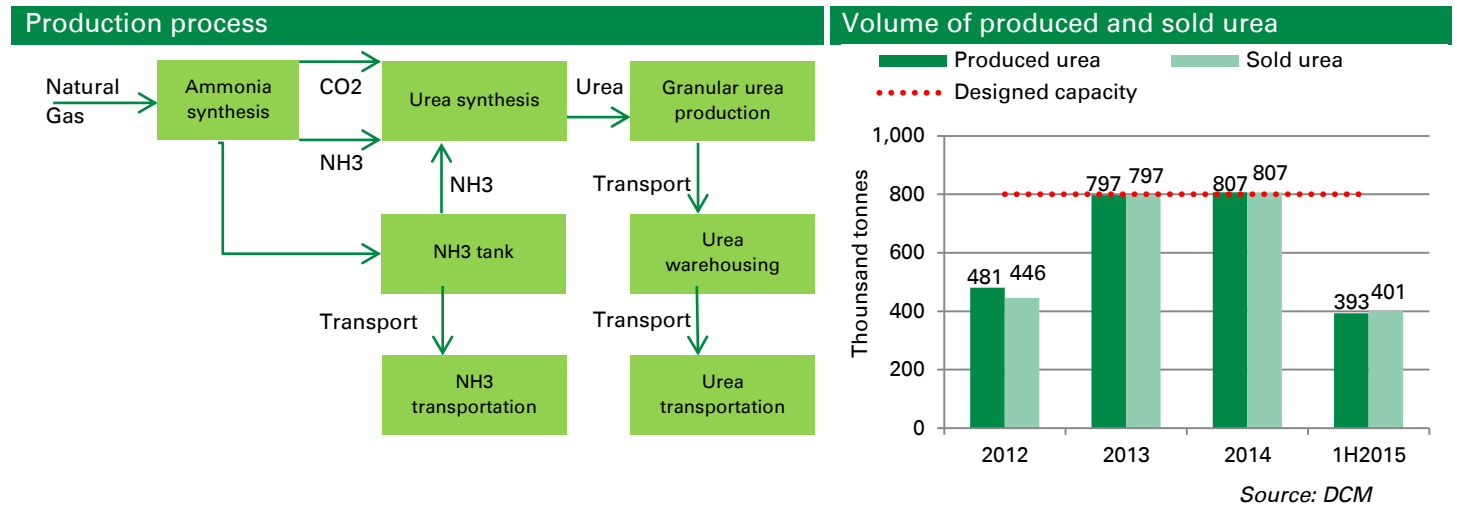
## PRODUCTION AT FULL CAPACITY

*Urea production exceeds designed capacity.*

DCM's urea plant was built with designed capacity of 800,000 tonnes per year. Since being put into operation in 2012, DCM's urea output has increased strongly, and exceeded designed capacity in 2014 with output volume of 806,750 tonnes.

DCM has the same designed capacity as its competitor, DPM. In 2014, DPM produced 850,000 tonnes of urea, 6.3 percent higher than designed capacity. Actual production is mainly dependent on the maintenance schedule of each company. DPM usually takes one month for maintenance every 2-3 years, thus the production amount is high in non-maintenance years. DCM takes about a half month for maintenance every year, thus the production amount is quite stable year-on-year.

In order to create growth for future, DCM plans to increase current plant's capacity by 10 percent by 2016 and another five percent by 2017. From 2017, DCM expects to introduce new products.



## PRODUCTION COST HIGHLY CORRELATED WITH GAS PRICE

*DCM's urea plant put its plant into operation in 2012, and must suffer high depreciation and interest expenses.*

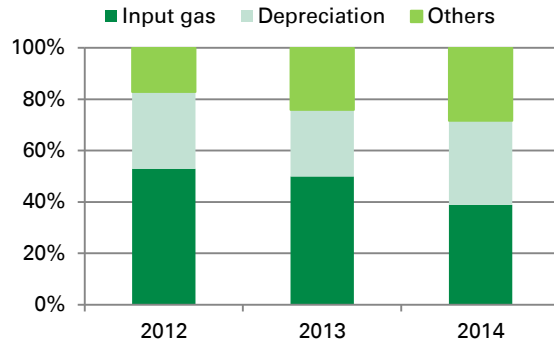
Urea production costs include natural gas, depreciation, and other materials such as catalytic materials, water, and electricity.

Total investment capital of DCM's urea plant was USD779.25 million (70 percent was financed by loans), and was put into operation in 2012. Most of the urea plant value is machinery with a value of VND8,486 billion (USD392 million). DCM expects to depreciate this machinery over 12 years from 2012 to 2024. Currently DCM must suffer high depreciation expenses with an amount of about VND1,351 billion (USD62.3 million) per year.

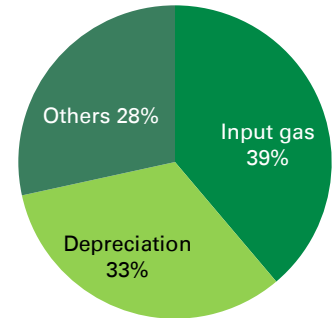
*PVN is supporting DCM with favorable input gas prices from 2015 to 2018 to maintain an average ROE of 12 percent.*

Input gas was provided by PVN via the PM3-Ca Mau pipeline. Input demand is about 500 million cubic meters, for production of 800,000 tonnes of urea per year. The gas price charged to DCM is currently regulated by government. In order to support DCM in the early stages of operation, PVN has guaranteed to sell natural gas to DCM at favorable prices so that DCM can maintain an average ROE of 12 percent from 2015 to 2018. After 2018, when DCM can significantly reduce interest expenses and some depreciation costs, the company should apply the market gas price.

### Cost structure of urea production



### Cost structure in 2014



Source: DCM, VBPS's calculation

Gas-based urea production requires less investment but higher input material costs.

Among urea producers in Vietnam, DPM has the lowest production costs due to lower depreciation. DCM, by contrast, must suffer high depreciation costs due to higher investment expenses and its early stage of operation. Other local urea plants are also quite new and bear high depreciation expenses as well – the Ninh Binh urea plant was built in 2012 and the Ha Bac expansion factory was completed in June 2015.

DCM and DPM are gas-based urea factories while Ninh Binh and Ha Bac are coal-based. In general, gas-based factories require less investment but higher input material costs.

### Production cost of urea plants in Vietnam

Company	Investment cost (USD mln)	Capacity (tonnes)	Depreciation expense per tonne (USD/tonne)	Material	Material demand	Material cost per tonne (USD/tonne)	Dep. and material cost (USD/tonne)	% compared to DCM
<b>Domestic</b>								
DPM	397	800,000	50	Gas	500 mn m <sup>3</sup>	109	109*	69.2%
DCM	779	800,000	97	Gas	500 mn m <sup>3</sup>	86	184	100.0%
Ninh Binh	667	560,000	119	Coal	470,400 tonnes	83	202	110.3%
Ha Bac	568	320,000	178	Coal	268,800 tonnes	83	261	142.1%
<b>Worldwide</b>								
SAMUR project (Petronas; complete 2016)	1,500	1,200,000	125	Gas	N/A	N/A	N/A	N/A
Turkmen project (complete 2018)	1,300	1,100,000	118	Gas	N/A	N/A	N/A	N/A

#### Assumptions:

- Depreciation period is 10 years.
- 1 tonne of urea needs 0.84 tonnes of coal (1 tonne of ammonia needs 1.3 – 1.7 tonnes of coal according to China Coal Research Institute 9/2011; 1 tonne of ammonia needs 1.45 tonnes of coal according to "New KPR process for coal to ammonia" by KPR company 11/2008; 1 tonne of urea is equivalent to 0.58 tonnes of ammonia)
- DPM gas price : USD4.80 / MMBTU (average gas price for 6M2015)
- DCM gas price: USD3.81 / MMBTU (provisional gas price for 2015)
- Coal price: VND2,150/kg ; coal price class 3c from nangluongvietnam.vn

\* excluding depreciation expenses as DPM plant is fully depreciated. Value including depreciation expenses is USD159 per tonne of urea

Source: DPM, DCM, VPBS

## HIGHEST TECHNOLOGY BUT SELLING PRICE STILL LOW

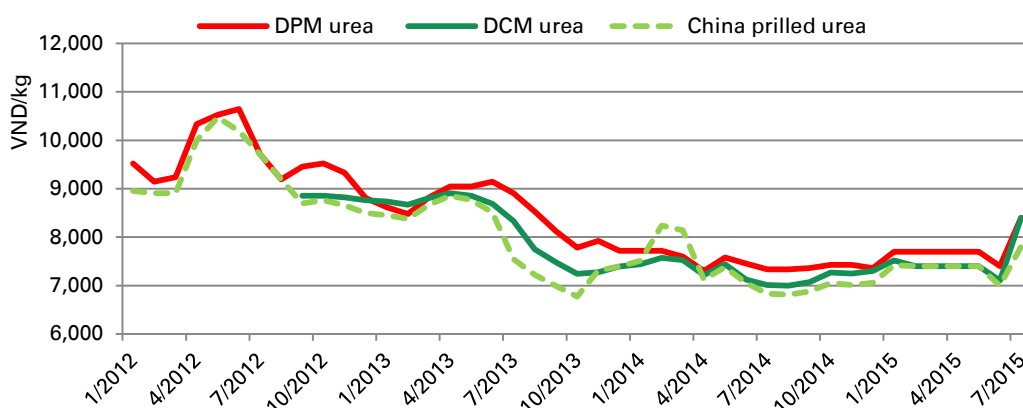
*Small differences in technology but doubled investment cost.*

*Selling price is still lower than DPM.*

DCM and its sister company, DPM, use the same urea production technology and the same machinery suppliers. The minor difference is that DCM produces granular urea while DPM produces prilled urea. DPM's urea plant was built in 2004 and is almost fully depreciated, while DCM completed its plant in 2012. The difference in time and technology means DCM's urea plant investment cost is nearly double that of DPM.

The price of granular urea is around 2-3 percent higher than prilled urea worldwide. However, in the local market, DCM's urea price is currently about 2-3 percent lower than DPM's. DCM urea is trading at nearly the same price as Ninh Binh urea, and about 1-3 percent higher than Chinese prilled urea. DPM is a leading urea producer in Vietnam with a high reputation, good marketing strategy, and solid distribution network that allow DPM to enjoy a price premium domestically.

Local urea price comparison (price including VAT)



Source: Binh Dien Fertilizer JSC, An Giang Ministry and Trade Department, VPBS

## BIGGEST THREAT FROM CHINESE UREA

*Chinese urea is putting more pressure on already-decreasing prices of domestic urea.*

All four domestic urea producers are state-owned companies. They can cooperate to set favorable prices for urea in the Vietnam market, unless there are urea products imported from China. The urea price in the Chinese market is much lower than Vietnam, by about 25-30 percent from 2014 to July 2015. The gap is much higher than the import tax rate of six percent for urea products.

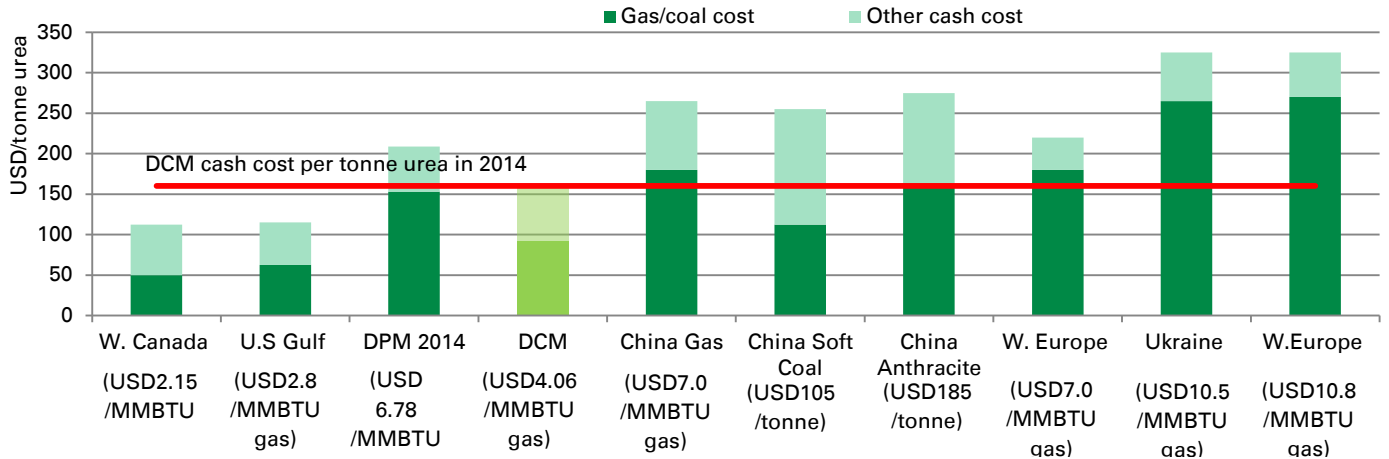
Domestic urea producers can maintain the price premium not only because of marketing strategy and distribution networks but also because of technical barriers to trade. The new circular (No. 35/2014/TT-BTC effective on December 1, 2014) on applying for an automatic license to import fertilizer, made the process of importing fertilizer more difficult, prolonging processing time and increasing storage costs for imported urea.

*Lower cash production cost than Chinese companies, but downward pressure of selling prices still exists.*

In comparison with other urea plants around the world, urea from both DCM and DPM is very competitive in terms of cost. In 2014, its cash production cost was even lower than the production cost of Chinese coal-based urea producers (coal-based urea producers in China set the global market's floor urea price, as explained in the Industry Overview section). DCM was even lower than DPM due to subsidies in gas prices. Though Chinese urea producers have higher cash costs than DCM and DPM, these companies have much lower profitability (*please refer to [Comparable Multiples](#)*

in the Evaluation section for more details) and are willing to sell their products for a lower price than both DCM and DPM, especially considering the current oversupply situation of urea in the Chinese market. This produces significant downward pressure on urea prices in Vietnam.

Global urea cash cost by country (2014)

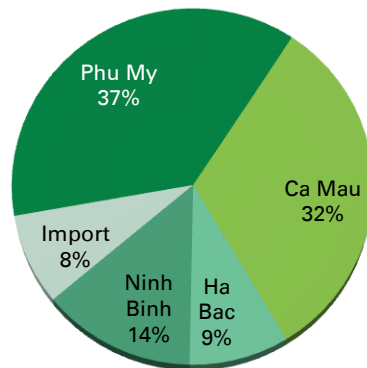


Source: Fertecon, Agrium Inc, CRU Group, VPBS

## GOOD LOCATION TO DEVELOP MARKET

We estimate that DCM held a share of around 32 percent of the urea market in Vietnam, just behind DPM with 37 percent. DCM and DPM both have the same designed urea capacity of 800,000 tonnes per year, but DPM's actual production amount is higher. DCM exported about 100,000 tonnes of urea in 2014 while the figure for DPM was about 25,000 tonnes, leading to a higher market share for DPM.

Market share in 2014



% selling amount in 2014

Region	Market share	% Selling amount
Southeast	25%	13%
Central and highlands	0%	0%
Southwest	55%	49%
Northern	0%	0%
Cambodia	35%	13%
NPK producers	70%	25%

Source: DCM, VPBS

Almost 50 percent of the amount of urea produced is sold in the Southwest area. With a good location, DCM can reduce selling expenses.

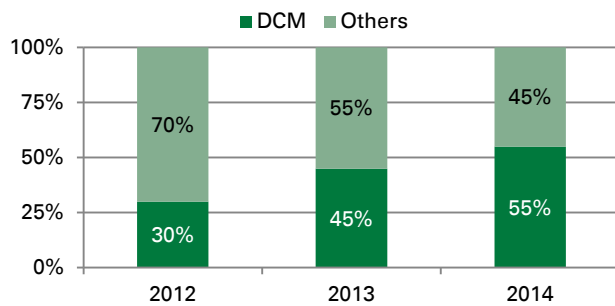
DCM is located in the Southwest area of Vietnam, which is the biggest urea market in the country with annual demand of about 700,000 tonnes, accounting for one third of total domestic urea demand. Due to its good location, all products sold in this area are transported by ship, which significantly reduces selling expenses for DCM. The selling expenses to revenues ratio for DCM was about 3.2 percent in 2014, the comparable ratio for DPM was more than double at 7.3 percent.



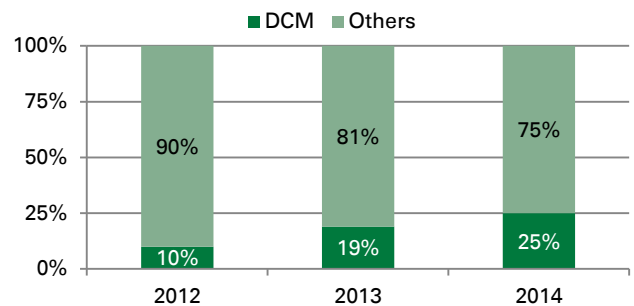
Granular urea is preferable to prilled urea for use as an input material for NPK producers. Since DCM urea reached the market in 2012, the product has steadily replaced imported granular urea. According to DCM, demand for urea for NPK production is about 250,000-280,000 tonnes per year, and DCM supplied about 70 percent of this market in 2014.

DCM urea is exported to Cambodia, Thailand, Bangladesh, Korea, and Philippines, of which Cambodia is the major export market. Urea demand from the Cambodian market is about 250,000-280,000 tonnes per year. Granular urea is preferred to prilled urea, and comprises about 95 percent of the total urea consumption in this market. Cambodia is close to the southwest area of Vietnam where DCM is located, and transportation from DCM to Cambodia is favorable by ship.

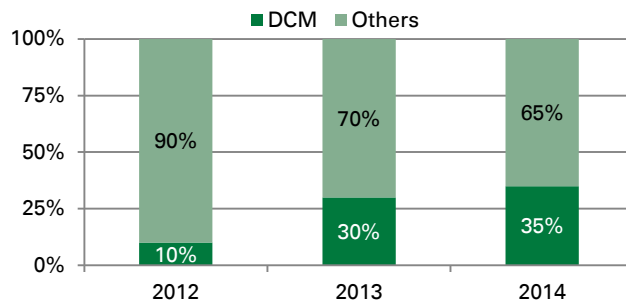
Southwest market share



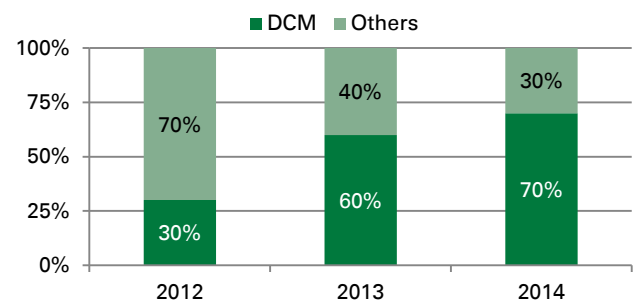
Southeast market share



Cambodia market share



Market share for NPK producers



Source: DCM

*Focusing on strategic markets and avoiding price competition.*

The current oversupply situation and the threat from Chinese urea together create significant downward pressure on local urea prices. DCM focuses on its strategic markets, and we believe this is a wise solution for avoiding price competition in the local urea market. DCM focuses on the Southwest area where the company has a favorable location for developing distribution channels and marketing strategy, and reducing selling expenses. DCM has competition only from imported products in supplying urea for local NPK producers. Cambodia is a potential market that DCM has advantages in developing.

# FINANCIAL PERFORMANCE

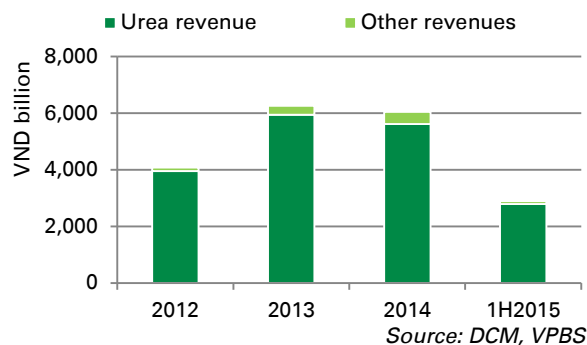
## GROWTH

### Revenues saw rapid growth over the last three years but lack potential for future growth

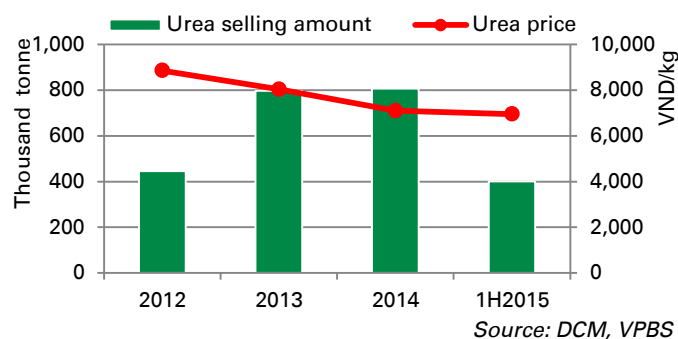
*Production has reached designed capacity while the urea price is on a downward trend, creating a lack of potential for DCM to grow in the future.*

Net revenues increased from VND4,076 billion (USD186 million) in 2012 to VND6,044 billion (USD276 million) in 2014, achieving a CAGR of 21.8 percent. Since DCM established its urea plant in 2012, urea production volume has increased strongly to reach a peak of 806,750 tonnes in 2014. The average DCM urea selling price dropped by 11.7 percent from VND8,033,000 (USD367) per tonne in 2013 to VND7,097,000 (USD324) per tonne in 2014. The urea price is currently on a downward trend, thus net revenues lack potential for growth in the future.

Revenue structure



Urea selling volume and price



### 1H2015 financial results and 2015 target

In 1H2015, DCM achieved 54.9 percent of its 2015 total revenues target and 71.2 percent of its 2015 profit before tax target. DCM sold about 401,000 tonnes of urea in 1H2015, meeting 53.8 percent of its 2015 target. We estimate that the average urea selling price was around VND6,950,000 per tonne, about 2.0 percent lower than the average urea selling price in 2014.

	1H2015 Consolidated	% y-o-y	Management target 2015	% Management target	VPBS forecast 2015	% VPBS forecast
Production volume (thousand tonnes)	393	-2.2%	747	52.6%	773	50.9%
Selling volume (thousand tonnes)	401	N/A	745	53.8%	757	52.9%
Total revenue (VND billion)	2,926	-6.9%	5,332	54.9%	5,818	50.3%
Net revenue (VND billion)	2,834	-7.6%	N/A	N/A	5,539	51.2%
Profit before tax (VND billion)	452	9.7%	634	71.4%	743	60.9%
Profit after tax (VND billion)	452	9.7%	634	71.2%	708	63.8%
Net profit (VND billion)	448	9.4%	N/A	N/A	705	63.6%

*\* Fiscal year 2015 is from January 15, 2015 when DCM officially transferred to a joint stock company, and ends on December 31, 2015.*

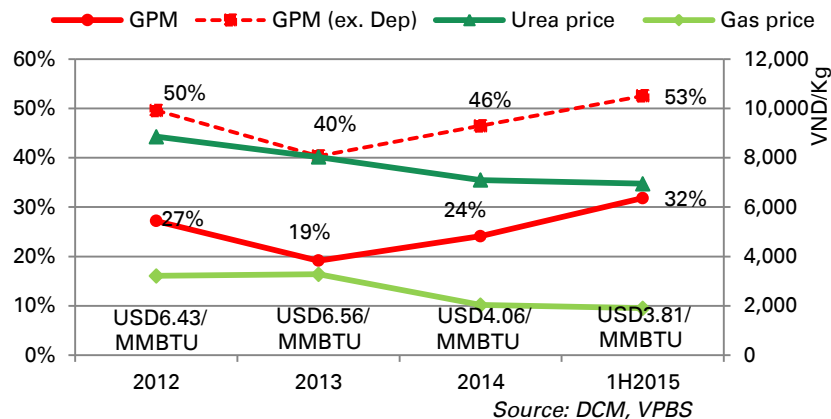
## COST STRUCTURE

### Gross profit margin increased due to reductions in gas prices

*High depreciation expenses reduced the value of gross profit by nearly half. Input gas price was the main driver of gross profit margin.*

Though the urea price has decreased over the last three years, DCM's profit margin saw a big improvement in 2014 due to reductions in gas prices. Depreciation made up a big portion of COGS. After deducting depreciation, DCM achieved very impressive gross profit margin over the last three years. This margin was much better than that of its peer, DPM with 2014 gross margin (excluding depreciation) of 28.2 percent.

#### Gross profit vs. input gas price

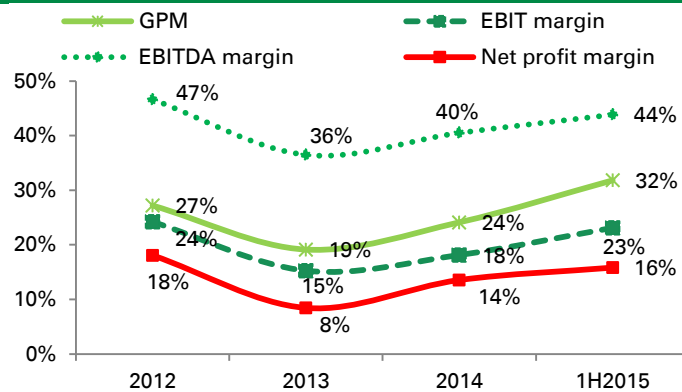


### Low SG&A expenses but high financial expenses

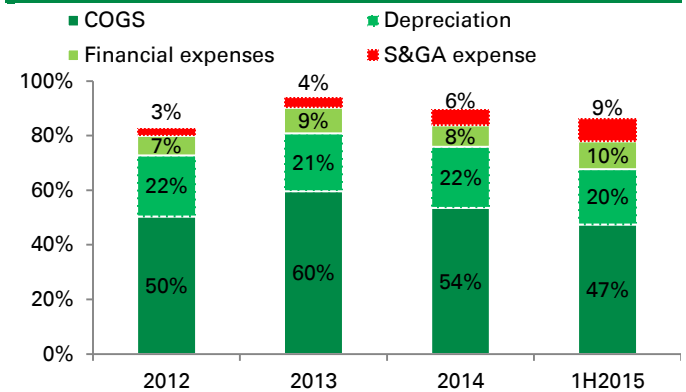
DCM's SG&A expenses to net revenues ratio is much lower than its peer, DPM. As explained above, good location helps DCM to reduce expenses in selling activities; and focusing on its main urea product is the primary reason for the low SG&A expense ratio. However, these ratios have increased slightly over the last three years, especially selling expenses to net revenues. In 1H2015, the selling expenses to net revenues ratio increased significantly to 5.5 percent, and the G&A expenses to revenues ratio increased to 3.2 percent. In the past DCM was supported by PVN and DPM in developing its distribution network, but DCM must now develop the network itself, which is the main reason for the increase in the selling expenses to net revenues ratio.

Financial expenses made up a significant portion of the cost structure at around 7.9 percent. As of June 30, 2015, DCM had total outstanding loans of VND7,504 billion (USD343 million), all of which was long-term. The value of USD loans was about VND7,470 billion (USD341 million), accounting for about 99.5 percent of total long-term loans. The average borrowing interest rate is 3-4 percent. Though the USD interest rate is quite low, DCM must bear risks from FX fluctuation.

## Profit margin



## % expenses to net revenues



Source: DCM, VPBS

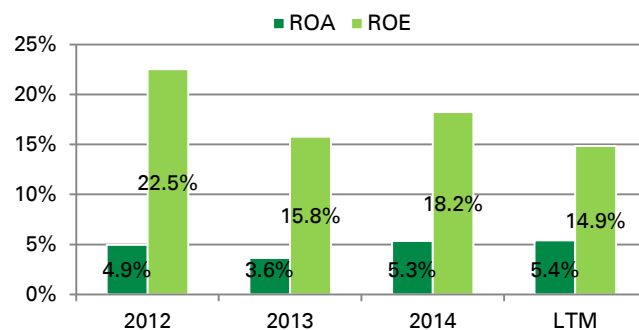
## PROFITABILITY

Gas prices dropped significantly and improved net profit margin in 2014, which was the main reason for the improvement of ROA and ROE, though assets turnover and assets to equity ratio fell during the year.

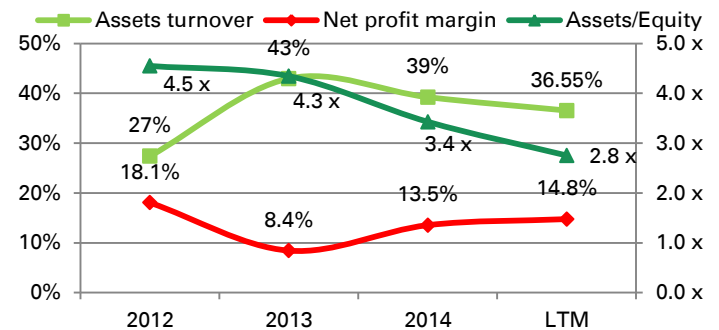
DCM currently bears a big depreciation expense every year, about VND1,352 billion (USD61.8 million) in 2014. PVN guarantees to offer gas with favorable prices to DCM so that DCM can maintain ROE at 12 percent from 2015 to 2018. With ROE of 12 percent, the operating cash flow is very strong. We expect equity to increase steadily due to growth of retained earnings, leading to an increase in net profit from 2015 to 2018, if the ROE is maintained at 12 percent.

Gas subsidy brings DCM a big cash flow.

## ROA and ROE



## DuPont analysis



Source: DCM, VPBS

## ASSETS STRUCTURE

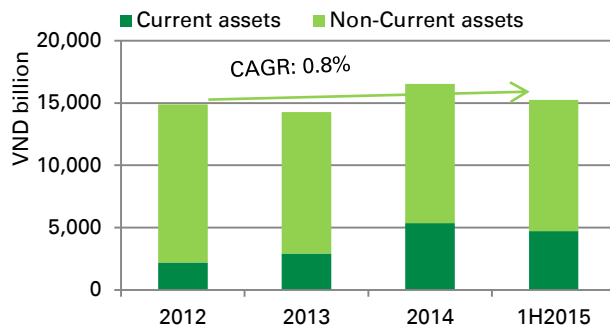
From 2009 to 2014, total assets grew slowly with a CAGR of about 5.4 percent from improvements in current assets, while the value of fixed assets experienced a slight drop. As of June 30, 2015, long-term assets comprised about 69.1 percent of total assets, of which 98.7 percent was the value of fixed assets, the majority of which was machinery. The decrease in long-term assets was entirely due to depreciation.

Total liabilities constituted 60.6 percent of total assets as of June 30, 2015. The ratio decreased significantly between 2012 and 1H2015 as DCM periodically repaid debts. All debts were long-term that DCM used to finance the urea factory, with investment capital of about USD779 million, of which approximately 70 percent was debt.

High value of fixed assets, as the urea plant was put into operation in 2012.

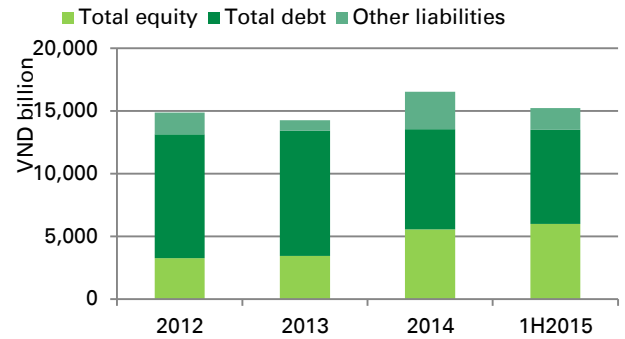
High financial leverage which is falling significantly over time.

### Total assets structure



Source: DCM, VPBS

### Financial leverage



Source: DCM, VPBS

## LIQUIDITY AND SOLVENCY

Financial leverage is quite high, but has been reduced significantly over time. Though highly leveraged, the current and quick ratios are quite good, with both above 1.0x as there are no short-term debts. The EBIT/interest expense ratio is also strong, at 3.3x in 2014, and it is expected that the ratio will improve as DCM repays debts over time.

### Liquidity and solvency ratios

	2012	2013	2014	1H2015
Current ratio	1.3 x	1.3 x	1.3 x	1.6 x
Quick ratio	1.0 x	1.1 x	1.2 x	1.5 x
Total liabilities/Total assets	78.0%	75.9%	66.5%	60.6%
Total borrowings/Equity	3.0 x	2.9 x	1.4 x	1.3 x
EBIT/Interest expense	3.5 x	2.2 x	3.3 x	5.7 x
EBITDA/Total debt	0.2 x	0.2 x	0.3 x	0.2 x

Source: DCM, VPBS

## FORECAST ASSUMPTIONS

### Production and selling volumes

Unit: Tonnes	2012	2013	2014	2015F	2016F	2017F	2018F	2019F
<b>Production</b>								
- Urea production amount (Including ammonia amount)	480,746	796,960	806,750	773,135	806,750	806,750	806,750	806,750
<b>Selling</b>								
- Urea selling volume	446,000	739,826	790,996	756,756	790,370	790,370	790,370	790,370
- Ammonia selling volume (VPBS estimate)	3,868	8,828	9,226	9,226	9,226	9,226	9,226	9,226
- Other fertilizers	N/A	18,020	31,030	15,000	15,000	15,000	15,000	15,000

#### Production volume

Production amount has increased significantly since 2012. We believe that production is now stable, and from 2015 to 2019 we expect the urea production amount (including an ammonia equivalent amount) to be maintained at 806,750 tonnes per year. For fiscal year 2015 only, the production volume is reduced as our forecast is for the period from January 15, 2015 to December 31, 2015.

#### Selling volume

We assume that the urea selling amount will remain unchanged at 790,370 tonnes per year over the period from 2015 to 2019. For fiscal year 2015 only, the urea selling volume is reduced as our forecast is for the period from January 15, 2015 to December 31, 2015. The ammonia selling amount is expected to be unchanged at 9,226 tonnes over the period from 2015 to 2019.

#### Trading other fertilizers

In 2015, DCM expects to trade 15,000 tonnes of other fertilizers, and we use this number in our forecast for the period from 2015 to 2019.

#### **Selling price**

Per our analysis in the Outlook Section, we estimate that DCM's urea price will decrease two percent in 2015 and three percent in 2016, and then remain unchanged at this level.

#### **Input gas price**

	2015F	2016F	2017F	2018F	2019F
Crude oil price, Brent (USD/barrel)	N/A	N/A	N/A	N/A	70.00
FO oil price (USD/tonne) (Singapore market, according to Platts)	N/A	N/A	N/A	N/A	392.00
Transportation cost (USD/MMBTU)	N/A	N/A	N/A	N/A	0.63
Gas price (ex. VAT) (USD/MMBTU)	3.88	3.74	3.76	3.72	5.07
% change y-o-y	-30.79%	-3.26%	2.27%	-0.08%	82.55%

PVN will subsidize the input gas price for DCM such that DCM can have ROE at 12 percent over the period from 2015 to 2018. We forecast the gas price for DCM from 2015 to 2018 based on this agreement. From 2019, DCM should apply input gas prices based on market benchmarks.

DPM used to receive such a subsidy from PVN, but started to apply the market benchmark price in 2014 based on the following formula:

*Gas price (USD/MMBTU) = 46% \* MFO (monthly average FO oil price traded in Singapore) + 0.63 (transportation cost).*

We apply this formula for DCM from 2019. We expect the transportation cost to increase from USD0.63 to USD1.0 per MMBTU from 2019 to 2024, thus we apply a negative long-term terminal growth rate for DCM.

### **Gross profit margin of trading other fertilizers**

	2012	2013	2014	2015F	2016F	2017F	2018F	2019F
Gross profit margin	1.66%	0.11%	0.26%	0.26%	0.26%	0.26%	0.26%	0.26%

We expect the gross profit margin of trading other fertilizers to be unchanged at 0.26 percent over the period from 2015 to 2019.

### **Selling, general, & administrative expenses (SG&A)**

	2012	2013	2014	2015F	2016F	2017F	2018F	2019F
Selling expenses/revenues	1.0%	2.2%	3.2%	5.0%	5.0%	5.0%	5.0%	5.0%
G&A expenses/revenues	1.9%	1.7%	2.8%	3.0%	3.2%	3.3%	3.5%	3.6%

Though the current selling expense to revenue ratio is quite low compared to DCM's peers, we believe that the ratio will increase to five percent in 2015 and remain unchanged through 2019 as DCM must pay more to develop market share on its own.

G&A expense-to-revenue ratio is also forecast to increase to three percent in 2015 (based on 1H2015's number), then increase steadily through 2019.

### **Working capital demand and borrowings**

The working capital shortage period is nil; DCM has no need to use loans for working capital.

	2012	2013	2014	2015F	2016F	2017F	2018F	2019F
Inventory DOH (days)	40	42	26	26	26	26	26	26
Receivable DOH (days)	1	3	5	5	5	5	5	5
Payable DOH (days)	51	37	31	31	31	31	31	31
Shortage period (days)	-10	7	0	0	0	0	0	0
Working capital demand (VND billion)	-85	97	1	1	1	1	1	2
Short-term bank loan (VND billion)	0	0	0	0	0	0	0	0
% short-term loan/ Working cap demand	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

### **Financial income and expenses**

USD loan interest rate is about 3-4 percent per annum, but DCM must bear the risk from FX fluctuation. We expect that VND will be depreciated by five percent against USD in 2015 and two percent annually from 2016 to 2019.

Financial income consists mostly of interest income. Because DCM holds a high amount of cash and cash equivalents, the fluctuation of deposit interest rates will markedly affect the company's financial income. Considering the current market deposit interest rate, we assume the average deposit rate for DCM will be 4.5 percent over the period from 2015 to 2019.



## Tax rate

DCM applies three separate income tax schemes, consisting of zero percent for its main business of urea production, ten percent for its packaging business, and 22 percent for its other businesses.

For the urea production business, DCM has an exempted income tax rate from 2012 to 2015; thereafter the company is subject to five percent tax until 2024, and from 2025 to 2026 the tax rate will be ten percent. From 2027, the urea production business will apply the normal income tax rate. For the packaging business, DCM had an exempted income tax rate from 2012 to 2013; from 2014 to 2017 the tax rate is ten percent, and from 2018 to 2021 the tax rate will be 20 percent.

## VALUATION

Based on the discounted cash flow (DCF) and comparable multiples methods, we derive a target price for DPM of VND15,000 per share.

Valuation method	(VND/share)	Weighting
DCF	16,231	80%
P/E	10,179	20%
Target price (VND/share)		15,000

P/E method is less applicable in this case as DCM must suffer high depreciation expenses while DPM does not. Therefore, we apply a higher weighting of 80 percent for the DCF method and 20 percent for P/E.

## DISCOUNTED CASH FLOW

The fair price derived from our DCF model is VND16,231 per share and includes the following assumptions:

Cost of Equity	
5-year government bond yield	6.8%
Beta (*)	0.77
Market risk premium	9.3%
Cost of equity	13.9%
Cost of Debt	
Long-term interest rate	7.6%
Effective tax rate	4.8%
After tax cost of debt	7.3%
WACC	
Current share price (VND/share)	12,900
Number of shares (million)	529.40
Market capitalization (VND billion)	6,829.26
Debts (VND billion)	7,504.37
WACC	10.44%
Terminal growth rate	-2.0%

(\*) As DCM has just been listed on HSX, the beta value is not available. We apply the 3-year beta of its peer, DPM, with a value of 0.77 in the DCF model of DCM.

From 2019, DCM will apply the gas price based on the market benchmark; gas prices should increase steadily thereafter (please refer to [assumptions for input gas prices](#)), reducing DCM's profit. Therefore we apply a terminal growth rate of negative two percent for the DCF model.

## COMPARABLE MULTIPLES

The number of companies in Vietnam that have similar business lines to DCM is very limited. DPM is a good comparable peer, however this company has operated for a long-time, its factory is almost depreciated, and DPM no longer receives subsidies from PVN. LAS is also a big fertilizer producer in Vietnam, but the company specializes in producing phosphate and NPK.

DCM has lower ROA than its local peers due to high total assets value – DCM's factory is new while those of DPM and LAS are almost fully depreciated. ROE of DCM is better than DPM but lower than LAS. DCM has much higher financial leverage.

Compared to regional peers, the results are quite divergent. In general, DCM's profitability is higher than companies in China but lower than companies in India and Pakistan. We believe Vietnam's urea market is highly affected by urea imported from China, and Chinese manufacturers with low profit margins will inevitably create more competition in terms of urea prices, and put pressure on DCM's profit margin in the future.

### Peer comparison

Company	BB code	Country	Market cap	Net profit margin	Asset turn over	Debt to equity	ROA		ROE		P/E		EV/EBITDA		P/B
				LTM	LTM		LTM	Rel.	LTM	Rel.	LTM	Rel.	LTM	Rel.	
Regional peers			(USDmn)	%	%	%	%	Time	%	Time	%	Time	%	Time	Time
LUXI CHEMICAL GROUP CO LT-A	000830 CH	CHINA	1,496	2.78	0.70	152.68	2.33	0.77	7.70	0.79	20.34	0.50	8.22	0.32	1.52
CHAMBAL FERTILISERS & CHEM	CHMB IN	INDIA	344	3.03	1.24	180.11	3.76	1.39	13.68	0.96	7.75	0.38	8.44	0.71	1.02
RASHTRIYA CHEMICALS & FERT	RCF IN	INDIA	362	4.47	1.29	73.60	5.78	2.14	13.25	0.93	6.98	0.34	5.02	0.42	0.89
FAUJI FERTILIZER BIN QASIM	FFBL PA	PAKISTAN	550	8.89	1.00	105.46	9.48	2.56	38.44	1.92	11.76	1.19	10.15	1.43	4.39
FAUJI FERTILIZER COMPANY LTD	FFC PA	PAKISTAN	1,605	40.01	N/A	59.69	31.83	8.59	100.52	5.01	4.74	0.48	N/A	N/A	3.88
ENGRO CORPORATION LTD	ENGRO PA	PAKISTAN	1,563	3.98	0.90	125.15	5.90	1.59	20.62	1.03	12.56	1.27	5.74	0.81	2.40
COROMANDEL INTERNATIONAL LTD	CRIN IN	INDIA	735	4.97	1.01	103.90	5.03	1.86	17.92	1.26	12.15	0.60	6.67	0.56	2.22
RALLIS INDIA LTD	RALI IN	INDIA	637	8.63	1.33	15.19	11.50	4.25	20.52	1.44	26.94	1.33	15.44	1.31	5.20
THAI CENTRAL CHEMICAL PUB CO	TCCC TB	THAILAND	417	9.10	1.46	16.60	13.05	4.97	25.33	2.37	9.27	0.53	5.33	0.49	2.16
PETROVIETNAM FERT & CHEMICAL	DPM VN	VIETNAM	522	11.48	0.95	1.05	11.85	4.19	13.62	0.87	10.81	0.98	3.94	0.47	1.33
LAM THAO FERTILIZERS AND CHE	LAS VN	VIETNAM	101	8.80	1.84	24.48	16.19	5.72	28.47	1.82	6.36	0.57	3.80	0.46	1.71
Average				9.65	1.17	77.99	10.61	3.46	27.28	1.67	11.79	0.74	7.28	0.70	2.43
Median				8.63	1.13	73.60	9.48	2.56	20.52	1.26	10.81	0.57	6.21	0.53	2.16
Local peers															
PETROVIETNAM FERT & CHEMICAL	DPM VN		522	11.48	0.95	1.05	11.85	4.19	13.62	0.87	10.81	0.98	3.94	0.47	1.33
LAM THAO FERTILIZERS AND CHE	LAS VN		101	8.80	1.84	24.48	16.19	5.72	28.47	1.82	6.36	0.57	3.80	0.46	1.71
Average				10.14	1.39	12.77	14.02	4.95	21.04	1.34	8.58	0.77	3.87	0.46	1.52
PETROVIETNAM CA MAU FERTILIZER AND CHEMICALS CORPORATION	DCM VN		304	14.76	0.37	125.07	5.40	1.91	14.86	0.95	8.48	0.77	4.25	0.51	1.14

Data as of September 11, 2015. Source: Bloomberg, VPBS

We derive a target P/E for DPM of 8.2x based on its regional peers. This P/E level is just slightly lower than the average P/E of local peers at 8.6x.

Valuation method	Relative	VN-Index	Target	DCM's stock price (VND/share)
P/E	0.74	11.1x	8.2x	10,179

## SENSITIVITY ANALYSIS

### Sensitivity of target stock price to WACC and terminal growth rate

		WACC								
		8%	9%	10%	11%	12%	13%	14%	15%	16%
Terminal growth rate	5%	51,300	38,500	28,400	25,700	22,000	19,200	17,000	15,300	13,800
	4%	39,700	31,800	24,700	22,700	19,800	17,600	15,800	14,300	13,000
	3%	32,800	27,300	22,000	20,400	18,100	16,200	14,700	13,400	12,300
	2%	28,200	24,100	19,900	18,600	16,700	15,100	13,800	12,700	11,700
	1%	24,900	21,700	18,300	17,200	15,600	14,200	13,100	12,100	11,200
	0%	22,400	19,800	17,000	16,100	14,700	13,500	12,400	11,500	10,700
	-1%	20,500	18,300	15,900	15,100	13,900	12,800	11,900	11,100	10,300
	-2%	18,900	17,100	15,000	14,300	13,200	12,300	11,400	10,700	10,000
	-3%	17,600	16,100	14,300	13,600	12,600	11,800	11,000	10,300	9,700
	-4%	16,600	15,200	13,600	13,000	12,100	11,300	10,600	10,000	9,400
	-5%	15,700	14,500	13,000	12,500	11,700	10,900	10,300	9,700	9,100

### Sensitivity of target stock price to oil price from 2019

Oil price (USD/barrel)											
40	45	50	55	60	65	70	75	80	85	90	100
22,900	21,600	20,300	19,000	17,700	16,400	15,000	14,000	12,700	11,300	9,900	7,200

## TECHNICAL ANALYSIS

DCM's technical chart has shown the accumulation phase of 12,800-13,600 in four months from May to August 21, 2015. After declining to the lowest price at 11,800 on August 25 with strong increasing volume, DCM rebounded and has been moving sideways around the support level of the MA10 as well as the MA50.

Recently, DCM's trading volume is stable at around the moving average of last ten days, which reinforce the accumulation of this stock.

Therefore we believe that DCM shares are trading in a neutral trend at the time of issuing this report.

As of September 11, 2015	(VND/share)
Horizon analytic	3 to 6 months
3-month highest price	13,600
3-month lowest price	11,800
Current MA50 days	13,000
Current MA100 days	13,000
Mid-term resistance level	13,600
Mid-term support level	12,700
<b>Recommendation</b>	<b>NEUTRAL</b>



## CONCLUSION

We believe that the fertilizer industry in general, and the urea sector in Vietnam in particular, are now reaching the mature stage of their life-cycle. Fertilizer demand is now facing slow growth due to sluggish expansion of planted areas and current high levels of fertilizer usage. In addition, urea production has already outpaced its demand in Vietnam, thus ushering in pressure for decreasing urea prices, and reducing the profitability of urea producers. However, DCM appears to be less affected by the downtrend of the urea price due to subsidies from its parent company, PVN, at least until 2018. PVN guarantees to offer gas with favorable prices to DCM so that DCM can maintain ROE at 12 percent over the period from 2015 to 2018. This ratio is not high compared with its peers currently, however DCM is a new company and must suffer high depreciation expenses while other companies do not. The subsidy will help DCM to generate a huge operational cash flow to repay most of its debt by 2019, and reduce financial expenses.

We believe that DCM stock is more suitable for long-term investors as the company cannot create significant growth in the short-term, and is still affected by the unfavorable business environment of the Vietnam fertilizer industry. However, we believe that DCM stock is UNDER-VALUED considering the cash inflow noted above.

All factors considered, we adopt a long term BUY recommendation for DCM stock with a target price of VND15,000 per share.

## Appendix 1: VPBS projection

Income Statement (VND billion)	2012A	2013A	2014A	2015F	2016F	2017F	2018F	2019F
<b>Revenue</b>								
1. Urea	3,949	5,943	5,614	5,263	5,332	5,332	5,332	5,332
Growth rate		50%	-6%	-6%	1%	0%	0%	0%
2. Ammonia	57	119	110	107	104	104	104	104
Growth rate		107%	-8%	-2%	-3%	0%	0%	0%
3. Trading other fertilizers	70	195	295	143	143	143	143	143
Growth rate		180%	51%	-52%	0%	0%	0%	0%
4. Others	0	6	26	26	26	26	26	26
Growth rate			324%	0%	0%	0%	0%	0%
<b>Net Revenue</b>	<b>4,076</b>	<b>6,263</b>	<b>6,044</b>	<b>5,539</b>	<b>5,605</b>	<b>5,605</b>	<b>5,605</b>	<b>5,605</b>
Growth rate		54%	-3%	-8%	1%	0%	0%	0%
<b>Cost of Goods Sold (excluding depreciation)</b>	<b>2,054</b>	<b>3,735</b>	<b>3,235</b>	<b>2,791</b>	<b>2,957</b>	<b>3,015</b>	<b>3,047</b>	<b>3,882</b>
<b>Gross Profit</b>	<b>2,022</b>	<b>2,528</b>	<b>2,809</b>	<b>2,748</b>	<b>2,648</b>	<b>2,590</b>	<b>2,558</b>	<b>1,723</b>
Gross Profit Margin	50%	40%	46%	50%	47%	46%	46%	31%
Total Selling Expenses	43	138	193	277	280	280	280	280
% sales	1.0%	2.2%	3.2%	5.0%	5.0%	5.0%	5.0%	5.0%
Total General & Admin Expenses	79	105	169	166	177	185	195	204
% sales	2%	2%	3%	3%	3%	3%	3%	4%
<b>EBITDA</b>	<b>1,900</b>	<b>2,285</b>	<b>2,448</b>	<b>2,305</b>	<b>2,191</b>	<b>2,124</b>	<b>2,083</b>	<b>1,238</b>
EBITDA Margin	47%	36%	40%	42%	39%	38%	37%	22%
Depreciation	914	1,330	1,352	1,197	1,194	1,163	1,163	1,163
<b>EBIT</b>	<b>987</b>	<b>955</b>	<b>1,096</b>	<b>1,108</b>	<b>998</b>	<b>961</b>	<b>920</b>	<b>76</b>
Financial income	32	128	181	226	153	139	125	124
Financial expenses	288	588	478	643	373	284	184	105
Interest Expense	283	438	328	257	234	181	114	55
<b>Net Financial Income (Expense)</b>	<b>(256)</b>	<b>(460)</b>	<b>(298)</b>	<b>(417)</b>	<b>(220)</b>	<b>(145)</b>	<b>(59)</b>	<b>19</b>
Other Income	6	37	58	53	53	53	53	53
% sale	0.16%	0.59%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%
<b>Pretax Income</b>	<b>737</b>	<b>532</b>	<b>856</b>	<b>743</b>	<b>831</b>	<b>870</b>	<b>915</b>	<b>148</b>
Income Tax Expense	-	0	35	35	65	67	71	35
Effective Tax Rate	0.00%	0.07%	4.11%	4.75%	7.88%	7.76%	7.81%	23.47%
<b>Profit after tax</b>	<b>737</b>	<b>532</b>	<b>821</b>	<b>708</b>	<b>766</b>	<b>802</b>	<b>843</b>	<b>113</b>
Minority Interests	-	3	2	3	3	3	3	3
<b>Net profit</b>	<b>737</b>	<b>529</b>	<b>819</b>	<b>705</b>	<b>762</b>	<b>799</b>	<b>840</b>	<b>110</b>
Net Profit Margin	18%	8%	14%	13%	14%	14%	15%	2%
EPS (VND)	N/A	N/A	1,438	1,238	1,339	1,404	1,475	192
Dividends Per Share (VND)	N/A	N/A	N/A	800	800	800	800	800

Balance Sheet (VND billion)	2012A	2013A	2014A	2015F	2016F	2017F	2018F	2019F
<b>Current Assets</b>								
Cash & Near Cash Items	1,808	2,353	1,952	721	416	101	79	392
Short Term Investments	-	-	3,068	2,672	2,672	2,672	2,672	2,672
Accounts & Notes Receivable	12	43	88	81	82	82	82	82
<i>A/R DOH</i>	1	3	5	5	5	5	5	5
Inventories	224	426	230	199	210	214	217	276
<i>Inv DOH</i>	40	42	26	26	26	26	26	26
Other Current Assets	157	94	34	30	31	32	32	38
<b>Total Current Assets</b>	<b>2,201</b>	<b>2,917</b>	<b>5,372</b>	<b>3,703</b>	<b>3,411</b>	<b>3,101</b>	<b>3,082</b>	<b>3,460</b>
<b>Long-Term Assets</b>								
Gross Fixed Assets	13,416	13,452	13,545	13,600	13,616	13,632	13,648	13,664
Accumulated Depreciation	920	2,247	2,632	3,837	5,030	6,193	7,355	8,517
Net Fixed Assets	12,496	11,206	10,913	9,764	8,586	7,440	6,293	5,147
Intangibles	1	0	44	46	47	48	49	50
Other Long Term Assets	187	141	214	7	7	7	7	7
<b>Total Long-Term Assets</b>	<b>12,683</b>	<b>11,347</b>	<b>11,171</b>	<b>9,817</b>	<b>8,640</b>	<b>7,495</b>	<b>6,350</b>	<b>5,204</b>
<b>Total Assets</b>	<b>14,885</b>	<b>14,264</b>	<b>16,544</b>	<b>13,520</b>	<b>12,052</b>	<b>10,596</b>	<b>9,431</b>	<b>8,664</b>
<b>Current Liabilities</b>								
Accounts Payable	289	381	276	238	253	258	260	332
<i>A/P DOH</i>	51	37	31	31	31	31	31	31
Accrued Expenses	-	-	-	89	91	93	95	97
Short Term Borrowings	2	1,374	1,254	2,112	2,112	1,586	473	494
Other Short Term Liabilities	1,452	448	2,583	786.53	795.85	795.85	795.85	795.85
<b>Total Current Liabilities</b>	<b>1,743</b>	<b>2,202</b>	<b>4,114</b>	<b>3,226</b>	<b>3,252</b>	<b>2,733</b>	<b>1,624</b>	<b>1,718</b>
<b>Long Term Liabilities</b>								
Long Term Borrowings	36	8,607	6,739	3,950	2,166	907	491	2
Other Long Term Liabilities	9,824	10	126	115	116	116	116	116
<b>Total Long Term Liabilities</b>	<b>9,860</b>	<b>8,616</b>	<b>6,865</b>	<b>4,065</b>	<b>2,282</b>	<b>1,023</b>	<b>607</b>	<b>118</b>
<b>Total Liabilities</b>	<b>11,603</b>	<b>10,818</b>	<b>10,979</b>	<b>7,291</b>	<b>5,534</b>	<b>3,756</b>	<b>2,231</b>	<b>1,837</b>
<i>Total Debt to Capital</i>	<i>1.1%</i>	<i>74.4%</i>	<i>59.0%</i>	<i>49.4%</i>	<i>39.7%</i>	<i>26.8%</i>	<i>11.8%</i>	<i>6.8%</i>
<b>Equity</b>								
Share Capital & APIC	3,198	3,198	4,120	5,294	5,294	5,294	5,294	5,294
Retained Earnings	-	239	10	575	793	1,038	1,318	860
Other Equity	73	-	1,415	339	410	487	568	653
<b>Total Shareholders Equity</b>	<b>3,272</b>	<b>3,437</b>	<b>5,546</b>	<b>6,208</b>	<b>6,498</b>	<b>6,820</b>	<b>7,180</b>	<b>6,807</b>
Minority Interest	10	9	19	20	20	20	20	20
<b>Total Liabilities &amp; Equity</b>	<b>14,885</b>	<b>14,264</b>	<b>16,544</b>	<b>13,520</b>	<b>12,052</b>	<b>10,596</b>	<b>9,431</b>	<b>8,664</b>

Cash Flows (VND billion)	2012A	2013A	2014A	2015F	2016F	2017F	2018F	2019F
Cash From Operation Activities	2,068	1,792	4,270	(24)	1,819	1,828	1,883	1,159
Cash From Investing Activities	(2)	85	(3,035)	769	137	122	107	106
Cash From Financing Activities	(285)	(1,333)	(1,635)	(1,976)	(2,261)	(2,265)	(2,013)	(953)
Net Changes in Cash	1,781	545	(401)	(1,230)	(306)	(315)	(22)	313
Free Cash Flow (FCFF)		2,190	4,404	203	2,017	1,978	1,971	1,184
Ratio Analysis	2012A	2013A	2014A	2015F	2016F	2017F	2018F	2019F
<b>Valuation Ratios</b>								
Price Earnings			9.0 x	10.4 x	9.6 x	9.2 x	8.7 x	67.0 x
PEG				(0.7)	1.2	1.9	1.7	(0.8)
EV to EBIT			10.8 x	10.6 x	11.8 x	12.3 x	12.8 x	155.9 x
EV to EBITDA			4.1 x	4.4 x	4.6 x	4.7 x	4.8 x	8.1 x
Price to Book				1.1 x	1.1 x	1.0 x	1.0 x	1.0 x
Dividend Yield				6.2%	6.2%	6.2%	6.2%	6.2%
<b>Profitability Ratios</b>								
Gross Margin (ex. Dep)	49.6%	40.4%	46.5%	49.6%	47.2%	46.2%	45.6%	30.7%
EBITDA Margin	46.6%	36.5%	40.5%	41.6%	39.1%	37.9%	37.2%	22.1%
Operating Margin	24.2%	15.3%	18.1%	20.0%	17.8%	17.2%	16.4%	1.3%
Profit Margin	18.1%	8.4%	13.5%	12.7%	13.6%	14.3%	15.0%	2.0%
Return on Avg. Assets	4.9%	3.6%	5.3%	4.7%	6.0%	7.1%	8.4%	1.2%
Return on Avg. Equity	22.4%	15.7%	18.2%	12.0%	12.0%	12.0%	12.0%	1.6%
<b>Leverage Ratios</b>								
Interest Coverage Ratio (EBIT/I)	3.5	2.2	3.3	4.3	4.3	5.3	8.1	1.4
EBITDA / (I + Cap Ex)	6.7	4.8	4.8	8.4	8.7	10.7	15.9	17.1
Tot Debt/Capital	1.1%	74.4%	59.0%	49.4%	39.7%	26.8%	11.8%	6.8%
Tot Debt/Equity	1.2%	290.4%	144.1%	97.6%	65.8%	36.6%	13.4%	7.3%
<b>Liquidity Ratios</b>								
Asset Turnover (times)	0.3 x	0.4 x	0.4 x	0.4 x	0.4 x	0.5 x	0.6 x	0.6 x
Accounts Receivable Turnover (day)	1	3	5	5	5	5	5	5
Accounts Payable Turnover (day)	51	37	31	31	31	31	31	31
Inventory Turnover (day)	40	42	26	26	26	26	26	26
Current Ratio (times)	1.3 x	1.3 x	1.3 x	1.1 x	1.0 x	1.1 x	1.9 x	2.0 x
Quick Ratio (times)	1.0 x	1.1 x	1.2 x	1.1 x	1.0 x	1.0 x	1.7 x	1.8 x



## Appendix 2: Introduction of fertilizer products

### Nitrogen, phosphate (phosphorus), and potassium are the three main nutrients for plants

Fertilizers are an essential plant nutrient for a crop to attain optimal yield and quality. There are three main nutrients for plants including nitrogen (N), phosphate ( $P_2O_5$  or P), and potassium ( $K_2O$  or K). Nitrogen is the main constituent of proteins which determine a plant's growth, vigor, color, and yield; nitrogen makes up over 60 percent of total fertilizer consumption. Phosphate is vital for adequate root development and to help the plant resist drought. It is also important for the ripening of seeds and fruits. Potassium (K) is also an important nutrient for the growth of a plant and for high-yielding crops, and helps to improve crop resistance to lodging, disease, and drought.

#### Characteristics of nitrogen, phosphorus, and potassium

		Primary benefit	Application	Industry structure
K	16%	• Improving crop quality	• Annual application not always done	• Fewer suppliers, production discipline
P	23%			
N	61%	• Increasing crop size • Most important and commonly lacking nutrient	• Annual application critical	• Industry more fragmented • More dynamic prices, but stable volume

Source: IFA (season 2013/2014 estimate, May 2014), Yara Fertilizer Industry Handbook (December 2014)

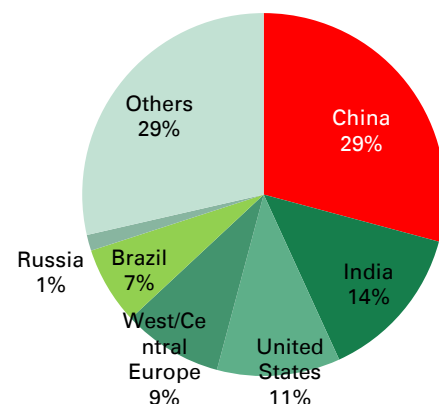
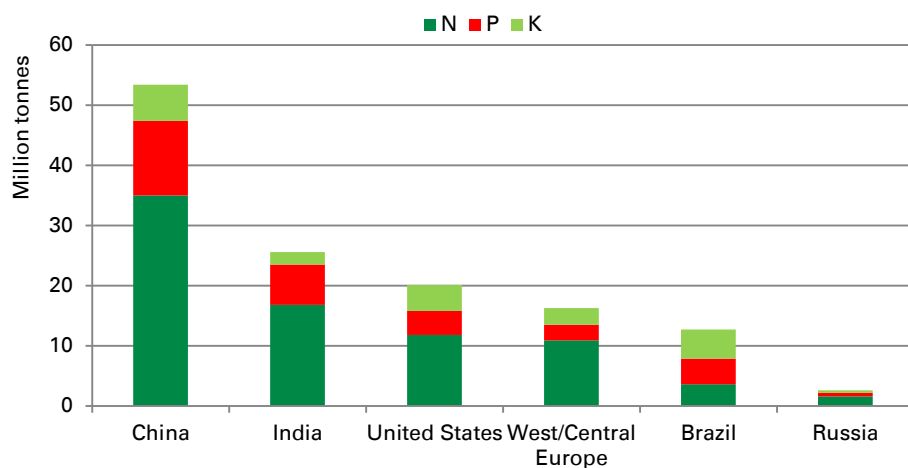
Apart from the three main nutrients, plants also need secondary nutrients including sulfur (S), magnesium (Mg), and calcium (Ca) for their optimal growth. Other nutrients, called micro nutrients, are also important to the plant and consist of chlorine (Cl), iron (Fe), manganese (Mn), boron (B), selenium (Se), zinc (Zn), and copper (Cu), among others.

### Urea, DAP, and MOP are three key products for providing nitrogen, phosphate, and potassium, respectively

Urea, containing 46 percent nitrogen, provides about 56 percent of total nitrogen consumption around the world. This proportion is increasing, and the majority of new and pipeline nitrogen capacity in the world is in the form of urea. Other nitrogen products include ammonia, DAP/MAP, NPK, AN/CAN, and UAN.

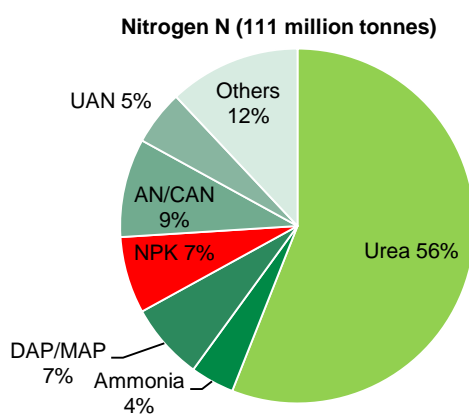
About 56 percent of phosphate nutrient demand is provided by DAP/MAP products. Both DAP and MAP contain 46 percent phosphate (measured in  $P_2O_5$ ) next to NPK with a 20 percent share. For potassium, MOP and SOP supply 72 percent of total potash consumption (measured in  $K_2O$ ).

## Fertilizer consumption of five key markets

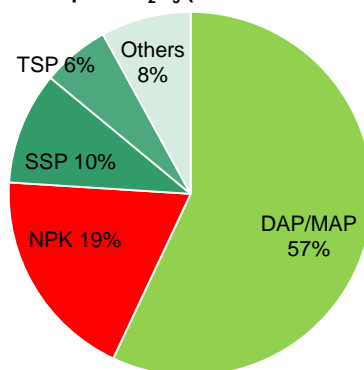


Source: IFA, Yara Fertilizer Industry Handbook (December 2014)

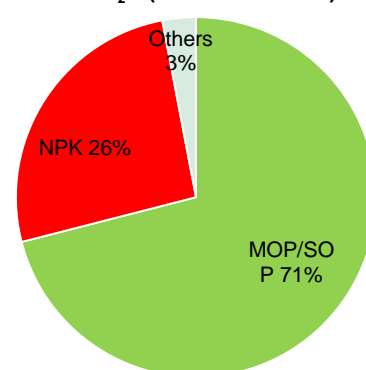
## Global consumption of key products



### Phosphate P<sub>2</sub>O<sub>5</sub> (42 million tonnes)

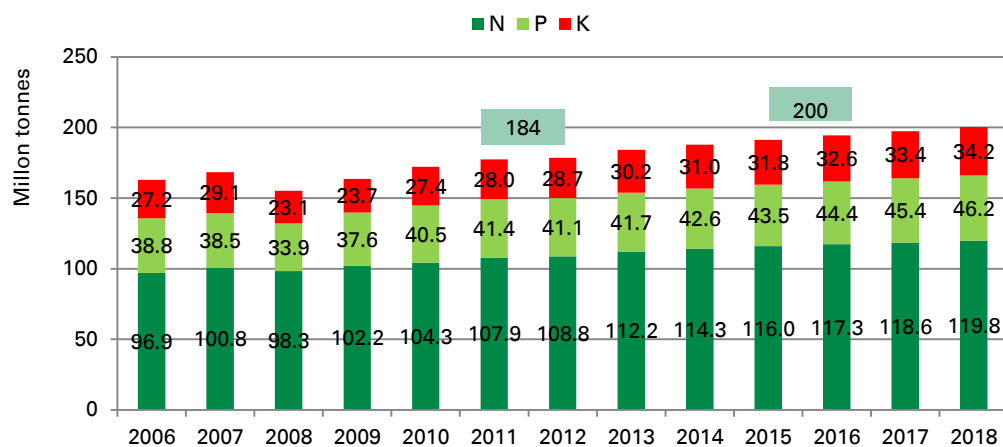


### Potash K<sub>2</sub>O (30 million tonnes)



Source: IFA, Yara Fertilizer Industry Handbook (December 2014)

## Global fertilizer demand and outlook



### 2014-2018 CAGR

N: 1.18%

P: 2.05%

K: 2.49%

Source: IFA, DPM

## GUIDE TO RATINGS DEFINITION

VPBank Securities (VPBS) ratings are based on a combination of short-term and long-term analysis.

We use the following long-term ratings system:

**Undervalued:** Expected return, including dividends, over the next 12 months is greater than 10 percent.

**Fully-valued:** Expected return, including dividends, over the next 12 months is from zero to 10 percent.

**Overvalued:** Expected return, including dividends, over the next 12 months is below zero.

We then form a short-term outlook by combining macroeconomic factors with our technical analysis scoring system. This system generates bullish, neutral or bearish signals based on analysis of trending indicators, such as moving average, PSAR, and MACD, and momentum indicators, such as RSI and MFI.

Our overall recommendation is based on the following combinations of short-term and long-term views:

Recommendation	Long-Term Value	Short-Term Trend
<b>BUY</b>	Undervalued	Bullish or Neutral
	Fully-valued	Bullish
<b>HOLD</b>	Undervalued	Bearish
	Fully-valued	Neutral
	Overvalued	Bullish
<b>SELL</b>	Fully-valued	Bearish
	Overvalued	Neutral or Bearish

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