

**PAKISTAN RESEARCH**  
**Fertilizer Sector**

**BUY**

**Target Price: PKR 219**

**Current Price: PKR 156**

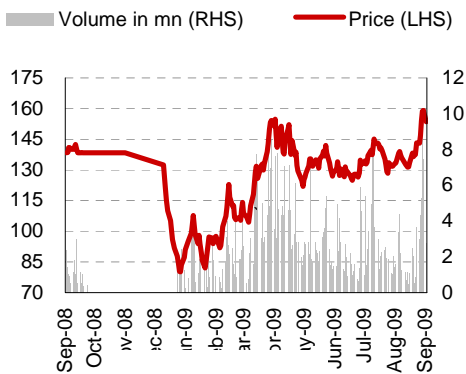
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**Price and Volume Graph**



KATS	ENGRO
Current Price	PKR 154/sh
Market Cap	PKR 45.7 bn
	USD 0.55 bn
Free Float	40%
Shares O/S mn	297.94
52 week High-Low	159/ 80

**ENGRO CHEMICAL: GREEN SHOOTS EVERYWHERE**

**INVESTMENT SUMMARY**

■ **Introduction**

Engro Chemical Pakistan Limited (ENGRO) came into existence in 1991 as a urea manufacturing concern. The company has since diversified and expanded into several businesses ranging from dairy to bulk handling. ENGRO today consists of the core fertilizer business with a capacity of 975K tpa for urea and several subsidiaries namely Engro Foods Limited (EFL), Engro Vopak Terminal Limited (EVTL), Engro Eximp Limited (EXIMP), Engro PowerGen Limited (EPGL), Engro Energy Limited (EEL), Engro Polymer & Chemicals Limited (EPCL) and Avanceon Limited (EIAL).

■ **Secure Markets**

ENGRO's value stems from its vision of expanding into operations that have a synergistic relationship. For example, EFL is able to leverage the existing distribution network of fertilizer. EPCL finds itself supported by EVTL's chemical handling capability. These synergies aid the company's extremely ambitious expansion plans. Furthermore, these expansion plans are in business lines with secure market demand, secure pricing and huge growth potential. For its fertilizer division, the international to local urea price differential and domestic shortage helps secure pricing power while EEL reaps the benefits of guaranteed USD Internal Rate of Return (IRR) regime under the Power Policy. Similarly, EVTL and EPCL are virtually monopolies commanding significant market share in their respective businesses.

■ **Robust Business Growth**

We expect ENGRO's revenues to register a 3-yr CAGR of 34.3% (CY08A-11E), primarily on account of higher volumetric offtake. Gross profit is projected to register a 3-yr CAGR of 58.7% over the same period as economies of scale will help expand gross margins. We expect Engro Foods and Engro Energy to start paying dividends by CY11E.

■ **Valuations**

Our fair value for ENGRO is PKR219/share, derived through Sum-of-the-Parts based analysis for its business units including fertilizer, EVTL, EFL, EEL and EPCL.

**FINANCIAL OVERVIEW**

	CY06A	CY07A	CY08A	CY09E	CY10E	CY11E
Net Sales	17,603	23,183	23,317	22,651	38,373	56,544
Sales growth	-4%	32%	1%	-3%	69%	47%
Gross Profit	4,239	4,920	6,197	7,877	14,259	24,750
Gross Profit growth	7%	16%	26%	27%	81%	74%
EPS	8.6	10.6	14.2	11.0	17.5	34.1
EPS growth	10%	24%	34%	-23%	59%	95%
PER	18.2	14.7	11.0	14.2	8.9	4.6
PBV	5.0	3.0	2.0	1.6	1.4	1.2
ROA	16%	8%	7%	4%	5%	10%
ROE	27%	20%	18%	11%	16%	27%

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## WHY ENGRO? THE IMPETUS FOR GROWTH

### SECURE MARKETS

**Fertilizer:** Engro's core fertilizer business remains the most important cash cow for the organization. Protection of agrarian policies by the government and stable gas supply has greatly helped the fertilizer arm making it stable, profitable and secure.

Urea is locally available at a significant discount to the international landed price of the product. Current retail prices of PKR797/bag compared to international landed cost of PKR1,200/bag means that locally available urea will continue to be preferred. Engro will become the largest urea producer of Pakistan by mid-CY10E with additional capacity to the tune of 1.3mtpa coming online.

**Food:** EFL has become a significant market player in a short span of three years. Currently, it manufactures and markets various dairy products ranging from milk to ice-cream. Olpers (all purpose milk) in this short span has grasped approximately 34% market share in UHT market. In a population of 170mn, UHT milk comprises of only 3% of the total production of 33bn litres per annum – indicating vast room for growth.

**Polymer:** EPCL operates in a virtually monopolistic market structure accounting for over 70% of the market share in PVC resin. With additional 50,000 ton capacity coming online in 2009, we expect market share to increase further. Its backward integration is expected to mitigate future commodity shocks while cost efficiencies attained from the project will enable the company to be an extremely low cost producer.

**Energy:** EEL stands to gain significantly from the current domestic energy crisis. Current projects include a 217MW plant at Qadirpur in the near term. The company is incorporated as an Independent Power Producer (IPP) and earns a sovereign guaranteed USD IRR of 15%.

**Handling:** EVTL is the sole integrated bulk liquid chemical handling facility with currently available capacity of 83,000 cubic meters. In addition to this, most of the contracts are long term (~15 years) and USD denominated which ensures revenue and margin stability.

### In the Pipeline

ENGRO's core business and subsidiaries all hold huge expansion potential, both in terms of capacity and product/service range.

The fertilizer business is the first to undergo expansion to the tune of 1.3mtpa which will make it the largest domestic urea producer of Pakistan with a total capacity of 2.3mn tpa. Currently about 80-90% of production setup is complete and the additional capacity should come online as per schedule.

EFL's long term plans include expansion of its dairy farm, entry into the powdered milk market and desserts.

EEL's avenues of growth include a 725MW plant at Bhiki and 1,000MW at Thar where it will be the first company to mine coal and utilize it for power generation; these are expected to materialize over the next three to five years.

EVTL is looking to set up an 8bn cubic meter LNG terminal as well as bid for handling and transportation of oil for the upcoming Khalifa Point refinery, which will be Pakistan's largest.

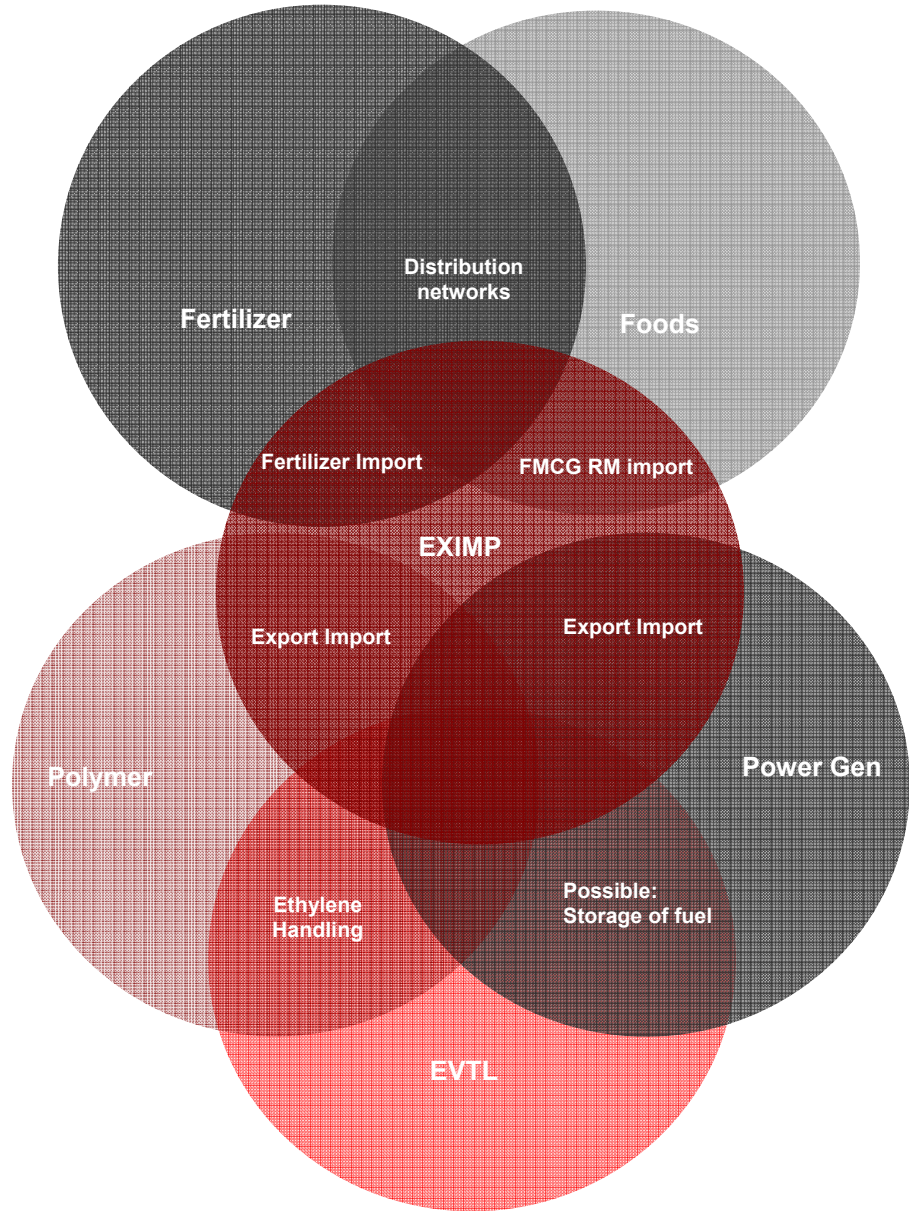
### **Synergies**

Synergizing represents a core philosophy of ENGRO management and is evident throughout the business lines;

Engro Foods is the primary beneficiary of management of supply chain. Engro's activities in fertilizer sale provided a significant base for Engro Foods. Milk collection mechanism was easier to establish because of inroads to livestock sources developed via distribution channels used for fertilizer. Currently Engro Foods utilizes 280 tankers for milk collection across 170 farm locations for collection of milk.

Engro-Vopak provides services to EPCL for Ethylene and Vinyl Chloride Monomer (VCM) handling. Although recent up-gradation of facilities to bring VCM production in house have been successfully implemented, Engro-Vopak will continue to provide services for handling of ethylene for EPCL.

**Business Unit Synergies**



Source: BMA Research

## VALUATION AND FINANCIALS; BUY!

We expect the company's revenues to register a 3 year CAGR of 34.3% (CY08A-11E), primarily on account of higher volumetric offtake. We expect gross profit to register a CAGR of 58.7% over the corresponding period as economies of scale will help expand gross margins. We also expect the company to benefit from additional dividends from EFL and EEL which should commence in CY11E.

### Financials

Financial Highlights	CY06A	CY07A	CY08A	CY09E	CY10E	CY11E
<b>Income statement</b>						
	PKRmn					
Net Sales	17,603	23,183	23,317	22,651	38,373	56,544
Cost of Sales	13,365	18,263	17,121	14,774	24,114	31,794
Gross Profit	4,239	4,920	6,197	7,877	14,259	24,750
Operating Profit	2,470	2,939	3,959	5,378	10,219	18,672
Other Income	1,339	1,831	2,754	629	1,064	2,180
Financial Charges	363	535	1,509	993	3,203	5,299
Profit Before Tax	3,446	4,236	5,205	5,014	8,080	5,552
Profit After Tax	2,549	3,155	4,240	3,277	5,212	10,153
<b>Cash Flow</b>						
	PKR mn					
CF Operating	1,380	1,815	(117)	5,273	5,251	12,501
CF Investing	(689)	(10,641)	(20,797)	(27,333)	(11,980)	1,725
CF Financing	(1,238)	15,863	13,187	28,811	(1,930)	(9,859)
Net Change in Cash	(547)	7,038	(7,728)	6,751	(8,659)	4,367
<b>Balance Sheet</b>						
	PKR mn					
Current Assets	5,684	15,685	15,230	19,126	16,035	26,430
Operating Assets	6,558	13,819	33,396	60,099	70,668	66,934
Total Assets	15,981	38,415	60,289	91,341	98,772	105,385
Current Liabilities	3,642	5,265	5,999	5,939	10,242	18,826
Long term Liabilities	2,968	17,410	31,205	56,274	55,084	48,920
Total Shareholders Equity	9,370	15,741	23,084	29,127	33,446	37,639
Total Equities and Liabilities	15,981	38,415	60,289	91,341	98,772	105,385
<b>Key Ratios</b>						
EPS	8.6	10.6	14.2	11.0	17.5	34.1
DPS	5.1	4.6	4.3	5.0	6.0	7.0
BVPS	31.4	52.8	77.5	97.8	112.3	126.3
PER	18.2	14.7	11.0	14.2	8.9	4.6
Dividend Yield	3%	3%	3%	3%	4%	4%
PBV	5.0	3.0	2.0	1.6	1.4	1.2
EPS Growth	10%	24%	34%	-23%	59%	95%
Return on Assets	16%	8%	7%	4%	5%	10%
Return on Equity	27%	20%	18%	11%	16%	27%
LT Debt/Equity	0.2	1.0	1.2	1.8	1.5	1.0
LT Debt/Total Assets	0.1	0.4	0.5	0.6	0.5	0.4
Current Ratio	1.6	3.0	2.5	3.2	1.6	1.4
Interest Coverage Ratio	10.5	8.9	4.4	6.0	3.5	3.9

Source: BMA Research

- We have estimated separate DCF models for ENGRO's core fertilizer business as well as EFL, EVTL, EEL and EPCL. For EXIMP and EIAL, we have incorporated dividend streams as part of the total valuation. Our sum-of-the-parts (SOTP) fair value for the company is PKR219/share. This incorporates a risk free rate and equity risk premium of 12.0% and 6.0%, respectively. The valuation breakup is as follows;

#### Valuation Breakup

Company	Symbol	Fair Value
		PKR
Engro Chemical Pakistan Limited (fertilizer business)	ECPL	126.8
Engro Foods Limited	EFL	30.3
Engro Vopak	EVTL	23.5
Engro Energy Limited	EEL	19.8
Engro Polymer and Chemical Limited	EPCL	18.8
<b>Engro Chemical Pakistan Limited</b>	<b>ENGRO</b>	<b>219.2</b>

Source: BMA Research

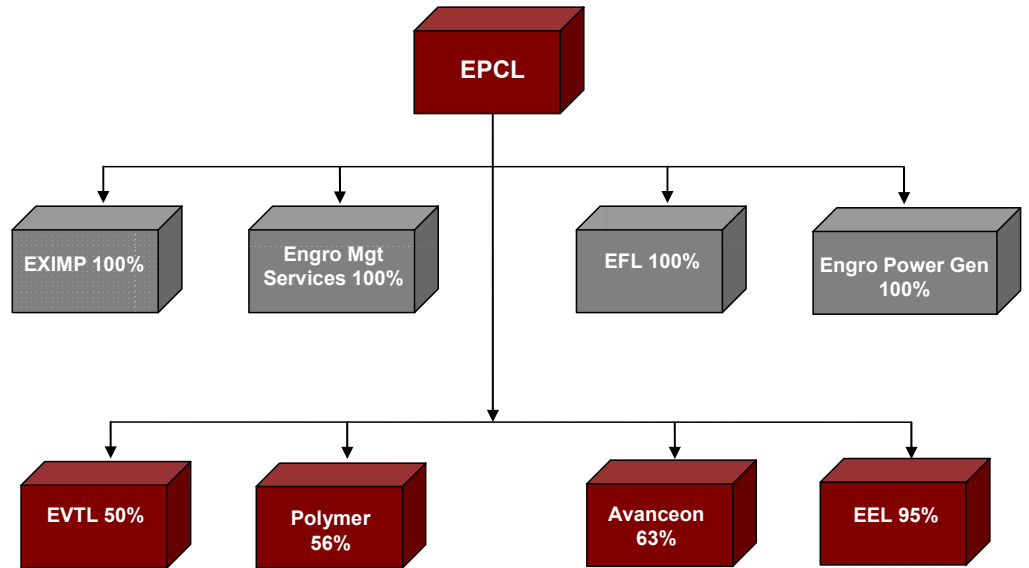
- Potential upsides to valuation include the backward integrated Algerian fertilizer complex with 1mn tpa capacity of urea and DAP each as well as phosphoric acid manufacturing capability, the Thar coal mining and power generation project and the 725 MW power project at Bhiki. These are all in progress and expected to materialize over the next 3-5 years. We have however not incorporated these into our valuation and any announcement in this regard will provide further upside
- Current price reflects significant 41% upside to our fair value and we maintain a BUY on the scrip. However; it is pertinent to note that CY09E will remain challenging; CY11E earnings, on the other hand, will be decidedly better, with an expected dividend contribution from EPCL, EVTL, EFL and dividend payout from EEL (expected to commence post 1HCY10E). We view the company as a solid long term play (holding period > 1 year)

### The Road to Conglomeratization

The management of Engro has recently indicated interest in demerging its fertilizer (core) business from itself by creating an entity which is solely responsible for fertilizer business. The intention is to decentralize certain functions for efficiency purposes. The company intends to spin-off its fertilizer related assets and liabilities to a newly formed entity Engro Fertilizer Limited and renaming the parent company as Engro Corp. We express the organizational business unit charts of before and after the merger below.

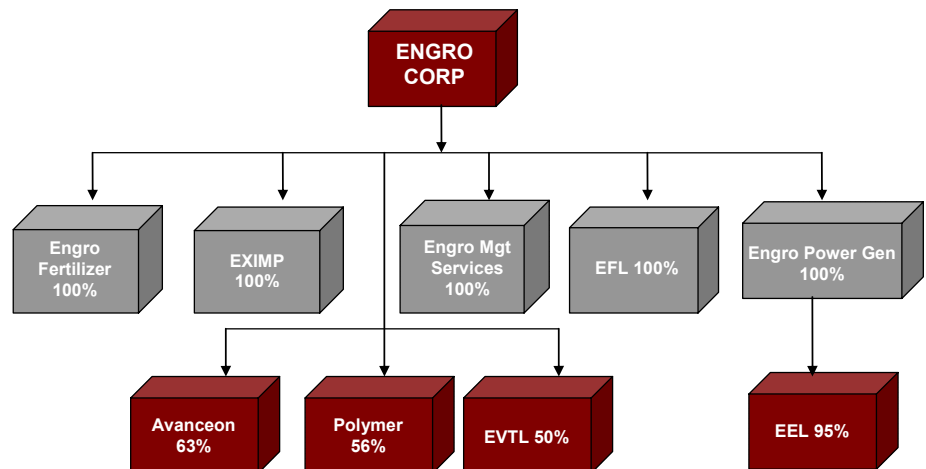
During the CY08 analyst briefing, management had indicated that the book value of the base urea plant is about PKR5-6bn while its market price is approximately USD500mn (PKR41.4bn). Hence, a best case revaluation scenario (mark to market), implies a revaluation surplus of PKR35.4bn which translates into a book value impact of PKR119/share. This should depress PBV ratios and make the equity more attractive. Further increase in equity as a result of revaluation surplus will inadvertently improve leverage ratios.

Engro before Demerger



Source: Company Management

Engro after Demerger



Source: Company Management

## ENGRO: LEADER IN THE MAKING

ENGRO is one of the most dynamic and progressive institutions in Pakistan. Its mantra of “Energy for Growth” is well represented in the nature and business of its subsidiaries. Undeniably, the company has become an icon of augmentation and value addition for its stake holders. Here we establish why we think Engro is worth its value.

Like any organization Engro finds its strength in the business model it follows and product lines (revenue stability).

### Major Businesses and Product Lines

Engro				
Fertilizer	Polymer	Engro Foods	Engro Energy	Engro-Vopak
Urea	PVC	Olpers	Qadirpur	PX
Zarkhez	Caustic Soda	Orwell	Bhiki	Ethylene
NP		Tarang	Thar	LPG
NPK		Tarka		VCM
Zingro		cream		PA
		Omore		AcryloNitrile
		flavored milk		Mono Ethylene Glycol
				Acetic Acid

Source: BMA Research

## FERTILIZER: MANURE FOR GROWTH

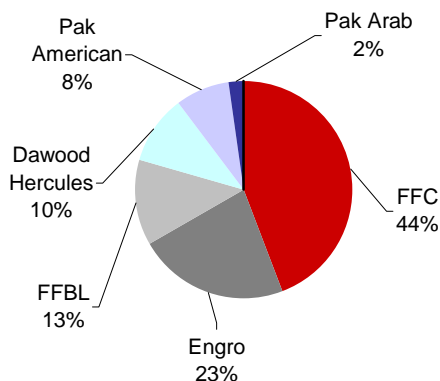
ENGRO’s core fertilizer business is highly protected and will be capable of churning out approximately 2.3mtpa by mid-CY10E, which will make it a leader amongst its peers. Pakistan has historically seen demand in excess of local capacity in the urea market, with the gap being bridged by import.

### Urea Players and Name-Plate Capacities

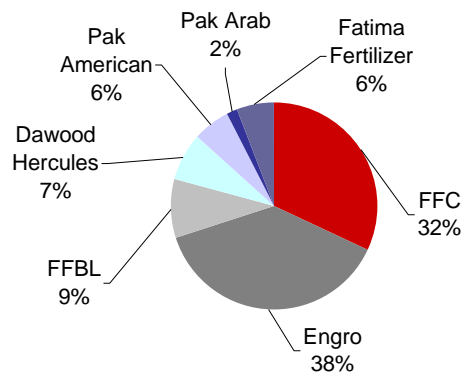
Company	Urea Capacity	Addition	total	HHI
FFC	1,904,000		1,904,000	0.10
Engro Chemical	975,000	1,300,000	2,275,000	0.15
FFBL	551,100		551,100	0.01
Dawood Hercules	445,500		445,500	0.01
Pak American	350,000		350,000	0.00
Pak Arab	92,400		92,400	0.00
Fatima Fertilizer	0	350,000	350,000	0.00
<b>Total</b>	<b>4,318,000</b>	<b>1,650,000</b>	<b>5,968,000</b>	<b>0.27</b>

Source: NFDC, Company Reports, BMA Research

### Urea Capacity



### Urea Capacity after expansion

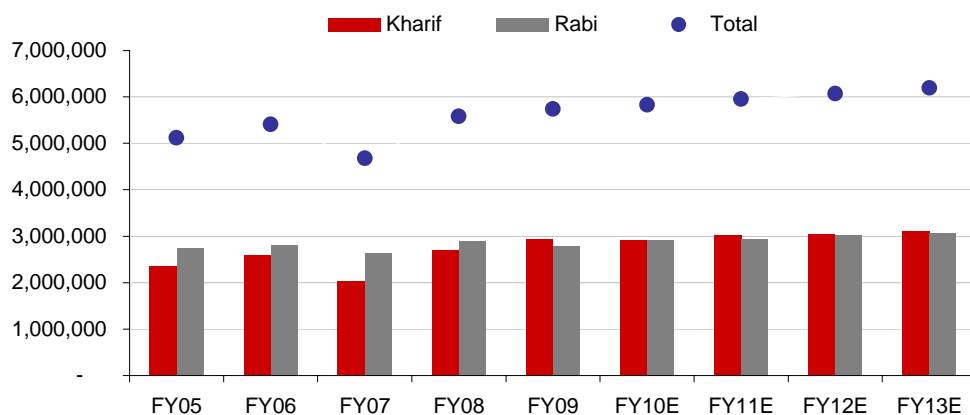


Source: NFDC, Company Reports, BMA Research

The domestic urea manufacturing industry is significant oligopolistic in nature. This is further confirmed by the Herfindahl Hirschman Index (HHI) which is expected to be around 0.27 (indicating lack of competition). Post-expansion, ENGRO's capacity market share will improve from 23% to 38%.

Engro's top-line stability stems from its urea production. Domestic urea demand has historically been both high and stable with little impact of seasonality. 7MCY09 data indicates Urea off-take growth of 13% YoY.

### Annual Urea Industry Offtake



Source: NFDC, BMA Research

However it is important to note that product portfolio for ENGRO includes Potassium and Phosphate based fertilizers which add to diversification benefits for the fertilizer division. Additionally, the company also has exposure to DAP via its subsidiary EXIMP which is involved largely in the procurement of DAP for the local market.

### Engro Fertilizer Product Portfolio

Product	Nature
Urea	Nitrogen based
Zarkhez	Potash
NP	Phosphate based
NPK	Phosphate based
Zingro	Micro Nutrient

Source: Company Reports, BMA Research

### Demand: Agriculture based economy a key driver

Pakistan is internationally recognized as an agrarian economy, providing employment to an over-whelming 44.7% of the population and contributing about 21.8% to the country's GDP. This heavy reliance on agriculture has led to various policies directed to ensure food security, fuel the textile sector, lower unemployment rate and provide for growth in the GDP. These policies along with their ramification have led both directly and indirectly to growth in the fertilizer demand for Pakistan. Add to this a growing population and the inherent need for growth orientation we get a perfect formula which secures fertilizer demand.

Its is also important to note that urea retail prices in Pakistan have in the past and continue to be, well below international landed price of Urea. With current landed price of Urea hovering in the realms of PKR1,200 per 50Kg bag compared to local price of PKR797 per 50Kg bag, highlights a key factor - the ability of Urea manufactures to pass-through cost increases to farmers without significant shifts in demand for their products.

### Urea for Engro

Urea manufacturing for Engro has special importance not only in terms of revenue but also with regards to the overall business model (growth orientation) for the company. As with any other rapidly expanding organization, Engro is consistently in need of liquidity for the high cash burn rates experienced in other business units. The stable Urea demand provides just this very essential ingredient for the overall formula to work efficiently. As noted before, the company is normally working its 975K tons urea plant at full capacity.

This stable revenue structure also indirectly aides the company in terms of debt. Latest annual reports indicate a debt to equity ratio of 1.3x. Pricing power is yet another flexibility which the company enjoys. However relative price inelasticity (due to local prices being lower compared to international landed price of Urea) adds to the stability of the top-line which in effect has been the cornerstone of its growth orientation.

### Future: Engro at the helm

With the additional capacity of around 1.3mn tpa coming online by CY10E along with additional supply in the industry by Fatima Fertilizer to the tune of 350-500ktpa, it is expected that industry capacity will outstrip local demand in the short run. Although we believe that local demand will eventually catch up to local supply

capacity by CY12, it beckons to wonder what will happen in between. There are three possible scenarios which might come into action from the highly conservative to the ambitious.

- **Excess capacity does not equal excess supply**

Excess productive capacity for the industry could possibly translate to reduction in utilization rates of plants in a bid to manage inventories. In such a situation fertilizer producers will reduce production to the levels of demand.

- **Export with subsidy return**

It is possible that the government may allow export of Urea, however per unit subsidy granted on production has to be returned on all export quantities. This will be beneficial for the company as it can access the international markets and achieve higher retention levels on exports.

- **Export at local prices**

It may also be possible that the government will allow exports with retention for the companies at local prices. The government will receive all premiums on exports, while the companies benefit from x-efficiencies achieved through 100% utilization.

Our analysis considers a base case where by the companies will be allowed to export at local retention prices with the government mopping up the excess revenues.

## Financial Projections

We expect revenues to takeoff for ENGRO during mid-CY10E due to initiation of commercial production from the additional urea capacity. This increase is expected to materialize completely by CY11E. We expect the company to be able to work at full capacity and will be allowed to export any excess output at local prices.

### Core Fertilizer Business Financial Snapshot

ENGRO	CY07A	CY08A	CY09E	CY10E	CY11E
PKR mn					
Revenue	23,183	23,317	22,651	38,373	56,544
Gross Profit	4,920	6,197	7,877	14,259	24,750
Other income	780	149	169	187	202
PBT	3,499	2,985	4,897	7,745	14,596
Taxes	976	704	1,691	2,780	5,202
PAT	2,524	2,281	3,206	4,965	9,394
EPS	8.5	7.7	10.8	16.7	31.5

Source: BMA Research

## ENGRO FOODS LIMITED: THE PRODIGAL SON

### Milk - New Sherriff in Town

At the time of market evaluation, there were just two players in the UHT milk market – Nestle and Haleeb who had a combined market share of 90%. The milk segment is a highly managed business and, seeing an opportunity for a third player in the growing market, EFL made its debut in 2005. Engro already possessed extensive supply chain experience advantage and proceeded with setting up milk collection infrastructure. Olpers was launched on March 26, 2006 and is currently amongst the top ten brands in the country.

#### Engro Foods Portfolio

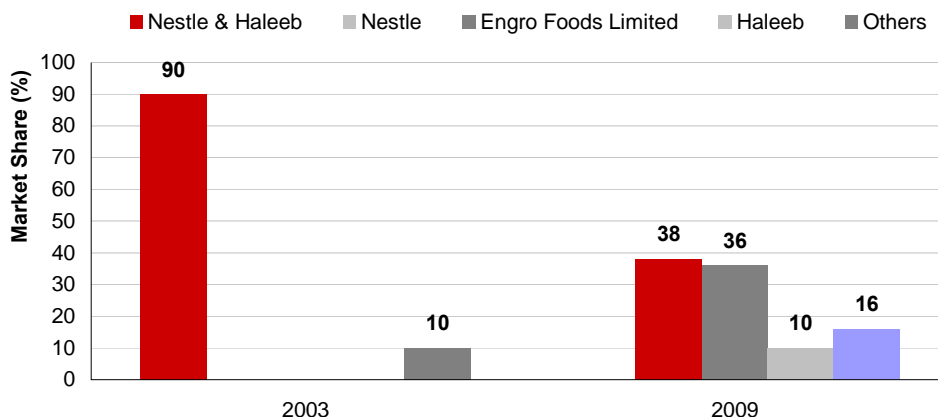
Brand	Description/Comments
Olpers	All purpose milk
Orvell	High calcium, niche market
Tarang	Tea whitener, launched in Aug07
Cream and Ghee	Side products
Awsum	Flavored milk, niche market
Omore	Ice cream, high margin product

Source: BMA Research

Pakistan is the fourth largest milk producer in the world with an annual industry of 33bn litres. Of this, currently only 3% is UHT milk which reflects upon the enormous potential for further penetration in this segment. Growth is driven primarily by “conversion” which refers to non-UHT users switching over to UHT milk – consumer awareness undoubtedly plays a very significant role in this regard.

Olpers remains the primary bread-earner for the company, currently accounting for roughly half of the topline. EFL has a capacity of 1.50-1.75mn litres annually and is ranked number 2 after Nestle. Backward integration remains a key theme for the company’s milk business, as evident by the establishment of a dairy farm at Nara, Sind which comprises of 1,700 cows producing 30-40K lpa. Milk production and consumption follow inverse patterns where Mar-Apr is the time when production and hence availability is at its low. In the long run, the EFL aims to derive 30-40% of its milk requirement from its own farms so that reliance on outside sources is diminished. At 3,500 cows, the dairy farm will also become profitable – management envisions growing the farm to a total of 60,000 animals.

### UHT Milk Market

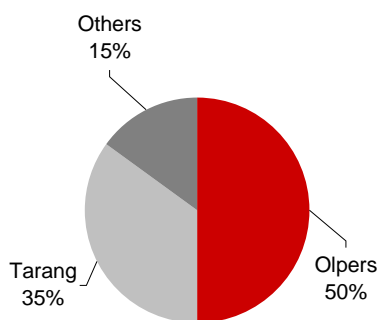


Source: BMA Research

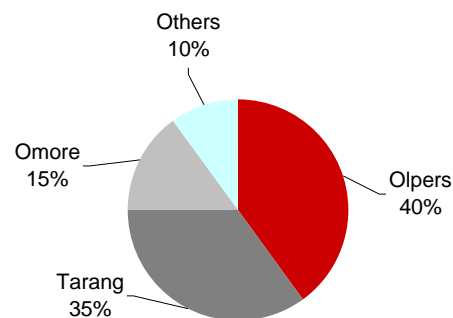
### Expecting More from Omore!

As part of its cold chain strategy, EFL launched ice cream brand Omore earlier this year in the North. The project is slow and capital intensive given the need for extensive branding and marketing exercises and also provision of freezers to retailers. On the other hand, it is also a high margin product. Currently, it contributes about 3-4% of revenue but should see its share in the top line increase to about 15% by 2012. Currently, the ice cream market is dominated by Walls with a 70% market share while smaller brands make up the rest (Rocco, Hico, Igloo, etc.); management expects that Omore will be able to capture 20% by next year.

#### Revenue Mix: 2009



#### Revenue Mix: 2012E



Source: BMA Research

### The Way Forward

The company has experienced solid revenue growth so far with 1HCY09 clocking in a YoY growth of 89%. Current leverage stands at about 50% and the company plans to limit this to a maximum of 55%. Over the next five years, EFL is targeting to become the top dairy player in the country, the second largest ice cream player

and the largest dairy farmer. Also, the company alluded to exploring and exploiting further opportunities as they present themselves such as desserts, grains, fruits and meat etc.

#### Engro Foods Financial Snapshot

EFL	CY07A	CY08A	CY09E	CY10E	CY11E
UHT milk sales 000 liters	77	153	215	247	276
Revenue	3631	8173	13085	16734	20561
Gross Profit	261	1050	2224	3179	4318
PBT	(954)	(857)	(649)	(54)	828
PAT	(620)	(554)	(422)	(35)	538

Source: BMA Research

## ENGRO POLYMER: THE CHAIN

Engro's chemical arm Engro Polymer and Chemical Limited (EPCL) is primarily involved in the production and marketing of PVC resin. EPCL is the largest PVC resin manufacturer in Pakistan with productive capacity of 150,000 tons (recently upgraded from 100,000 tons) controlling around 70% to 80% of the total market for PVC resin. The company is set on track to achieve complete backward integration for PVC manufacturing and initiating commercial production of EDC (Ethylene Di-Chloride) and VCM (Vinyl Chloride Monomer).

The company is progressively making inroads into the Caustic Soda market and intends to add Hydro Chloric Acid and Sodium Hypo Chloride in the future.

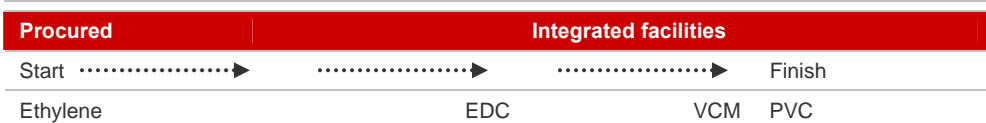
### Integration equals control

EPCL has invested significantly over the last few years to achieve vertical backward integration for production of PVC. The company has upgraded its facilities for in-house production of Chlorine, EDC and VCM which are raw materials for PVC manufacturing. Control over production of these raw materials will allow the company to adequately manage its supply chain (adding to the efficiency) and to mitigate international shocks in pricing of raw materials (effectiveness). Recent movement in commodity pricing indicated a lagging price adjustment of PVC compared to VCM, resulting in gross margin depressions for EPCL.

#### Before Integration



#### After Integration



Source: BMA Research

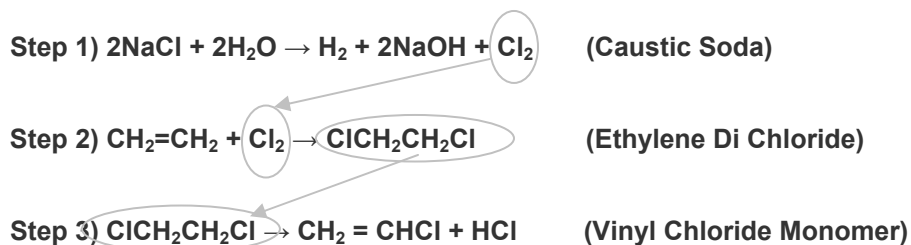
Earlier the company had to procure VCM and then convert it to PVC, the issue being VCM has significant practical uses and therefore the operations were vulnerable to shifts in global VCM prices. However, the company now imports Ethylene and does much of the value addition in-house. This helps reduce vulnerability

The company currently has capacity to produce 150,000tons of PVC, 90,000tons of Caustic Soda and 270,000tons of VCM. However caustic soda production limits VCM output to 150,000tons.

### Vertical Integration: a brief look

Raw materials for Caustic soda production include water and salt (NaCl). The breakdown results in production of Chlorine gas and Sodium Hydroxide; the latter is then evaporated to produce crystallized NaOH popularly known as Caustic Soda. The by-product of Chlorine gas is then used to convert Ethylene to Di-Chloro Ethylene (EDC). The EDC thus produced is then heated to achieve Vinyl Chloride

Monomer (VCM) and the by-product of Hydro Chloric Acid. VCM is later converted to Poly Vinyl Chloride (PVC).



### Financial Projections

#### Engro Polymer Financial Snapshot

EPCL	CY07A	CY08A	CY09E	CY10E	CY11E
Offtake MT	94,347	102,907	120,000	124,800	129,792
Revenues	6,033	7,848	7,403	7,705	8,662
Gross Profit	958	1,111	1,110	1,541	2,166
PBT	576	458	323	680	1,260
PAT	422	353	224	484	871

Source: BMA Research

## ENGRO VOPAK: HANDLING WELL

EVTL is a joint-venture (partnership share 50:50) between ENGRO and Royal Vopak and deals in bulk handling of liquid chemicals. Royal Vopak brings with it vast experience with over 77 terminals spanning 30 different countries. Engro Vopak was incorporated in 1995 and commenced operations in 1997. It is currently the only state of the art integrated bulk liquid chemical terminal and storage facility. Current capacity stands at 83,000m<sup>3</sup> with tanks ranging from 200 m<sup>3</sup> to 12,000 m<sup>3</sup> located at Port Qasim, Karachi. Main product handling categories include Paraxylene (PX), Acetic Acid (AA), Vinyl Chloride Monomer (VCM), Acrylonitrile (ACN), Mono Ethylene Glycol (MEG), Phosphoric Acid (PA), Liquefied Petroleum Gas (LPG) & Ethylene.

EVTL's unique market position allows it to capitalize on long term material handling contracts. The company currently handles 70% of all liquid chemical imports into the country.

### Current Business Position

The company currently handles about 1mn tons of product while existing infrastructure is able to support throughput load of up to 3mn tons, leaving huge room for x-efficiencies. This excess capacity indirectly tends to ward off any threat of competition.

All contracts are denominated in USD which leads to stability in revenue stream of the firm. Furthermore, contracts are constructed to be long term in nature which adds to reliability and sustainability of the revenue stream. Currently the contracts tend to average around 15 years.

### EVTL Product Range and Clientele

	Code	Capacity	Nature	Client
Paraxylene	PX	36,000	feedstock PTA	ICI
Acetic Acid	AA	5,000	Catalyst PTA	ICI
Vinyl Chloride Monomer	VCM	7,500	Feedstock PVC	Engro Polymer
Acrylonitrile	CAN	6,400	Feedstock Acrylic Fiber	Dewan Salman
Mono Ethylene Glycol	MEG	4,000	Feedstock Polyester Fiber	ICI
Phosphoric Acid	PA	pipeline	Feedstock DAP	FFBL
Liquefied Petroleum Gas	LPG	10,000	Fuel	Various
Ethylene		13,400	Feedstock VCM	Engro Polymer

Source: Company Reports, BMA Research

Major customers include ICI (which accounts for about 30% of the business), Fauji Fertilizer Bin Qasim, Pak PTA, Engro Polymer, and numerous LPG marketing companies.

### Experienced Vopak and Desire to (En)Gro(W)

With Royal Vopak's experience in chemical handling and storage, EVTL's potential to grow looks bright. Potential expansion projects include facilities catering to PX, Hexane, Methanol, Oil, and land based LNG terminal. Royal Vopak has recently set up an 8bn cubic meter LNG terminal at Rotterdam; in an energy starved country like Pakistan, such handling facility can be highly lucrative.

### EVTL's Potential Projects

	Projected CAPEX (USD mn)
PX Pipeline	5-7
Hexane	4-5
Methanol	1-2
Floating LNG terminal	100
Oil Blending & Storage	300-350
Land based LNG Terminal	1,000

Source: EVTL management estimates

### Financial Projections

The company has successfully managed to increase its throughput for the year. One of the main advantages of Engro Vopak is the stability and reliability of its revenue stream. Contract durations range between 15 to 17 years and to add further to their stability they are USD denominated.

The company has excess capacity at hand which reduces the need for capital expenditure in the near future. It is important to understand that this excess capacity means that any additional project contributes significantly to the bottom line.

### EVTL Financial Snapshot

	CY07A	CY08A	CY09E	CY10E	CY11E
Through-Put (mtons)	800,000	879,000	940,530	1,006,367	1,076,813
Revenues (PKR mn)	1,032	1,177	1,464	1,637	1,822
PAT (PKR mn)	487	490	650	727	809

Source: BMA Research

## ENGRO ENERGY: POWERING GROWTH

Engro has recently shown increasing interest in the power generation sector of the economy. For an energy hungry country such a move can provide fruit and can fuel growth for the entire company. The company envisages the power generation units to be consolidated under a holding company Engro Power Gen.

### Projects

**Qadirpur:** The Qadirpur power generation plant is expected to commence commercial production of electricity by end of CY09. The production capacity stands at 217MW and utilizes flare gas from Qadirpur fields. The management believes that at the moment the flare gas supply is stable and depletion is expected to begin in CY15E. The flare gas from Qadirpur is first burnt for gas turbine system and then residual steam is used to power steam turbines. Like most IPPs, Qadirpur project is projected to yield a guaranteed ROE of 15%. After reaching a minimum efficiency level any excess energy production revenues can be pocketed by ENGRO. Dividend income is expected to flow in after six months of commercial production.

**Bhiki:** Envisaged to be a dual fuel power generation unit to the tune of 725MW. Currently the company is under-negotiations with NEPRA to set a power tariff rate.

**Thar Coal:** The undertaking consists of two separate endeavours 1) mining the coal 2) electricity generation. ENGRO has successfully inked agreements for public-private partnership with the government regarding both mining and electricity generation. Engro has been allotted a 650mn ton (proven reserve) share from the Thar coal fields. The company intends to set up a 1,000MW plant within the next 3-4 years. The total cost of the project is expected to be around USD3bn with USD1.00bn-USD1.25bn dedicated to mining setup.

### Upcoming Power Projects

Plant	Type	Capacity MW
Qadirpur	Flare gas	217
Bhiki	Dual fuel	725
Thar	Coal	1,000
<b>Total</b>		<b>1,942</b>

Source: BMA Research

### Leveraged Growth

One of the prime advantages of Engro Energy is its ability to take on additional debt at lower costs. Utility company's return closely mimics a revenue bond with a highly predictable revenue stream. This stable and reliable revenue stream allows the company to operate at significantly higher debt levels.

At the moment, we have only considered Qadirpur flare gas operations for valuation purposes as the management still needs to finalize and disclose the final timeline, cost structure and other material details for Bhiki and Thar Coal projects

#### Engro Energy Financials

	CY10E	CY11E	CY12E	CY13E	CY14E
Cash flow to Equity USDmn	6	12	12	12	12
Cash flow to Equity PKRmn	526	1,094	1,133	1,172	1,213
IRR USD	15%				
IRR PKR	22%				

Source: BMA Research

## **RISK FACTORS: SIDE-EFFECTS OF GROWTH**

Engro's risk stems from its aggressive growth strategy. The company's growth orientation has led it to a highly leveraged position; as of CY08 end the company had a debt to equity ratio of 1.3x. Though we have mentioned in the report that Engro operates in highly secure markets with stable demand being the forte of their business models, financial charges erode the earnings substantially and reduce value addition for the stake holder. Interest Rates: KIBOR for locally denominated loans and LIBOR and exchange rate for offshore loans and swaps continue to be a key driver of the profitability going forward

**Supply Glut in the Fertilizer Market:** we have currently assumed that once Engro and Fatima Fertilizers' expansions come online, the government will allow the local urea manufacturers to export surplus production. While we have been on conservative side by incorporating the assumption of local prices for exports (and assumed that the differential will be bagged by the GoP), any regulatory delays in the approvals may lead to supply glut in the country and pointing towards risks of lower capacity utilization, depressed offtakes and poor margins

**Global Commodity Prices:** Currently global urea prices are hovering around USD285/ton which is approximately 36% higher than the Ex-factory prices in Pakistan.

**Regulatory Involvement:** With most of Engro's businesses tied to industries with oligopolistic structure and captive markets and pricing, the level of regulatory risks remains on the higher side. Moreover, certain projects (which are still in planning stages) such as Thar Coal Project and Fertilizer Complex in Algeria inherently point towards the possibility of political ramifications and hence unforeseen delays in their projected timelines

**Sum of Moving Parts:** Keeping in view the ambitious projects lined up by each of the Engro's companies, the risk of unforeseen delays in timeline and cost overruns may have a very material impact on the overall financial stability of the group

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**ANALYST CERTIFICATION**

I, Omar Rafiq, hereby certify that this report represents my personal opinions and analysis of information. All views are accurately expressed to the best of my knowledge. I certify that no part of my remuneration is linked either directly or indirectly to recommendations or analysis covered in this report.