

The Saudi Strategy for Prominence in the Petrochemical Markets  
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The EIA in its International Oil Report of July 2005 shows that Saudi Arabia should produce 20 million b/d by 2025, starting with 14 million b/d in 2010. These estimates of Saudi production allow the EIA to balance the growing demand for oil in the world with production. However, the EIA's estimates do not match Saudi intentions. The Saudi Minister of Oil and the top Saudi Aramco officials have mentioned on many occasions and in great details that they will increase capacity to 12.5 million b/d by 2009 and perhaps to 15 million b/d later if market conditions warrant it. They also mentioned repeatedly that Saudi Arabia needs to keep a cushion of production of 1.5 million to 2 million b/d. Therefore, it should be clear to the US administration that Saudi Arabia will not increase production, as opposed to capacity, to more than 11 million b/d and that in exceptional market circumstances, they may increase production to 13.5 million b/d. The US administration should consider that the Saudi leadership does not feel it is in its interest to deplete its reserves as quickly as suggested by the EIA. It is common sense that the Saudi interest lies in maximizing its main assets, oil and gas, for its future generations rather than for the convenience of the US SUV owners. This long term view implies that the Kingdom must develop energy based value added products. In other words Saudi reserves must be kept to insure to the Kingdom keeps its gas and oil for producing petrochemicals and other energy based industries, which triple or quadruple their value to the Kingdom.

The past ten years' growth of the energy-based industries in the Kingdom, such as steel, fertilizers and petrochemicals, suggests that the Saudi state follows a strategy to become as dominant in the Petrochemical sector as it is presently in the Petroleum one. Maximizing their natural advantage appears to be the only path the kingdom can follow to create the 200,000 jobs needed by a population growth of 3% p.a. and bring the country socio-economic structures into the 21<sup>st</sup> century.

Saudi Arabia produces 45 million tons of energy-based products, such as 5 million tons of steel, 5 million tons of fertilizers and 20 million tons of ethylene and

propylene based products. It is already the world's 2<sup>nd</sup> largest producer of Ethylene Glycol, 2<sup>nd</sup> producer of Methanol, 3<sup>rd</sup> of Polyethylene, and 6<sup>th</sup> of Polypropylene.

The expansion plans for the energy based industries are quite impressive. Just totaling the existing projects, one can expect that by 2015, the Kingdom will produce about 100 millions tons per year of products for sales of about \$40 to \$50 billion per year, making it the largest player in the world. The Saudi cost of feedstock at less than \$2.00 per barrel equivalent gives its petrochemicals the lowest fabrication cost in the world. This translates in the fact that Saudi producers of petrochemicals could take any amount of market, at any time, anywhere if they so desired.

The strategy of prominence in petrochemicals has led the Kingdom to actively negotiate its entry into the World Trade Organization, which happened on December 12, 2005. WTO accession will ensure that Saudi products will have access to its main markets, especially in the Far East.

The Saudi growth in petrochemicals is being followed through a four prong approach:

1-The 70% state-owned SABIC has 17 affiliates which use natural gas and natural gas liquids [NGLs], mainly ethane, propane and butane, to produce 42 millions tons of products such as the petrochemicals mentioned above but also steel and fertilizers. For a number of years after its inception, SABIC established production in joint ventures with large foreign firms like ExxonMobil or Mitsubishi. It learned to market its products through the joint ventures, but now is established enough to sell all its own products under its own brand. Today SABIC has become the 7<sup>th</sup> largest petrochemical company in the world. It has its own research centers, develops its own products and no longer works in joint ventures with other firms. It is even expanding overseas through acquisitions. It has become the largest ethylene producer in Western Europe by purchasing the basic-chemical arm of DSM in Holland. It also has purchased Scientific Design of New Jersey a designer and producer of catalysts, which allows SABIC to design its own plants. SABIC expects to increase its total production to 70million tons/y by 2015.

2-Another prong to the Saudi strategy is the new entry of Saudi Aramco in the industry. Saudi Aramco can produce the cheapest feedstocks in the world. With the

development of its new specialized refineries in Rabigh and Ras Tannura, Saudi Aramco can become the world's lowest cost producer of oil based petrochemicals. To learn the trade, Saudi Aramco has allied itself with Sumitomo in an \$8 billion venture in Rabigh. This new plant will use Naphtha to produce 2.3 million tons per year of Ethylene and related products. Saudi Aramco has plans for an equally large petrochemical plant in the Ras Tannura refinery. If Saudi Aramco's follow SABIC's precedent, it could be producing over 10million ts/y by 2010.

3- Saudi Arabia is encouraging its private sector's development in this industry. Today the private sector runs 18 production lines producing about 4.1 million tons per year, and has plans for 46 new lines which could provide 22 millions more tons p.a. by 2010. The development of the private sector is presently taking off in great part because it now has access to a booming stock market and banks more willing to lend large amounts at longer term than in the in the 1990s. The private sector is of course dependent on obtaining cheap feedstock from Saudi Aramco and therefore on the government's good will.

4-Finally, both SABIC and Saudi Aramco have plans to develop petrochemical plants in the Far East. The main planned venture presently is between Saudi Aramco, ExxonMobil and Sinopec in Fujian, China, to produce 1.5 million tons per year of Ethylene and Paraxylene.

Even though, the emphasis on energy based industries rather than development of oil production is rooted in the Saudis view of their own long term interest, it has substantial strategic implications. It underlines the fact that Saudi Arabia is less willing to accommodate the US's thirst for crude oil, but on the other hand needs to develop relations with its main non-oil client-China. Saudi petrochemicals are primarily marketed in the Far East, especially China. Every dollar of Chinese exports has a petrochemical component in it, even if it is only a few cents worth of packaging. Without access to quality petrochemicals, the Chinese growth could not be as high as it is now and its \$20 billion monthly sales to the US could not be sustained. Of course, China is increasing its own production of petrochemicals dramatically, but is not expected to meet more than 1/2 of its need for the near future. China depends on foreign productions, principally that of

Kuwait, Qatar, and mainly Saudi Arabia. Further, for its own petrochemical production, China depends on access to crude oil or refined products, such as Naphtha, propane, butane and heavy fuel oils, which they also increasingly obtain from the Gulf.

In dollar term, the petrochemical “axis” of China-Saudi Arabia may not compare to the volume of Saudi oil sales to Europe or the US, but from a strategic stand point it is making China partly dependent on Saudi Arabia to maintain its growth, and Saudi Arabia dependent on China as the main outlet for its productions. This interdependency points to the replacement of the strong but tense link between Saudi Arabia and the US by a more stable and stronger link between the Kingdom and China.