PETROCHEMICALS AND FERTILIZERS

Introduction

Indonesia's petrochemical industry is characterized by abundant natural resources in crude oil and natural gas, a large and growing market of more than 220 million people, but constrained by a lack of integration between the petroleum and petrochemical industries. In addition, many of the companies have heavy debts, and Indonesia's poor investment climate significantly limits interest in this sector. The combination of growing demand and limited capacity, despite the proximity of oil and gas production centers, means Indonesia imports a number of key petrochemicals, missing opportunities for job creation, foreign exchange revenues and a domestic buffer from international price changes.

The Asian economic crisis had an adverse impact on the country's petrochemical industry. Petrochemical producers faced soaring prices for imported materials, shrinking domestic demand, and severe financial problems. According to the GOI, the petrochemical industry currently owes about Rp 10 trillion ($1.2 billion) to the banking sector. As a result, Indonesia's plans to expand petrochemical production have been put on hold.

One company caught with massive debt obligations was Chandra Asri Petrochemical Center (CAPC), a producer of ethylene and propylene. CAPC's debts amounted to $463.6 million to the Indonesian Bank Restructuring Agency (IBRA) and $731 million to private lenders led by Marubeni Cooperation of Japan.

In 2002, the government reached a debt-for-equity swap with Japanese creditors. Marubeni agreed to convert $147 million of its loans into a 24.59 percent equity share. IBRA took a 25.9 percent stake in Chandra Asri under the same agreement. In 2003, following many months of negotiation, IBRA reached agreement to sell its stake CAPC to Thailand's Glazer & Putnam Investment, for an estimated $71.6 million. When the sale is complete, Chandra Asri will belong to company founder Prayogo Pangestu (49.6%), Glazer & Putnam (25.9%) and the Japanese consortium (24.59%).

Tariff reduction postponed

In 2003 the government, which had committed to reduce tariffs of petrochemical products to comply with the Common Effective Preferential Tariff (CEPT) and ASEAN Free Trade Agreement (AFTA) schemes, decided to postpone further reductions. The Energy Ministry defended the decision, citing that current rates already ranged between 0-10 percent.

In 1998, the government had lowered import tariffs on petrochemical products (ethylene, propylene, styrene, polyethylene, polypropylene, polystyrene and polyvinyl chloride) and their derivatives from 25-35 percent to 10-20 percent, effective January 1, 1999. Minister of Finance Decree No. 187 of May 2000 went a step further by reducing import tariffs for 708 items, including upstream and midstream petrochemical products.

This decree lowered import duties on selected petrochemical products (ethylene, propylene, styrene, polyethylene,

polypropylene, and their derivatives) as of June 1, 2000. Tariffs on ethylene and propylene (both produced by CAPC) are now zero percent and five percent, respectively. Tariffs for polyethylene (produced by PT Petrokimia Nusantara Interindo and CAPC) and polypropylene (produced by PT Tri Polyta Indonesia and PT Polytama Propindo) have been reduced from 20 percent to 5 percent.

Import Tariffs of Selected Petrochemical Products (%)

Products	Pre Jan 1 1999	Jan 1 1999	Jun 1 2000
Ethylene	25	10	0
Propylene	25	10	5
Polyethylene	35	20	5
Polypropylene	35	20	5
Polystyrene	25	20	10
Polyvinyl Chloride	35	20	10

Benzene & Paraxylene

Benzene and paraxylene are currently produced by Pertamina's Cilacap refinery with production capacity of 123,000 MT per year and 270,000 MT per year, respectively. Production rates of the two products are insufficient to meet domestic demand. According to the Department of Industry and Trade, domestic demand of benzene and paraxylene increased to 1.2 million MT and 2.2 million MT, respectively, in 2003.

PTA

The growth of Indonesia's textile industry and the demand for polyester raw materials provided the stimulus for Pertamina and private investors to enter into the production of purified terephthalic acid (PTA). Since 1998, five PTA plants have been in operation -- Pertamina Plaju Aromatic, Bakrie Kazei PTA, Amoco Mitsui PTA Indonesia, Polysindo Eka Perkasa and Polyprima Karya Reksa, with a combined capacity of 1.8 million MT per year. The bulk of production is sold to Indonesian polyester makers.

Three Japanese partners led by Mitsubishi Kasei Corp. own Bakrie Kasei, the largest PTA producer in Indonesia with a total capacity of 500,000 MT per year. (PT Bakrie Brothers sold its 20 percent share in the company to its former partners in late 2000.) Bakrie Kasei's first PTA production unit commenced operation in 1994 and the second unit in 1996.

Amoco-Mitsui PTA Indonesia, a joint venture between Amoco Chemical (50 percent), now incorporated into BP, Mitsui Petrochemical Industries (45 percent) and Mitsui Company (5 percent), commissioned a PTA factory in Merak, West Java, in February 1998, with an annual production capacity of 350,000 MT per year. PT Polysindo Eka Perkasa of the Texmaco Group started PTA plant operation in April 1997 with capacity of 360,000 MT per year. PT Polyprima Karyareksa of the Napan group commenced commercial production in 1997 with annual capacity of 285 thousand MT/Y.

Polypropylene

Three plants, with a total production capacity of 600,000 MT per year, produce polypropylene, which is made from propylene. They are Pertamina's plant in Plaju, South Sumatra, with an annual production capacity of 60,000 MT; Tri Polyta's plant in Cilegon, West Java, with an annual capacity of 360,000 MT; and Polytama Propindo, near Pertamina's

Balongan refinery in West Java, with an annual capacity of 180,000 MT.

Ethylene

Chandra Asri Petrochemical Center (CAPC) is the only ethylene producer in Indonesia, with an annual capacity of 520,000 MT. Actual production is probably 80 percent of capacity, well below the country's annual demand of 755,000 MT.

Polyethylene

Indonesia's first polyethylene plant, PT PENI in Merak, West Java, came on stream in 1993, with an annual production capacity of 250,000 MT. PT PENI is majority owned and operationally managed by BP Chemicals. In August 1998, the company completed its expansion project and increased its annual capacity to 450,000 MT. In 1999, CAPC increased the country's total polyethylene production capacity to 750,000 MT.

The demand for raw materials of plastics in Indonesia is growing around 8% per year and national production has been unable to meet the demand. In 2002, the total imports of polyethylene were 220,000 tons, and will likely increase from year to year. Without new investment, the industries cannot increase the national production capacity and Indonesia will have to import greater amounts of raw materials.

Methanol

PT Kaltim Methanol Industry in Bontang, East Kalimantan, which came on stream in 1998, brought Indonesian methanol production capacity to 990,000 MT per year. Prior to 1998, methanol was produced only by Pertamina's Bunyu Refinery, now owned by Medco Energi. PT Kaltim Methanol has plans to be a major methanol supplier to Asia. The first shipment of methanol to Japan was in March 1998. PT Kaltim, a subsidiary of Humpuss Group, has an annual production capacity of 660,000 MT.

The Projects

The long-suspended $900 million Trans Pacific Petrochemical Indonesia (TPPI) project in Tuban, East Java, may continue. In 2003, Japanese creditors agreed in principle to the government's draft guarantee letter for the TPPI project, which will allow Pertamina to receive $400 million from a Japanese consortium to fund the remainder of the project. The Tirtamas Group transferred majority ownership of the project to IBRA in 1998 after the conglomerate failed to repay $635 million in bank loans. IBRA plans to transfer 15% ownership to state-owned Pertamina. Siam Cement of Thailand and Nissho Iwai Corporation are also shareholders in the project.

According to Pertamina, the government's letter does not state the GOI's readiness to financially guarantee the project, but informs lenders that Pertamina will guarantee the supply of low sulphur wax residue (LSWR) for the first four years of the project in return for 15% ownership. Japanese creditors are studying the proposal. After paying a 10 percent processing fee. Pertamina would then sell TPPI products, with most of the proceeds (about $350 million), paid out to TPPI's main contractor JGC of Japan.

JGC would use the funds to finish construction of TPPI's petrochemical

storage tank. The tank will store middle distillate (crude diesel and kerosene) and light naphta (premium gasoline). If completed, TPPI will have the capacity to produce 700,000 MT of ethylene; 500,000 MT of paraxylene; and 300,000 MT of benzene annually, greatly reducing imports of these products and carrying a potential savings of $1 billion per year to country.

Fertilizers

Given Indonesia's abundant supply of natural gas and strong domestic and export demand for fertilizer in Asia, the fertilizer industry presents a potential area for growth, provided the GOI loosens its tight control over the industry. Installed production capacity at Indonesia's 12 fertilizer plants operated by six companies (five state-owned companies and one ASEAN joint venture) is 7.0 million MT of urea and 4.6 million MT of ammonia per year.

Urea and ammonia production in 2002 increased to 6.0 million MT and 4.1 million MT from 5.2 million MT and 3.5 million, respectively. In 2001, urea and ammonia production were affected by the suspension of production at the two large fertilizer plants in Aceh (ASEAN Aceh Fertilizer, AAF, and Pupuk Iskandar Muda, PIM I). Urea exports declined slightly to 1.1 million MT valued $124 million in 2002, with main destinations being Vietnam, Taiwan, Thailand, South Korea, the Philippines, Malaysia, New Zealand and Japan.

Designated a strategic commodity, the government directs state-owned fertilizer companies meet domestic demand first and the remainder can be exported, with the exception of PT ASEAN Aceh Fertilizer (AAF), which exports its fertilizer to ASEAN countries. Domestic demand for fertilizer continues to increase at average of 3.0 percent per year. The government estimates domestic demand will reach 6 million MT for urea and 1.3 million MT for phosphate by 2005.

To meet domestic demand Indonesia also imported fertilizer amounting to 1.5 million MT valued at $200 million in 2001 up from 1.3 million MT valued $185 million in 2000. The largest Indonesian fertilizer import is potassium chloride, which is used as an additive to enhance performance of other fertilizers. This particular additive is mainly imported for use in plantations that produce soybeans, tobacco and tea.

The fertilizer industry utilizes about 210 BSCF of natural gas per year and purchases gas in U.S. dollars at the government's subsidized price of $1.3/mmbtu. (The government reduced the natural gas price from a range of US $1-2/mmbtu as a development incentive to the fertilizer industry.) Recently, a number of plants have had difficulty paying their dollar-denominated gas bills to Pertamina. Fertilizer is sold to farmers in rupiah at government-administered prices.

The Indonesian Government resumed five delayed fertilizer projects affected by the financial crisis due to the anticipated increase of domestic demand. The five projects are the $310 million Pupuk Iskandar Muda (PIM) II; $304.6 million Kujang IB; $359.7 million Pupuk Kaltim IV; $26.2 million Petrokimia Gresik NPK fertilizer plant; and $34 million ASEAN Aceh Fertilizer's hydrogen peroxide plant.

The PIM II project is in the process of starting commercial operations. The plant was commissioned in late 2003 and was planned to begin fertilizer production in early 2004. However, there is currently no gas supply arrangement for this plant, so production operations may be postponed.

PT Kaltim Parna Industry (KPI), a US $240 million ammonia plant in East Kalimantan, is a joint venture between two Japanese companies (Mitsubishi 55 percent and Asahi Chemical Industry – 10 percent) and two Indonesian companies (PT Parna Raja -- 25 percent and PT Pupuk Kaltim -- 10 percent). After postponing construction for three years due to the economic crisis, KPI was completed in 2002, with an annual capacity of 500,000 MT. The plant consumes 55 mmscf/d from three gas fields operated by Total, Unocal and Vico. KPI signed a 20-year gas purchase agreement with Pertamina in July 1999.

PT ASEAN Aceh Fertilizer (AAF): The ASEAN-sponsored urea fertilizer plant is located near the Arun gas fields at Lhokseumawe in North Sumatra and is 60-percent owned by Indonesia, 13-percent by Malaysia, 13-percent by the Philippines, 13-percent by Thailand, and 1-percent by Singapore. The plant produced 586,000 MT of urea and 405,000 MT of ammonia in 2000.

Gas supplies to the AAF plant have been curtailed because ExxonMobil's gas production is enough only to meet Pertamina’s LNG sales commitments. AAF is currently shut down due to the lack of gas supply.