

LNG AND LPG

Production and Exports

In 1999, 60 percent of Indonesia's marketable natural gas was converted into LNG, while the remainder was used in the production of LPG, used as fuel for electric power generation, as fuel and feedstock for the petrochemical and fertilizer industries, and consumed or flared in connection with the production of oil. Indonesia signed its first long-term LNG contract in 1973, with the first shipment from Bontang in 1977 and the first shipment from Arun in 1978. Indonesia signed a number of additional LNG contracts between 1973 and 1995. Indonesia's LNG exports are under long-term contracts between Pertamina and its customers.

Currently, Indonesia has capacity to produce 31.6 million MT of LNG at the Arun plant in North Sumatra and the Badak plant in East Kalimantan. Actual production reached 29.8 million MT in 1999, 9.7 percent higher than the 27.2 million MT produced in 1998. Most of this production is exported, making Indonesia the world's largest LNG exporter. LNG exports increased by 7.3 percent to 29 million MT in 1999 for about 32 percent market share in the world market and over 43 percent share in Asia and Pacific market.

LNG remained a significant earner of foreign exchange, with a 32.4 percent increase in earnings in 1999. LNG

exports were valued at \$4.5 billion from \$3.4 billion in 1998. Japan remained Indonesia's top market for LNG, with 64 percent of the total, followed by South Korea (29 percent) and Taiwan (7 percent).

Japanese customers (the largest being Kansai, Chubu, Kyushu and Osaka Gas) have contracted to import 18.2 MMT a year of LNG for the contract period 1999 to 2017. Korea Gas has contracted to import 8.2 MMT/Y and Taiwan 3.1 MMT/Y over the same period.

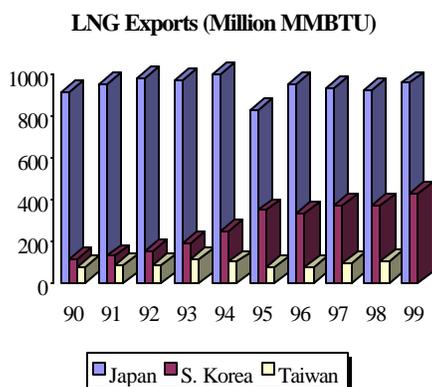
Two Japanese power companies, Tokyo Electric and Tohoku, reached an agreement with Pertamina to extend their existing term LNG contract for five years to 2009. Under the new contract signed on August 28, 1999, the two companies have agreed to purchase a total of 960,000 MT of LNG per year over a period of five years from the Arun LNG plant after the current contract (3.5 million MT/year) expires in December 2004. It was reported the two buyers would like to diversify their LNG sources and look for other LNG suppliers.

The Government announced a priority to develop the Tangguh LNG project in Irian Jaya. Other important LNG projects include the potential development of train "I" at the Badak LNG plant in Bontang, East Kalimantan and the East Natuna LNG project. With 6.0 million MT/Y from the new LNG facility projected for

World LNG Trade in 1998

Exporting Country	Million MT/Y	%
Indonesia	26.9	31.9
Algeria	18.6	22.0
Malaysia	14.5	17.2
Australia	7.4	8.8
Brunei	6.1	7.2
UAE	5.3	6.3
Qatar	3.5	4.2
USA	1.3	1.6
Libya	0.7	0.8
Total	84.4	100.0

Tangguh, Papua, Indonesia is still well positioned in the short term. However, when the Tangguh LNG facility comes on line in 2005, LNG production from Bontang and Arun may be on their way to depletion. The Arun facility is expected to produce only 3.0 million MT in 2010.



Badak

The eight-train (A through H) Bontang facility in Badak, East Kalimantan has 21.6 million MT of production capacity.

The plant is operated by PT Badak NGL Company, which is 55-percent owned by Pertamina, 20-percent by Vico (which is 50-percent owned by BP), 10-percent by Total and 15-percent by Japan Indonesia LNG Company (JILCO). Gas is supplied from production sharing arrangements between Pertamina, Unocal, Vico and Total. LNG production from the Badak facility in 1999 was 18.4 million MT, up from 16.3 million MT in 1998.

In 1995, Pertamina signed two 20-year contracts for Badak's "H" train with Korea Gas Company and Chinese Petroleum Corporation (Taiwan).

Arun

LNG production from the PT Arun Liquefied Natural Gas plant increased in 1999 to 11.4 million MT, compared with 10.8 million MT in 1998. Arun is operated by PT Arun LNG Company, of which 55 percent is owned by Pertamina, 30 percent by ExxonMobil Indonesia and 15 percent by Japan Indonesia LNG Company (JILCO). ExxonMobil is the sole supplier of natural gas to Arun.

ExxonMobil has extracted about 70 percent of the gas reserves in its Arun gas field and gas deliveries to the four-train Arun LNG plant have started to decline. Production capacity at Arun is 12.3 million MT, but Pertamina and ExxonMobil reduced LNG output by 37 percent beginning April 2000, with the closure of two of the original six LNG trains.

Pertamina initially expected that new gas fields discovered around Aceh would enable Pertamina to maintain LNG production and to meet long-term sales contracts with Japanese buyers. To meet future demand, ExxonMobil proceeded with development of discoveries at three other locations: the South Lhoksukon gas field, located 15 kilometers from Arun; the Pase gas field, located north of Arun; and the North Sumatra Offshore (NSO) gas field. All are currently in operation.

In July 1999, ExxonMobil started supplying feed gas to Arun from the NSO field, located 100 kilometers off the coast of Sumatra in the Malacca Strait. ExxonMobil holds a 100-percent working interest in the PSC. NSO is the first offshore project in Indonesia to produce and treat a large volume of

“sour” gas (natural gas containing chemical impurities). Discovered in 1972, the NSO gas field will feed gas to Arun through a 63-mile pipeline, supplementing gas from the other fields to fill existing LNG contracts through mid-2014.

Liquid Petroleum Gas

Total LPG production continued to decline in 1999 to 2.26 million MT, from 2.35 million MT in 1998 and 2.79 million MT in 1997. LPG production at five of Pertamina’s refineries declined slightly to 606,000 MT in 1999 from 616,000 MT in 1998. Production at LPG extraction facilities at the Arun and Badak LNG plants declined to 1.18 million MT in 1999 from 1.34 million MT in 1997. Over 77 percent of LPG production in 1999, valued at over \$340 million, was exported to major markets Japan, Taiwan, Australia, Hong Kong and Singapore. LPG is sold at LPG stations in Jakarta, Bandung and Denpasar.

Other Gas Products

Pertamina plans to build 52 new compressed natural gas (CNG) stations over the next two years to support the government’s “Blue Sky” environmental program. The Blue Sky program monitors and controls emissions from vehicles and encourages the utilization of fuel gas, low-sulfur and lead-free fuels. The total number of existing CNG stations is close to 20, located mainly in Jakarta and Surabaya. An estimated 1,800 vehicles currently use CNG and LPG. Distributed by Pertamina subsidiary PT Elnusa, CNG costs Rp 550/liter. LPG is distributed by private companies and costs Rp 1,500/Kg.