

# THE MINERAL INDUSTRY OF TRINIDAD AND TOBAGO

By Ivette E. Torres

Trinidad and Tobago's gross domestic product (GDP) grew by 2.7 % in 1995.<sup>1</sup> Its economy continued to depend heavily on oil and natural gas, but the growth in GDP was attributed partly to increases in the manufacturing and construction sectors. Twenty eight percent of Trinidad and Tobago's GDP, 22% of Government revenue, and 68% of earnings from foreign exchange in 1995 originated from the energy sector. This represents a decreasing trend in energy's importance to the economy in part because of decreasing production levels of crude petroleum and Trinidad and Tobago's efforts to develop its natural gas downstream industries.

In addition to oil and natural gas, Trinidad and Tobago is a significant producer and a major exporter of ammonia. The country also produces byproduct sulfur, cement, iron and steel, limestone, and petroleum refinery products. The country's mineral industry is characterized by mixed private and Government ownership, with efforts to privatize that began in the early 1990's and continued in 1995. In November, a new Government was elected. The new Government planned to focus on reforming the tax system as a measure to encourage private investment. It also planned to decrease its ownership and direct participation in mineral production and oil exploration and production.

The United States is Trinidad and Tobago's main trading partner, accounting for about 50% of the country's total trade. Trinidad and Tobago's second leading trading area is Latin America and the Caribbean. A member of Caribbean Community and Common Market, Trinidad and Tobago has expressed interest in becoming a member of the North America Free Trade Agreement.

While oil production and refining have been significant sources of foreign exchange earnings, natural gas has become an extremely important factor in the domestic economy. As an inexpensive and abundant energy source, it is the basis of Trinidad and Tobago's industrial development. In June 1995, the proven gas reserves were 10.09 trillion cubic feet (285.72 billion cubic meters), probable reserves were 6.0 trillion cubic feet (169.9 billion cubic meters) and possible reserves were 2.68 trillion cubic feet (75.9 billion cubic meters).<sup>2</sup>

Trinidad and Tobago's petrochemical industry is the largest consumer of natural gas. Demand for this sector is expected to increase to 59% of the total by yearend 1996. The country continues to expand its natural gas based industries.

In 1995, plans for a new liquefied natural gas (LNG) plant were proceeding smoothly with the establishment of Atlantic Liquefied Natural Gas. The \$1 billion project, expected to be completed by 1999, will expand Trinidad and Tobago's natural gas into the export market. Atlantic Liquefied Natural Gas is owned by AMOCO Trinidad (34%), British Gas (26%), Repsol International (20%), Cabot LNG (10%), and Trinidad and Tobago's National Gas Company (10%).<sup>3</sup> Planned production capacity is 425 million cubic feet per day (12.03 million cubic meters per day), almost 70% of the country's total production in 1995. Cabot has agreed to purchase 60% of the plant's output. Enaga, a subsidiary of Spain's Gas Natural S.A., agreed to purchase the remainder.

In 1995, Trinidad and Tobago exported about 80% of the 1.7 million tons of ammonia (nitrogen content) produced during the year. Its high level of exports was exceeded only by Russia, the world's leading exporter of ammonia.

Arcadian Corp. (Arcadian), a major producer of ammonia in Trinidad and Tobago, continued to expand its production capacity in 1995. In December, the U.S. company announced plans to construct a new 650,000-ton-per-year ammonia plant in the Point Lisas industrial sector in Caroni County, Trinidad. Construction of the plant was scheduled to begin in February 1996. This was in addition to a 680-ton-per-day (about 250,000-ton-per-year) plant that was being relocated to Trinidad by Arcadian in 1995 and that was scheduled to be completed in February 1996. Most of Arcadian's ammonia sales (93%) from its Trinidad plants goes to the United States.

Production of crude petroleum decreased slightly from that of 1994 to 47.8 million barrels. With the exception of the increase of about 3% achieved in 1994, production of crude petroleum has been decreasing steadily and significantly since 1978 when it reached almost 84 million barrels. In 1995, output of petroleum refinery products increased slightly. While Trinidad and Tobago's industry has benefited tremendously from the shift to natural gas, the country recently has developed a new petroleum exploration program, mainly through production sharing contracts.<sup>4</sup> As part of this program, two new offshore blocks were awarded in late 1995 to Enron and BHP Petroleum/Elf Aquitaine, with eight more blocks to be bid for at the beginning of 1996.

---

<sup>1</sup>Inter-American Development Bank Annual Report 1995, p. 105.

<sup>2</sup>Petroleum Economist. Trinidad and Tobago. A Petroelum Economist Special Report. V. 62, No. 6, June 1995, pp. 121-134.

<sup>3</sup>James, C. J. Com. Commodities /Chemicals. Amoco, Cabot LNG Join in \$1 Billion Trinidad Venture. Jan. 10, 1996, p. 20.

<sup>4</sup>Petroleum Economist. Trinidad and Tobago. Exploration to Restore Production. V. 62. No. 10, Oct. 1995, p. 50.

## **Major Sources of Information**

Ministry of Energy  
Port-of-Spain, Trinidad, W.I.  
Telephone: (809) 623-6708

TABLE 1  
TRINIDAD AND TOBAGO: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity		1991	1992	1993	1994	1995 e/
Asphalt, natural		20,000 e/	24,565	24,600	16,700	17,000
Cement, hydraulic		485,396	482,000	527,000	583,000	600,000
Gas, natural						
Gross	million cubic meters	8,730	7,000	8,200	7,700	7,500
Marketed	do.	5,700 r/	5,500 r/	6,200 r/	6,240 e/	6,119 2/
Iron and steel:						
Iron, sponge		683,000 r/	675,000 r/	830,006 r/	911,800	1,077,000 2/
Steel, crude		440,000 r/	553,000	519,000 r/	631,000	738,000 2/
Semimanufactures (rolled) e/		290,000	450,000 2/	446,000	525,000	550,000
Lead, refined (secondary) e/		1,800	1,800	1,700	1,600	1,600
Natural gas liquids	thousand 42-gallon barrels	120	280	320	384	380
Nitrogen, N content of ammonia	thousand tons	1,530	1,570	1,462	1,649 r/	1,696 2/
Petroleum :						
Crude	thousand 42-gallon barrels	53,085 r/	49,934 r/	46,680 r/	48,009 r/	47,811 2/
Refinery products	do.	39,546 r/	39,834 r/	38,561 r/	36,299 r/	36,973 2/
Stone, limestone	thousand tons	1,030	1,420	1,580	1,600 e/	1,600
Sulfur, byproduct of petroleum e/ 3/		5,000	5,000	5,000	4,500	4,500

e/ Estimated. r/ Revised.

1/ Table includes data available through Oct. 1996.

2/ Reported figure.

3/ Sulfur as a byproduct of natural gas may be produced, but information is inadequate for reliable output estimates.

TABLE 2  
TRINIDAD AND TOBAGO: STRUCTURE OF THE MINERAL INDUSTRY FOR 1995

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity holders	Location of main facilities	Annual capacity
Anhydrous ammonia	Trinidad Nitrogen Co. Ltd. (Norsk Hydro AS, 49%; Government, 51%)		
	Tringen I	Point Lisas, Caroni Co.	370. 1/
	Tringen II	do.	450. 1/
Do.	Arcadian Trinidad Ltd., (Arcadian Corp., U.S., 100%)	do.	710. 1/
Do.	Federation Chemicals (Norsk Hydro AS, 100%)	do.	230. 1/
Asphalt	Lake Asphalt of Trinidad and Tobago (1978) Ltd. (Government, 100%)	Brighton, St. Patrick Co.	60.
Cement	Trinidad Cement Ltd. (Cemex of Mexico, 20%; Government, 80%)	Claxton Bay, Caroni Co.	540 cement. 600 clinker.
Iron and steel	Iron and Steel Co. of Trinidad and Tobago (Caribbean Ispat Ltd.)	Point Lisas, Caroni Co.	900 sponge iron. 700 steel. 600 wire rod.
Do.	Nucor Iron Carbide Inc. (Nucor, USA, 80%; Samitri, Brazil, 20%)	do.	320 iron carbide.
Petroleum:			
Crude	Amoco Trinidad Oil Co. Ltd. (Amoco International Oil Co. Ltd., 100%)	Poui, Samaan, Teak, and Cassia fields, offshore\ east of Guayaguayare	95,000. 2/
Do.	Petroleum Company of Trinidad and Tobago Ltd. (Petrotrin) (Government, 100%)	Point Fortin, Ortoire, Penal Forest fields, offshore, east of Guayaguayare	20,000. 2/
Do.	Trinmar Ltd. (Texaco Trinidad Inc., 33 1/3%; Petrotrin, 66 2/3 %)	Soldado fields, offshore in Gulf of Paria	40,000. 2/
Do.	Petrotrin (Government, 100%)	Soldado field, onshore; Galeota field, offshore (exported)	24,000. 2/
Products	do.		
		Point Fortin, St. Patrick Co.	80,000. 2/
Do.	do.	Point-a-Pierre, Victoria Co.	220,000. 2/

1/ Based on 340-day operating year.

2/ Barrels per day