

TRINIDAD & TOBAGO

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Located at the triple junction formed by the meeting of three geological plates, Trinidad is consequently one of the most geologically complex areas of the world and has been called the graveyard of geologists. The group of 23 islands with Trinidad the largest at 4,828 km² and Tobago at 200 km² can certainly boast a number of superlatives. The most southerly of all the islands in the Caribbean sub-region with Trinidad itself lying just 11 km off the Venezuelan coast, it is by far the Caribbean's largest producer of oil and gas. This enviable position has enabled it to become the most industrialised Caribbean nation and not surprisingly it has been dubbed the tiger of the Caribbean. Indeed it has become one of the major natural gas development centres in the world. With eight ammonia complexes, five methanol units, a urea plant and an iron and steel facility, Trinidad is also the world's leading exporter of ammonia and potentially the leading exporter of methanol. In addition, Lake Asphalt of Trinidad & Tobago Ltd. has mined reserves in the southwest from the largest natural asphalt lake in the world.

Energy accounts for over 70% of the country's exports and has considerable foreign investment. With an estimated 605 Mbbl of crude oil reserves only expected to last another decade, it had been hoped that production would be raised to 200,000 bbl/d between 2005 and 2010. Yet 1996 was the last year in which as much as 130,000 bbl/d of oil were produced and average production last year was 119,073 bbl/d with the forecast for this year about the same. Nevertheless, the new Energy Minister John Lindsay Gillette is not just letting the oil industry decline. He has just announced distribution of seven more blocks for exploration and he is pushing forward with the 2D seismic survey of Trinidad's East Atlantic Basin and there has been international interest in exploration.

In January, Norsk Hydro for instance, signed an agreement with Petrobras Trinidad to farm into Exploration Block 27. Partners in the block are operator BP (57%), Petrobras (19%), Hydro (19%) and Petrotrin (5%). While the state oil company Petrotrin has been involved in various joint ventures, the government decided that it would no longer invest directly in oil and gas assets, although it would not sell the state oil and gas companies. Crude oil refining capacity has been 160,000 bbl/d at the Petroleum Co. of Trinidad & Tobago's Pointe-a-Pierre refinery which completed its upgrading in August 1998 at a cost of US\$355 million.

Proven reserves of natural gas are 559 billion m³. Over the past decade domestic natural gas demand has doubled due mainly to new construction and expansions of methanol, ammonia and iron reduction plants, and is projected to double again by 2005. Most of the natural gas production comes from fields off Trinidad and Tobago's east coast, but new sources are being discovered. The Atlantic plant is reputed to be the largest single-train plant ever constructed and the first LNG producer in the region. It was built in a record 6.5 years and Atlantic intends to triple capacity. In January 2000, the government approved the construction of two additional gas trains which will make the complex the fourth largest in the world.

Over 1.3 Mt of methanol are exported, while 3.6 Mt of ammonia were expected to be produced by the end of last year. New ventures should lift fertiliser capacity to 4.5 Mt/y. Companies investing in fertiliser and methanol have included Norsk Hydro of Norway, Ferrostaal and Helm of Germany, Methanex of Canada and Farmland, and Mississippi Chemical of the US. Canada has been a major investor and Potash Corp. of Saskatchewan, which acquired Arcadian,

(now PCS Nitrogen), has three ammonia plants and a fourth under construction at the Point Lisas Industrial Estate petrochemical complex.

The country's major non-oil exports are iron and steel. Point Lisas is expanding in response to industrial growth and hosts the Nucor iron carbide plant and the DR-based steel-maker Ispat. Norsk Hydro, whose Agri division has been in Trinidad since 1991 and employs 320 employees, mainly in ammonia production, has planned to build another aluminium smelter near its existing ammonia plant; the US\$1.5 billion plant should begin production in the year 2002 and the project is part of the division's strategy to double production capacity of primary aluminium from 1995 to 2005. The available production capacity would be 237,000 t/y here with an equal increase in a second step production later.

There are about 50 active quarries and the demand for construction aggregates has increased dramatically. An important outlet for limestone is Trinidad Cement's plant on the western coast near Point Lisas. The company has just reported its attributable profit has increased by 32% to US\$92.6 million in the year ending December 2000. Blue-coloured limestone and sand and gravel of various grades are quarried in the Northern Range for use in construction, while plastering or red sand is quarried in central Trinidad and used as a low grade filler material and as a construction finishing material. Yellow-coloured limestone is also quarried in the south central portion of Trinidad, while clay from the central and south eastern area is used for blocks, tiles and pottery. Other economic minerals include andesite, argillite, porcellanite, fluorspar, graphite, gypsum, sand and gravel, quartz gravel, and sandstone.