**1903:** Guayaguayare No. 3 – first well to be drilled with rotary equipment

1857: First well drilled

for oil in Trinidad – 61

of the Pitch Lake by the

Merrimac Company

metres deep in the vicinity

1901: Randolph Rust

and John Lee Lum

drill and test a well

which produces 455

litres of oil in 2 hours

1908: Commercial oil production begins in Trinidad near the Pitch Lake, La Brea

> **1910:** British Admiralty converts Royal Navy's ships from coal to fuel oil. First export cargo of crude oil shipped by tanker from Brighton, La Brea

> > 1914: Production reaches 1 mn bbl/yr with 1,200 employed in the oil industry

> > > **1916:** World's first use of gas recycling re-injection of gas into wells to recover more oil – in Tabaquite field

1937: Widespread labour unrest in the oilfield area

> **1939:** Pointe-a-Pierre refinery becomes the main provider of aviation fuel to the RAF and USAF following the outbreak of WWII

1940: Refining capacity increased to approximately 285.000 bbl/day

> 1948: Formation of Petroleum Department

> > **1954:** Marine drilling for oil begun in the Soldado Field by Trinidad Northern Areas Ltd. Deepest well drilled on land by Apex, Fyzabad Well No. 560, drilled to 16,155 feet

**1958:** First well started on platform 1.2 miles offshore from Brighton. The structure was designed to accommodate 36 wells, a world record for this type of platform

> 1959: Federation Chemicals Ltd pioneers the use of natural gas in Trinidad and Tobago as a chemical feedstock in the manufacture of ammonia. Start up of Yara

> > 1961: Galeota No. 1 becomes the first exploratory well drilled ffshore the East Coast of rinidad. Well produces bil but considered ineconomic

> > > 1962: T&T gains independence from Great Britain Ministry of Petroleum and Mines is formed

**1968:** First commercial oil discovery off the East Coast of Trinidad (off Point Radix), well OPR-2. Government and the United Nations carry out a seismic survey off Trinidad's North Coast

1967: A nev

production

high of 65

mn bbl/vr is

achieved

1971: Drilling begins off the North Coast of Trinidad. Natural gas discovered

1970: First marine concessions given out under the new Petroleum Act – North Coast Marine Area

1970

1904: Mines Department instituted as a branch of the Public Works for the production of manjack

> 1911: Discovery of Tabaquite field, the most northerly oilfield found on land in Trinidad to date

**1866:** First successful oil well drilled by Walter Darwent at Aripero

1865: Walter Darwent founds the Paria Oil Company to drill for oil in South Trinidad

**1919:** Refinerv capacity increased to 9,000 bbl/day. 66 per cent of crude oil produced refined locally

1912: Small refinery

built at Point Fortin.

outbreak of WWI

it becomes a major

supplier of fuel to

the Royal Navy

Following the

1953: First commercial use of natural gas to generate electricity at the Penal power station in South Trinidad

1932: Electrical well logging introduced in Trinidad

1930: Crude oil production increased to . 10 mn bbl/vr. First importation of oil from Venezuela for refining in Trinidad

1963: Appointment of Commission of Enquiry into the Oil Industry, one of the first acts of the newly independent Government

> 1966: Point Lisas Industrial Port Development Corporation (PLIPDECO) is incorporated

**1955:** Discovery of the northernmost gasfield in Trinidad at Mahaica, by Dominion Oil Ltd. First offshore production commences in the Soldado Field off the West Coast of Trinidad

1950 1960

**1969:** On July 1, the Government, in a joint venture with Tesoro Corporation of the US, acquires the local assets of British Petroleum; Government's first venture into national ownership of an oil company. National Petroleum Company established by law

> **1972:** Trinidad and Tobago National Petroleum Marketing Company created. Commercial production begins off the East Coast of Trinidad from AMOCO's Teak Platform. First delivery of East Coast oil ashore

**Trinidad and Tobago Energy Milestones** 

**1974:** On August 31, the Government acquires the local operations of Shell Trinidad Ltd and forms the Trinidad and Tobago Oil Company Ltd (TRINTOC)

Petroleum Taxes Act splits the petroleum industry into three parts for tax purposes - production, refining and marketing, and introduces the Refinery Throughput Tax. PSCs introduced on the Peruvian model, with no cost recovery prior to profits split. Later amended to permit cost recovery prior to profit split.

Large-scale commercial natural gas production begins at Amoco's Teak field off Trinidad's East Coast. Government builds 16in, 24mile offshore gas pipeline to bring gas ashore

**1977:** GORTT takes its option of an additional

commercial discovery is announced.

Start up of Trinidad Nitrogen 1 (Tringen).

20% participation in South Coast Consortium as a

First shipment of ammonia to the USA and Europe

1973: Opec embargo sends oil price rocketing from US\$1.66 to US\$14 a barrel

> 1976: Trinidad and Tobago becomes a Republic. T&TEC's Point Lisas power plant becomes the first tenant at the Point Lisas

Industrial Estate

1980: Commissioning of the Iron and Steel Company of Trinidad and Tobago (ISCOTT). Formation of the National Energy Corporation (NEC)

00

1975: Formation of the National Gas Company (NGC) for the transmission and sale of natural gas

1978: T&T's oil production peaks at 230,000 bbl/day

## <u>KEY:</u>

GORTT - Government of the Republic of Trinidad and Tobago mn – million, bn – billion, mcf/day – million cubic feet per day PSC – Production Sharing Contract SPT – Supplemental Petroleum Tax SECC - South East Coast Consortium bbl/day, bbl/yr - barrels per day, barrels per year

**1983:** Cassia Gasfield comes on stream in May. Urea plant at Point Lisas commissioned in December. SPT for land operations reduced from 35% to 15%

**1992:** EOG Resources begins operations. EOG is currently contracted to sell gas to NGC and condensate to Petrotrin. Petroleum Taxes Act is amended to introduce a system of taxation for calculation of the SPT on a sliding scale instead of a fixed rate. NGC acquires the assets of NEC

**1984:** Crude oil production registers its first increase since 1978 with production rising from 155,078 bl/day to 163,937 bl/day. Start up of PCS Nitrogen II.

Start up of Trinidad and Tobago Methanol Company (TTMC). First Methanol Plant at Point Lisas begins commercial production. GORTT carries out marine seismic survey over unlicensed areas off the North and East Coast of Trinidad. SPT on marine operations is reduced from 60% to 55% with effect

from 1 January 1984

**1985:** Amoco produces its 500 millionth barrel of crude oil, i.e. 22.6% of total crude production for the country at that date. The majority of the assets of Textrin are acquired by GORTT and vested in Trintoc. GORTT acquires Tesoro Corporation's 49.9% equity in Trinidad-Tesoro Petroleum Company Ltd.

1991: Start up of Hydro-Agri Trinidad. Phoenix Park Gas Processors Ltd commences operations

1990: Venezuela and T&T sign oil cooperation agreement

**1993:** The Petroleum Company of T&T (Petrotrin) is registered on January 21, with an authorised share capital of TT\$1.5 bn. Petrotrin is the single entity formed from the merger of the state-owned oil companies, Trintoc and

British Gas signs a revised PSC with the Government of T&T. EOG and British Gas/Texaco lease marine fields Keskidee and Dolphin respectively. Start up of Caribbean Methanol Company (CMC)

> **1995:** The Atlantic LNG Co. (ALNG) comprising Amoco Trinidad (34%), British Gas (26%), Repsol International Finance (20%), Cabot Trinidad (10%) and NGC (10%) is formed for the production and exportation of liquefied natural gas (LNG). Unleaded gasoline is introduced on the domestic petroleum product market. Blocks off Trinidad's East Coast are awarded in Phase 1 of the Competitive Bid Round.

Agreement signed for the joint venture Farmland-Mississippi Chemicals ammonia plant. This will be the largest ammonia facility in the world

**1997:** Farmland MissChem Ltd commences operations in T&T. Messer T&T Ltd enters into joint venture with Neal and Massy to operate three industrial gas plants in Point Lisas. PCS Nitrogen Trinidad Ltd acquires Arcadian's operations. Announcement of results of Deep Water Bid Round. The preferred bidders are: Shell/Agip; Exxon, Union Texas, Arco/Braspetro. GORTT agrees to sell its 69% stake in TTMC to a consortium comprising CL Financial and German Companies Ferrostaal AG and Helm AG

> 1999: Atlantic LNG Train 1 begins production. Start up of ISPAT (DRI) and Methanex. NGC constructs 36 foot pipeline from Beachfield to Point Lisas

2004: Start up of N2000 and International Steel Group (ISG). NEC assumes direct responsibility for the management of gas-based investment projects, industrial parks and harbours from NGC. Petrotrin granted an automatic stake in all exploration and production arrangements with foreign companies

**2000:** Agreement reached for expansion of Atlantic LNG Trains 2 and 3. Start up of Titan Methanol, the world's largest methanol plant. NGC's sales of natural gas exceed 1 bcf/day for the first time. Natural gas takes over from oil as the leading

contributor to government revenue

2001: Titan Methanol Company begins production. Caribbean Nitrogen Company commences operations. BHP Billiton announces that wells Canteen 1 and Kairi 1 encountered significant oil and gas columns in previously untested Oligocene sands - the first offshore oil discovery since Amoco in 1968

**1986:** Oil price collapses to US\$8 per barrel. Compressed natural gas pilot project is launched and the first CNG filling station inaugurated

1981: Start up of PCS Nitrogen 1. Petroleum Taxes Act of 1974 is amended to provide a more equitable treatment of all petroleum companies operating in T&T. Oil price begins to decline for the first time since the early 1970s

**1982:** TRINTOC enters into

Installation work begins on

the second cross-country pipeline by the National Gas

Company (NGC)

of crude oil.

a processing agreement with Texaco Trinidad Inc (Textrin) for the processing of 1 mn bbl

## deeper geological horizons in the southern half of the island

1988: Trintomar Ltd incorporated to develop and operate acreage held by the SECC. Comprises Trintoc 40%, Trintopec 40% and NGC 20%. Start up of Tringen II. GORTT revises SPT and announces major tax incentives for workovers and marine heavy oil production

**1996:** Start of construction of Atlantic LNG facility at Point Fortin. GORTT opens 3rd round of competitive bidding for 13 offshore leases for deep water PSCs between itself and international companies. Start up of TTMC II and PCS Nitrogen III

**1989:** Introduction of lease operatorship and farm-out programme. Signing of joint venture agreement for the formation of Phoenix

Park Gas Processors Ltd. Caribbean Ispat commences operations in May. The Southern Basin Consortium, comprising Exxon, Total, Chevron, Trintoc and Trintopec is formed to carry out exploration in the

**1998:** Petrotrin's Pointe-a-Pierre Refinery Upgrade, a US\$355 mn project is completed and commissioned. Exxon Mobil Exploration & Production Trinidad Ltd signs a PSC in February. Trinidad Shell Exploration and Production BV signs a PSC in February. New Horizon commences operations in September Start up of PCS Nitrogen IV and Methanol IV (MIV). Start up of Point Lisas Nitrogen Ltd. Amoco discovers oil at Immortelle Field

estimated at between 40-70 mn barrels

## 1 tcf of gas.

**2005:** NGC invests in upstream gas development activity for the first time since Trintomar in 1988, taking 15% in Teak/Samaan/Poui (TSP) block purchased from bpTT by Repsol YPF.

ALNG Train 4, the world's largest LNG train with a capacity of 800 mcf/day or 5.2 mn tonnes of LNG/yr, begins production at Point Fortin.

Methanol 5000, the world's largest methanol plant with a capacity of 1.89 mn tonnes/yr, comes on stream.

GORTT increases royalty on gas exports by bpTT to 10%, payable in kind, to obtain a gas supply for industries it wishes to encourage, such as aluminium smelting. Chevron/BG T&T's Manatee well in block 6d confirms existence of cross-border gas reserves with block 2 in Venezuela's Plataforma Deltana, also held by Chevron

> 2007: Eastern Caribbean gas pipeline given formal go-ahead by initial customer. Barbados

New gas discoveries in offshore blocks 5c (Southeast Coast) and 22 (north of Tobago).

MEEI confirms that cross-border natural gas in blocks 6d (T&T) and block 2 (Venezuela) amounts to 10 tcf, 2.7 tcf of which is on the Trinidad side.

Demonstration methanol-fired power plant established at Point Lisas with an installed capacity of 8.39 MW, opening the way for a new source of electricity for the Caribbean

**2006:** Launch of Cannonball Platform: first of a kind that is 100% locally constructed. Deepest offshore well (Ibis Deep) drilled by bpTT to 18,680 ft. BPTT drills Ibis Deep, the deepest well ever in T&T at 19,068 feet in SECC block but fails to find hydrocarbons. BHP Billiton makes the first oil discovery Kairi and Canteen in 2001 with the Kingbird and Ruby 1 wells in block 3a. NGC inaugurates the largest gas pipeline in the western hemisphere, the 56 in, 76.5 km Cross Island Pipeline (CIP) from Beachfield to Point Fortin, with a capacity of 2.4 bcf/day on free flow and 3.2 bcf/day with compression

2003: Start up of Atlantic LNG Train 3. Start up of Atlas Methanol NGC's profit exceeds TT\$1 bn for the first time. BG T&T and partners begin production of natural gas offshore Trinidad's North Coast. Kairi 1 becomes the first offshore platform to be fabricated in T&T, by Damus in collaboration with Gulf Island Fabrication for BHP Billiton, Total and Talisman's block 2c

2002: First commercial gas produced from BG T&T North Coast Marine acreage. Start up of Caribbean Nitrogen Company Ltd and ALNG train 2. Commencement of Ultradeep 2D survey. BPTT begins installation of the world's second largest natural gas processing/production platform in Kapok Field. Production of natural gas begins from Hibiscus field on the North Coast. BHP Billiton declares commerciality of the Greater Angoustra Structure, reserves estimated at 1 bn bbl of oil &

Vintage petroleum announces the first onshore gas and condensate discovery since 1957 at Carapal Ridge 1. BPTT becomes the first company to commit to maximum local content in its upstream operations. BG T&T drills the deepest deviated wells in T&T to date (22,000 ft) at its Hibiscus field off Trinidad's North Coast. BPTT installs the world's largest offshore gas processing unit, Cassia B, with a capacity of 1.6 bcf/day