

Trinidad And Tobago : Natural Gas Monetization As A Driver Of Economic And Social Prosperity

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MINISTRY OF ENERGY
AND ENERGY INDUSTRIES



NATIONAL GAS COMPANY
OF TRINIDAD AND TOBAGO

Atlantic LNG Plant





The Energy Sector Is Playing a Major Role in T&T Development



Current Context



The energy industry is the primary driver of economic activity in T&T, accounting for an average of 36.6% of the country's GDP over 2001 to 2005 (based on constant 2000 prices.) For 2005, this is projected be 40.5%



The Government of Trinidad and Tobago has embarked on an ambitious and far-reaching programme to achieve widespread and sustainable development by the year 2020.

Because of its scale and scope, the energy sector will continue to be a major driver for economic development, while providing a platform for significant development of certain key ingredients in achieving the "Vision 2020" goals:

- **People,**
- **Enterprises**
- **The Capital market**
- **Innovation**
- **Technology**

This allows us an opportunity to use the energy sector as an agent for sustainable development and diversification.

Government agencies and the state-owned energy companies will play an important role in the realisation of these goals.



Selected Economic Indicators



	2004	2005	2006
Real GDP Growth (%)	6.5	7.0	10.0
Inflation (Year on Year %)	5.6	7.2	4.0 – 5.0*
Unemployment (%)	10.5	8.4	7.0
Public Sector Debt/GDP (%)	49.1	41.3	31.8
External Current A/C Balance/GDP(%)	14.5	17.7	19.0
Oil Prices (WTI) - US\$	41.5	54.4	55.0

Source: Central Bank of Trinidad and Tobago



Summary of Natural Gas Resource for Trinidad and Tobago



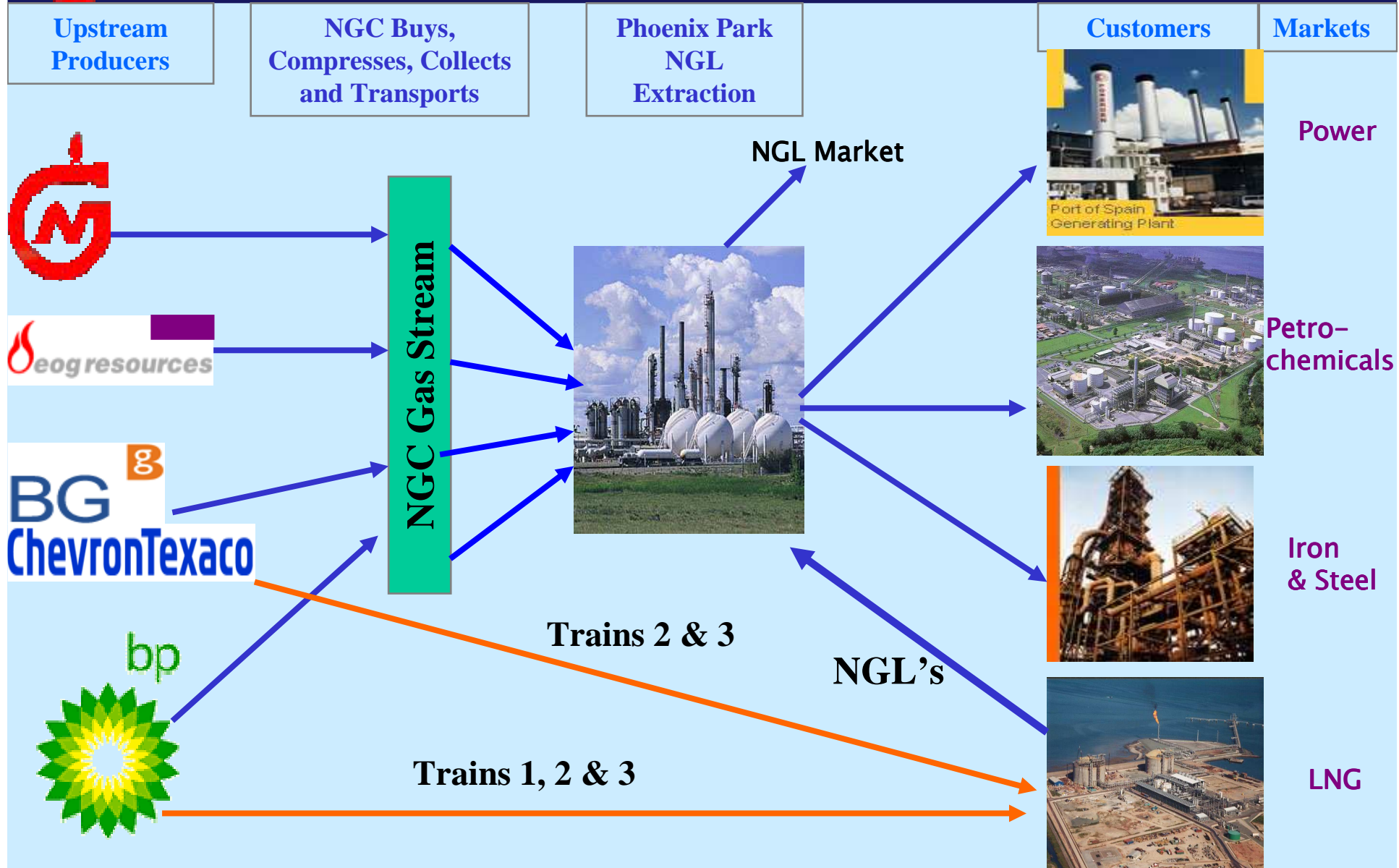
	Gas (TCF)		
	2003	2004	2005
Proved	20.8	18.8	18.77
Probable	8.3	8.6	9.03
Possible	6.1	5.8	7.07
TOTALS	35.2	33.2	34.87

Exp Leads ~ 29 TCF

Unrisked Gas leads ~ 30 TCF

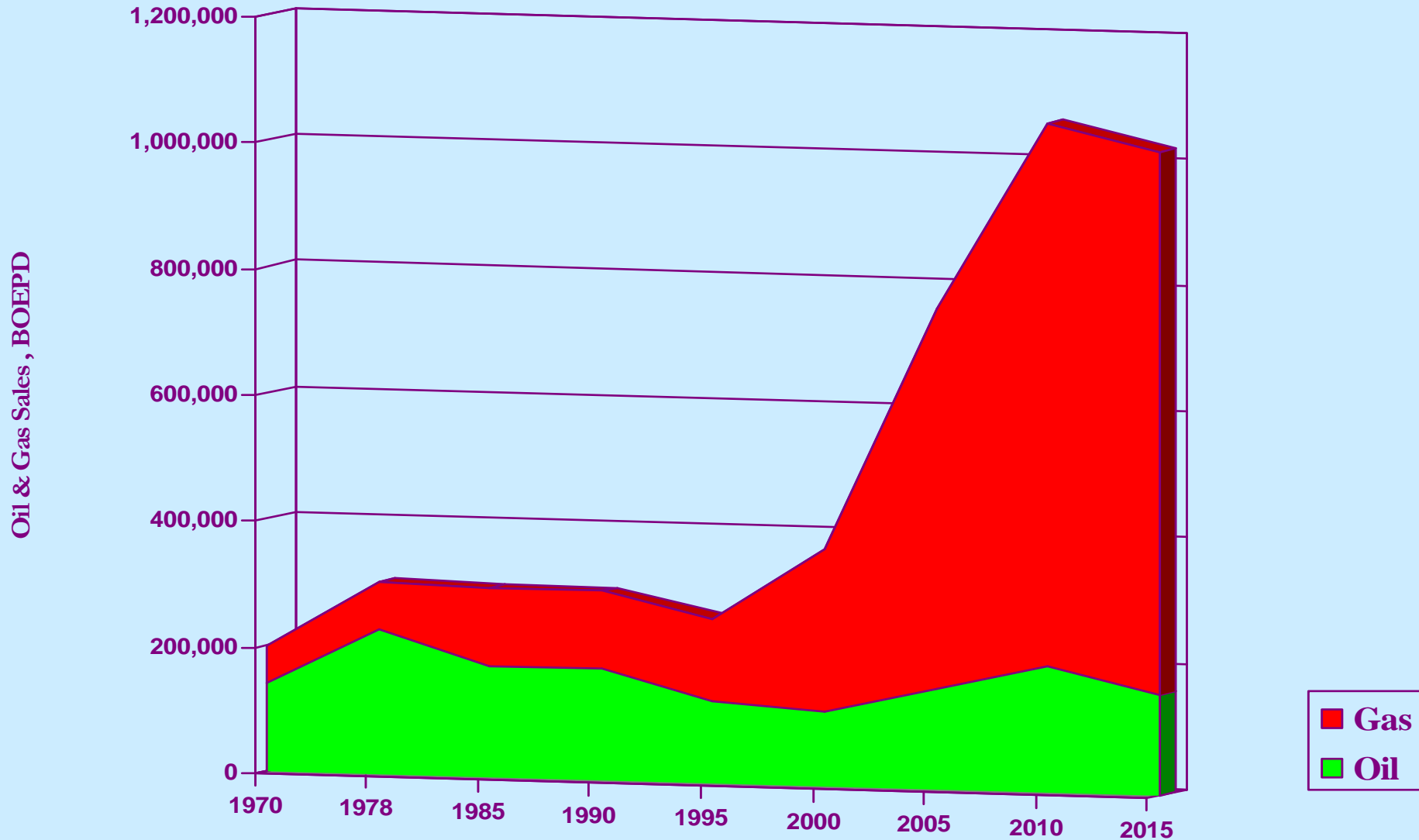


Current Gas Industry Structure



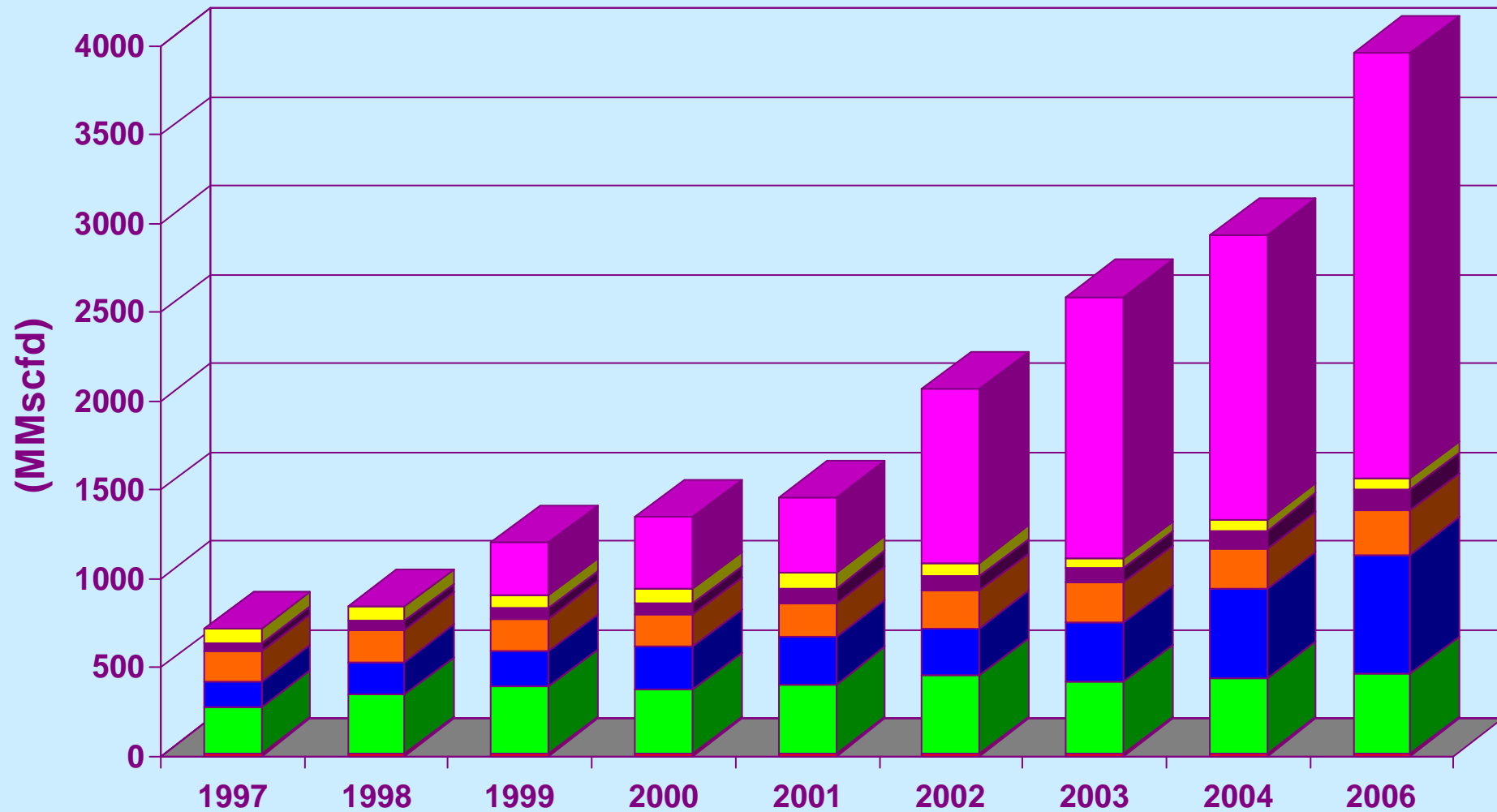


Oil and Gas Production Projection 1980-2020 (BOEPPD)





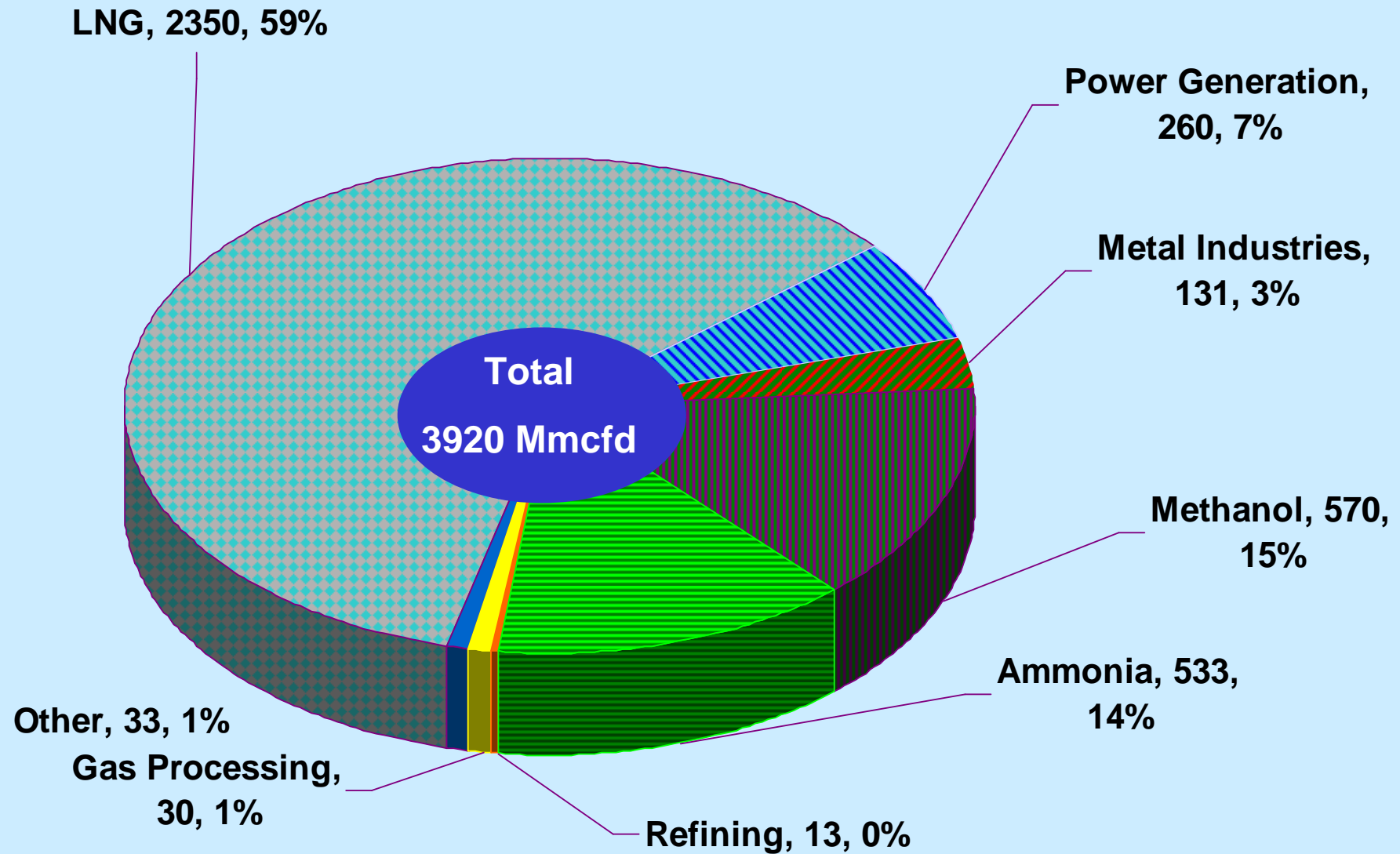
Natural Gas Demand (1997 - 2006)



■ Light Industrial ■ Ammonia ■ Methanol ■ Power Generation ■ Metals ■ Heavy Industrial ■ LNG



Natural Gas Usage 2006 (MMcfd)





Existing Gas Based Plants



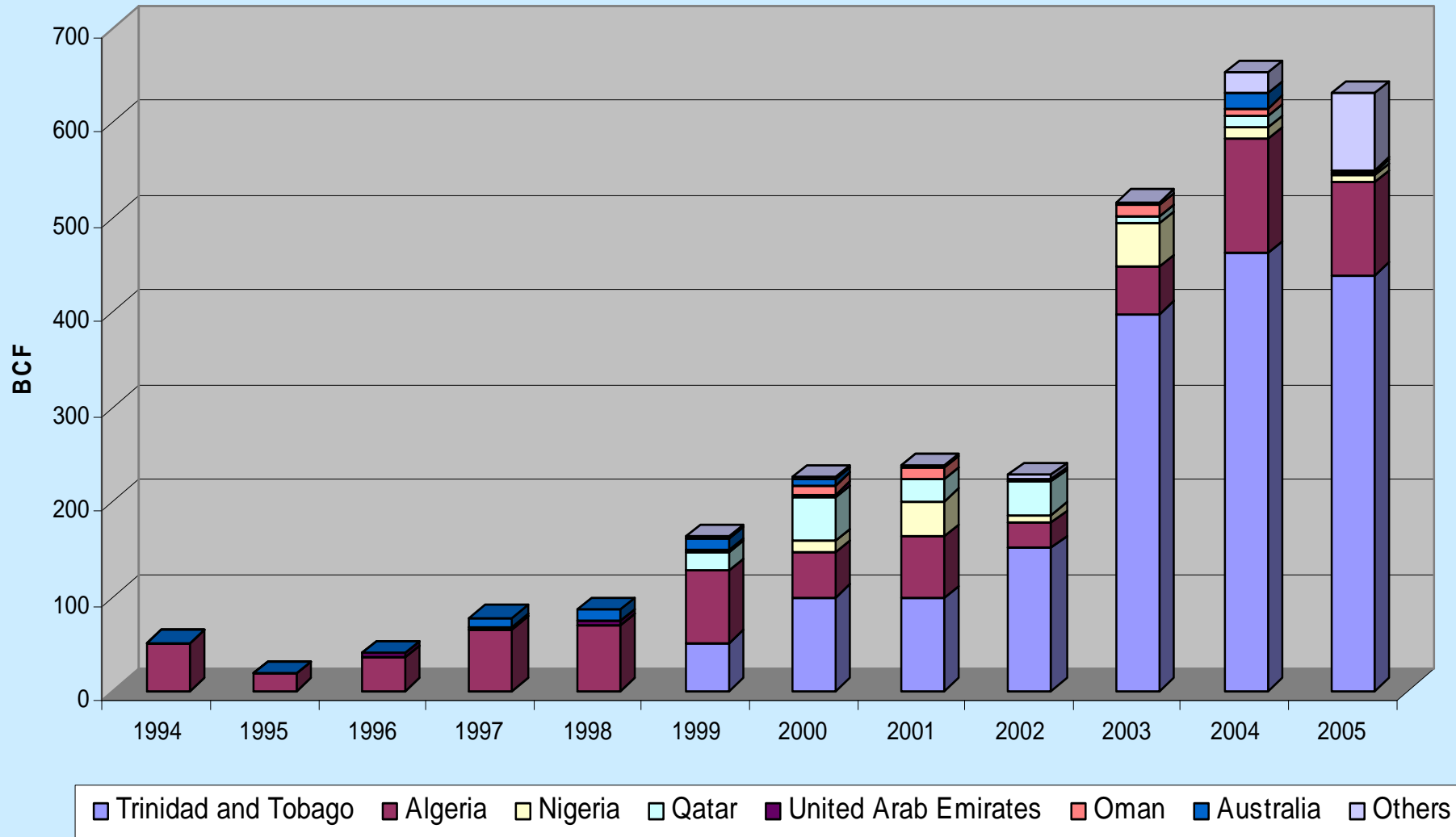
- **1 Natural Gas Liquids Processing Facility (70 MBPD)**
- **4 Liquefied Natural Gas Plant (15.2 MTPA)**
- **10 Ammonia Plants (6,330 MTPA)**
- **1 Urea Plant (550 MTPA)**
- **7 Methanol Plants (6,400 MTPA)**
- **4 Iron and Steel Mills (2,560 MTPA)**
- **4 Power Generation Plants - Powergen (3) & Inncogen**
- **Other**
 - Refinery
 - Cement Manufacture
 - Light Industrial/Commercial Consumers - 96
 - 2 Gas Fired Air Cooling Projects
 - 4000 CNG powered vehicles



USA LNG Imports -1994-2005



T&T Supplied >70% Of USA LNG Imports from 2003-05



Source: US Dept. of Energy



New Initiatives



- **New Industrial Estates**
- **Small scale (2650 bpd) GTL Plant approved (Construction about to commence)**
- **Value Added requirements**
- **-Ammonia to UAN; Methanol to Acetic Acid,**
 - Methanol to Propylene, Methanol to Power**
- **Caribbean Gas Pipeline(feasibility study)**
- **Metals - 2 Al smelters**
- **Downstream LNG Investments**



Major New Projects

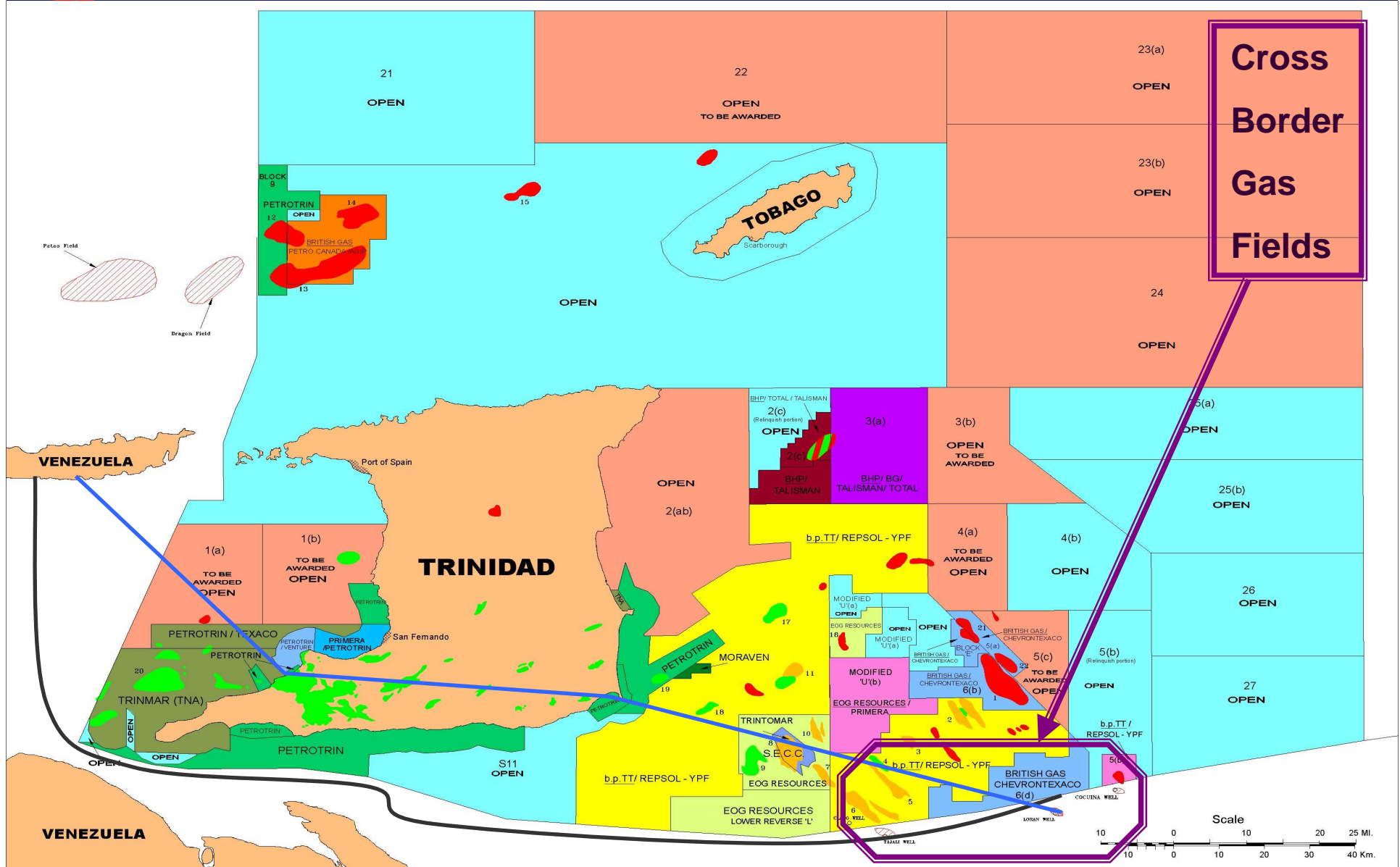


- **CLICO AUM (UAN/Melamine)**
 - 60,000 tpy melamine
 - 1,400,000 tpy UAN (urea ammonium nitrate)
- **First UAN (Ammonium/UAN)**
 - 300,000 tpy ammonia
 - 900,000 tpy UAN
- **Alutrint Aluminum Smelter & Downstream**
 - 125,000 tpy aluminum and downstream products
- **Alcoa Smelter & Downstream**
 - 341,000 tpy aluminum and downstream products
- **Essar Steel HBI (hot briquette iron)**
 - 1,100,000 tpy HBI and 3,300,000 tpy downstream steel slabs and hot rolled coils
- **Union Estate Fertilizer Complex including MTP**
 - 700,000 tpy ammonia
 - 950,000 tpy UAN
 - 460,000 tpy polypropylene and downstream

Total CAPEX – US\$6.5 Billion -- Investment Decisions – 2006-07



Unitization of Cross-Border Reserves





Caribbean Gas Pipeline - Proposed Routing





Government Realizations



Trade and Investment are inexorably linked and positively correlated

**Trinidad and Tobago is a small country
Has a small domestic market**

Economic success best achieved via development of a vibrant export oriented sector

Investment has also been facilitated by Government investment in industrial infrastructure

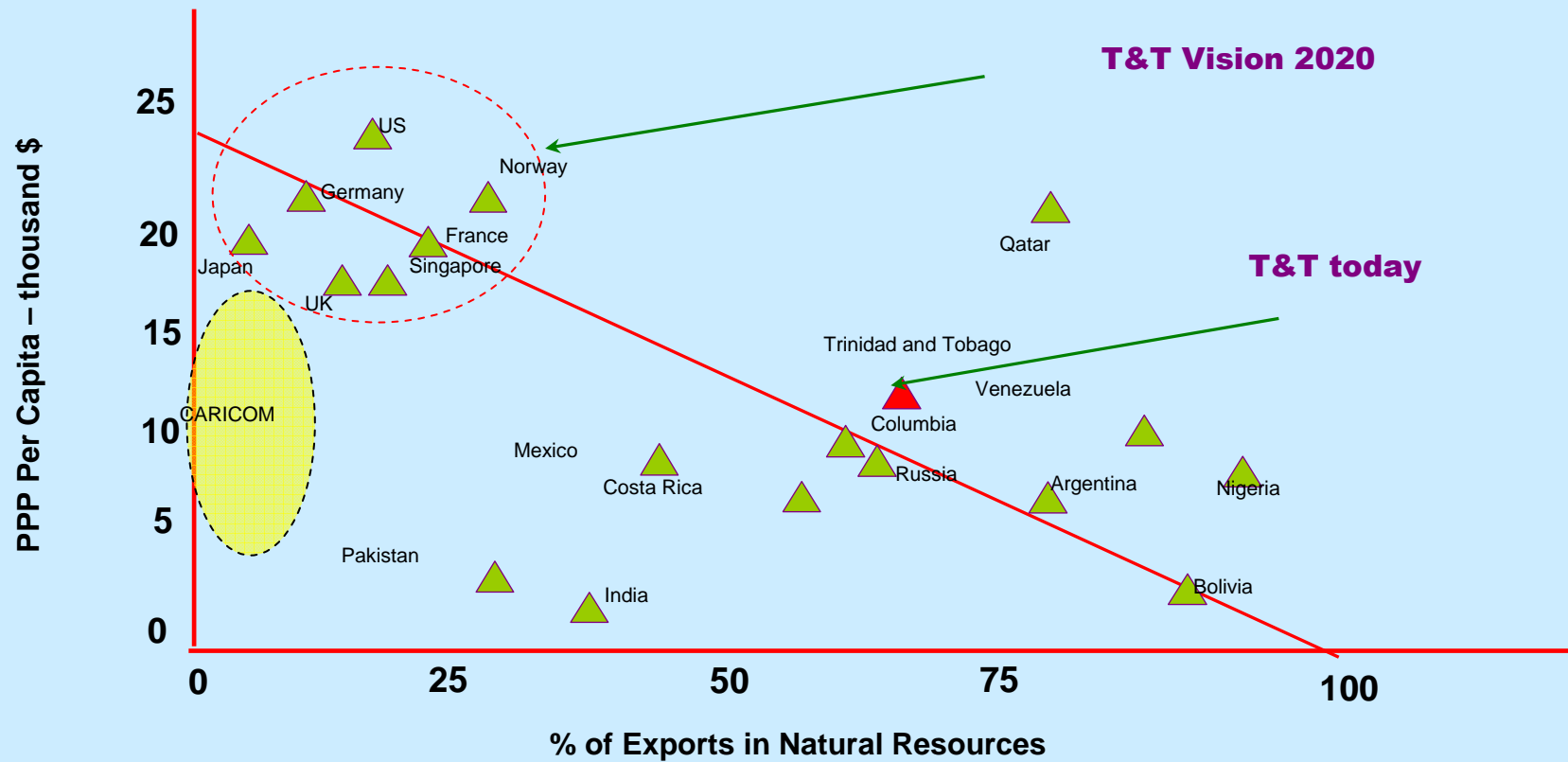
Aim has been to provide a good environment for investment through quick decision-making on major projects



Wealth vs Natural Resources



Relationship Between Natural Resources Exports and Wealth



Note: The correlation coefficient is -0.66

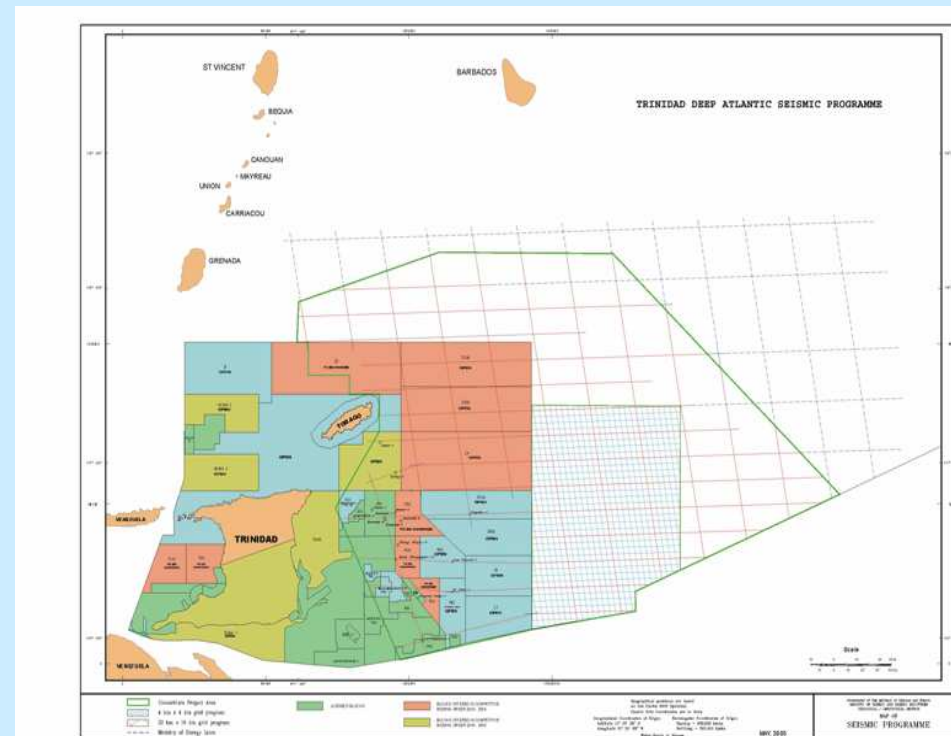
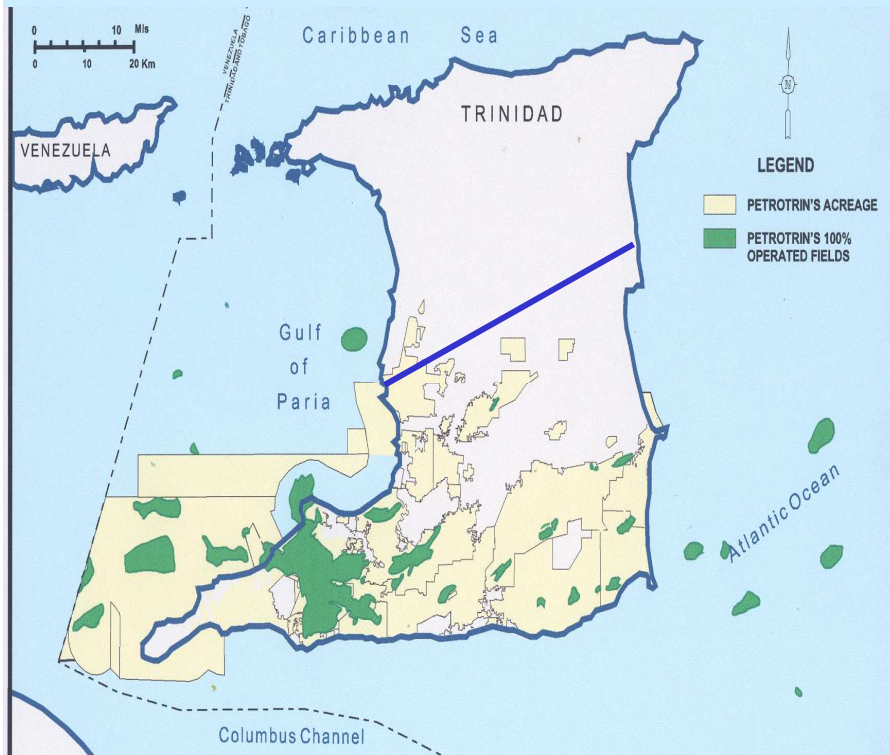


Ensuring Continued Economic Prosperity

Finding New Reserves -- Exploration

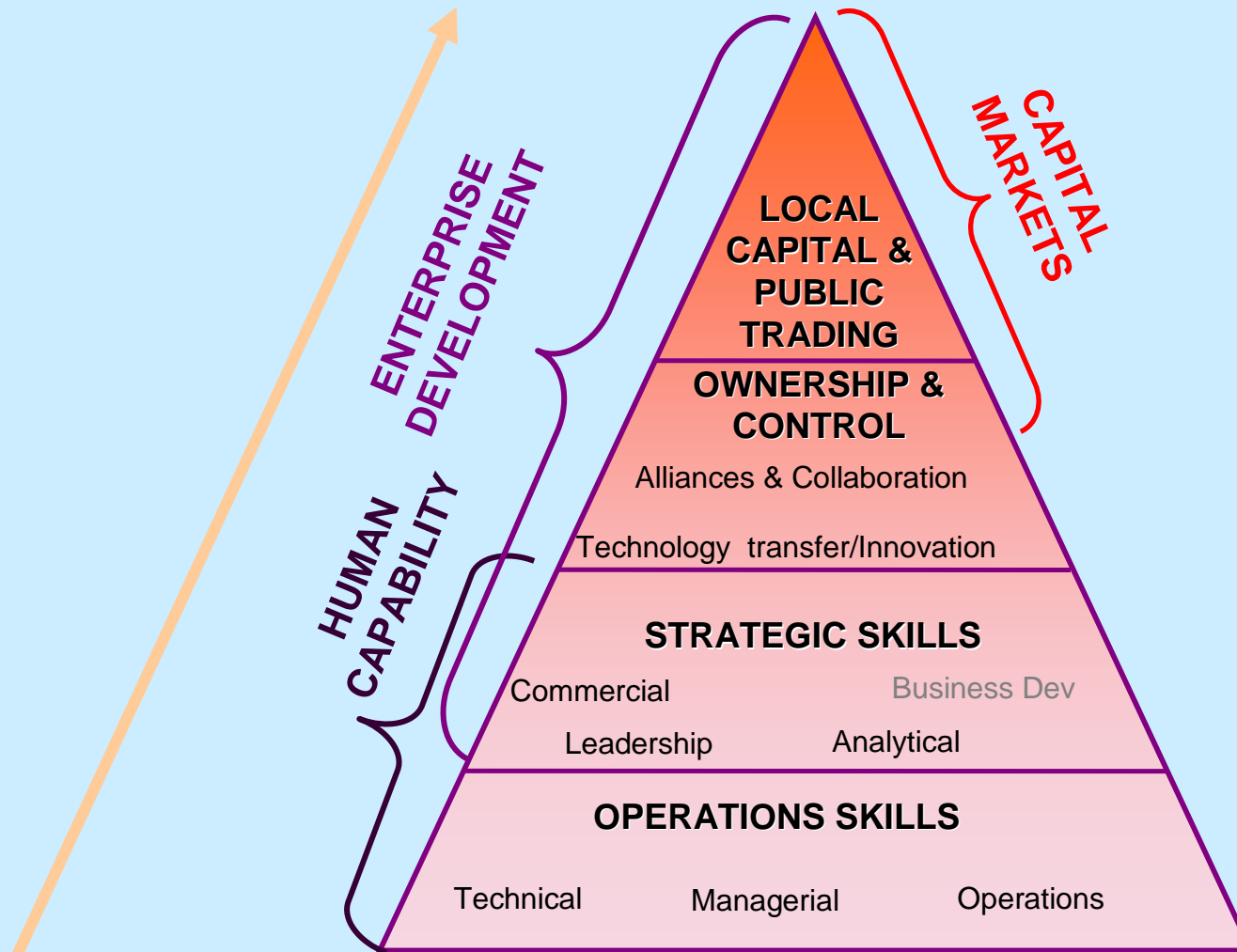


- Phase 1 - Southern Basin Land acreage (Ongoing)
- Phase 2 - Shallow Marine Acreage (Ongoing)
- Phase 3 - Deep Atlantic (Q4 2006)



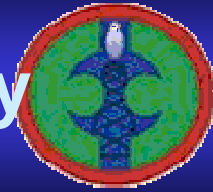


The Local Value Adder





Local Value-Added - Elements of Strategy



OBJECTIVE

Leverage The Energy Sector To Lead To Sustainable Development Of Non-energy Sectors

STRATEGIES

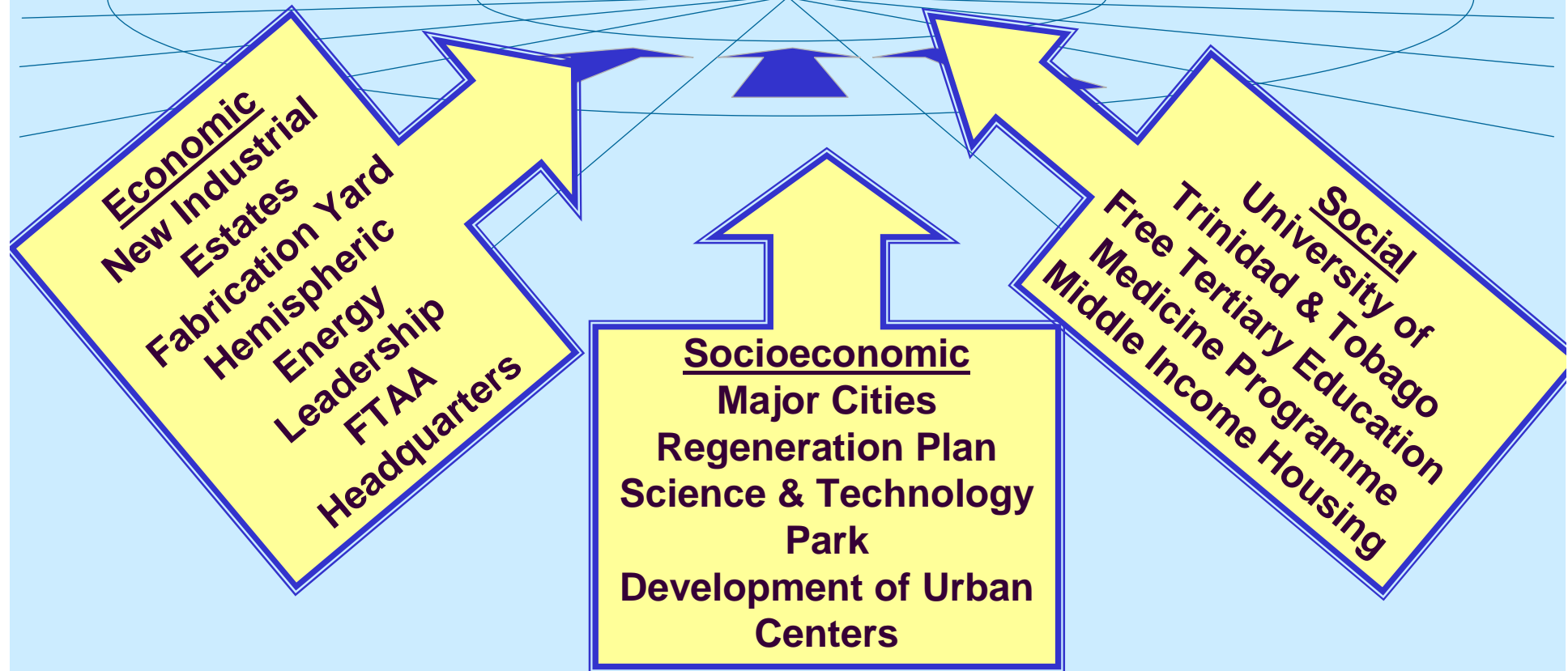
- **Intensify links between energy sector and non-energy sector**
- **Balance investment portfolio to include value added products and services**
- **Increasingly Shift focus away from “capital intensive industries” to “knowledge industries.**
- **Ensure investment is *productive* (future wealth generating) investment rather than sunk cost investment.**
- **Encourage strong export-orientation of goods and services**



Transformation of Wealth into Economic and Social Prosperity



Economic & Social Prosperity





Offshore Platform Fabrication Yard





Government Campus Plaza – 50% Complete





International Waterfront Centre 25% Complete





Brian Lara International Cricket Stadium Construction Underway





National Carnival and Arts Centre Construction about to begin





THANK YOU





Trinidad and Tobago: Where Possibilities are Endless!!



World Cup - Dortmund, June 10, 2006



TRINIDAD AND TOBAGO 2 – SWEDEN 1 !!!