The Economic Contribution of the Midstream & Downstream Energy Sectors in Trinidad & Tobago

RRCT Conference

Richard De La Bastide, PLEA

6 June 2014
The T&T Midstream and Downstream Landscape

• Trinidad and Tobago has track record of developing world class gas based industry (number one exporter of methanol, ammonia in world and global leader in LNG).

• The midstream and downstream sectors are major contributors to Government revenue through equity ownership and taxation.

• The sectors also add value to economy through employment in engineering, construction, operations and maintenance.
Natural Gas Industry

- **3P Reserves**: 32.6 TCF
- **Resource Potential**: 91.3 TCF

Venezuela
Trinidad
Tobago
Port of Spain

- **Bombax gas pipeline**
- **NCMA gas pipeline**

### Important Locations:
- **Columbus Channel**
- **PT. Fortin**
- **San-Fernando**
- **ALNG**
- **Port Lisas**
- **Poinsetta**
- **DAB**
- **Orchid**
- **Iris**
- **Dolphin**
- **Block 5A**
- **BG/Texaco**

### Key Pipeline Points:
- **Kapok**
- **Beachfield**
- **Poui**
- **Immortelle**
- **Flamboyant**
- **Cassia**
- **Chaconia**
- **Hibiscus**
- **Abyssinia**
- **Poul**
- **Flamboyant**
- **30”**
- **Amherstia**
- **Sparrow, Parang and Renegade**
- **SBM**
- **Mahogany**
- **Pt. Lisas**
- **Pt. Fortin**
- **San-Fernando**
- **ALNG**
- **Sparrow, Parang and Renegade**

### Other Key Points:
- **Venezuela**
- **Trinidad**
- **Tobago**
- **Port of Spain**
- **Bombax gas pipeline**
- **NCMA gas pipeline**
T&T Gas Market Structure

Export Market
- LNG
  - Petro-chemicals
    - Electricity
      - Other Manufacturing
  - Metals

Domestic Market
- NGC Buyer/Seller
  - NGC Transmission
    - Upstream Gas

Transmission:
- 57%
- 43%

Source: MEEA
The structure of the petrochemical value chain

Natural Gas

Gas Processing PPGPL

Methanol

Acetic Acid

Formaldehyde & UF Resin

Nitric Acid

Ammonia

Urea

Poly Propylene

UAN

Plastics Industry

Export

Potential

Existing
Midstream and Downstream Plants

11 Ammonia Plants
7 Methanol Plants
1 AUM complex, comprising
  • 1 ammonia plant
  • 1 urea plant
  • 1 nitric acid plant
  • 1 ammonia nitrate plant
  • 1 UAN plant
  • 2 melamine plants

1 Urea Plant
1 NGL Facility
4 DRI Plants
6 Power Generation Plants
4 LNG Trains
1 Crude Oil Refinery

• Contributed c. US$3 billion in GDP (2012)
• Employs roughly 20,000 (inc. temporary jobs)

Source: MEEA, CSO & Ministry of Finance
Contribution to GDP

Petroleum Sector GDP 2002-2012

Source: Ministry of Finance
Midstream and Downstream Contribution to employment

PLEA Safety Passport Assessments from 2013-2014

Source: Energy Chamber
Major issues facing the midstream and downstream energy sector

1. Gas supply fluctuation
2. Future review of upstream/downstream gas contracts
3. Competition for new and existing markets in light of shale gas development
4. Access to skilled personnel
QUESTIONS & COMMENTS