Egyptian Natural Gas Industry Development

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United Nations – Economic Commission for Europe

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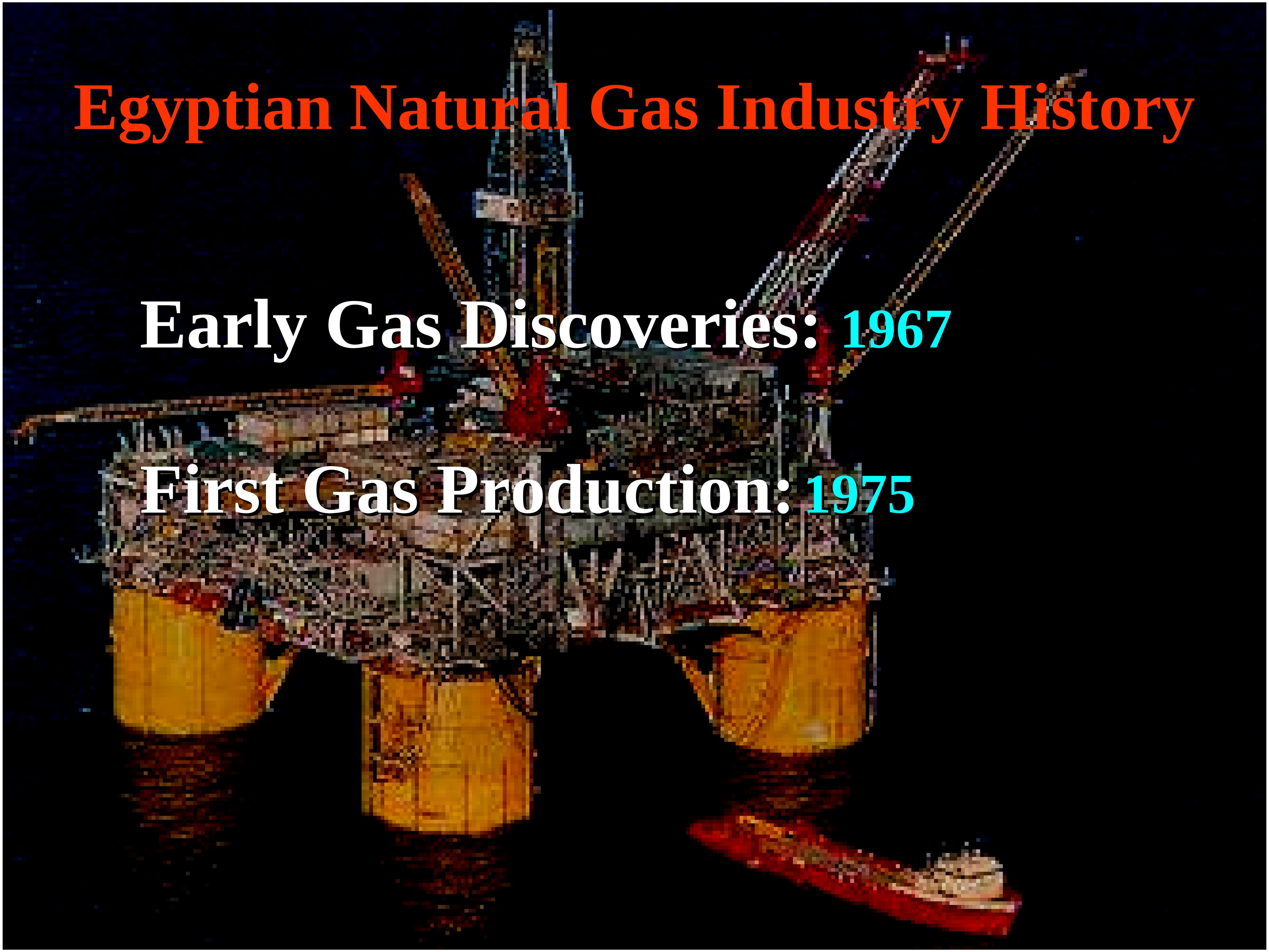
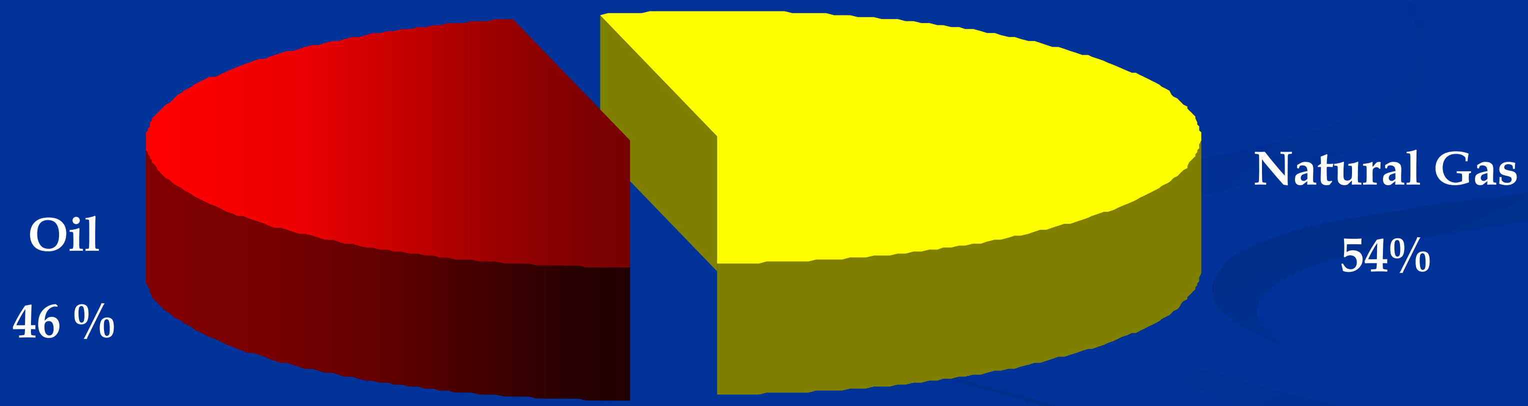
Egyptian Natural Gas Industry History



Early Gas Discoveries: 1967

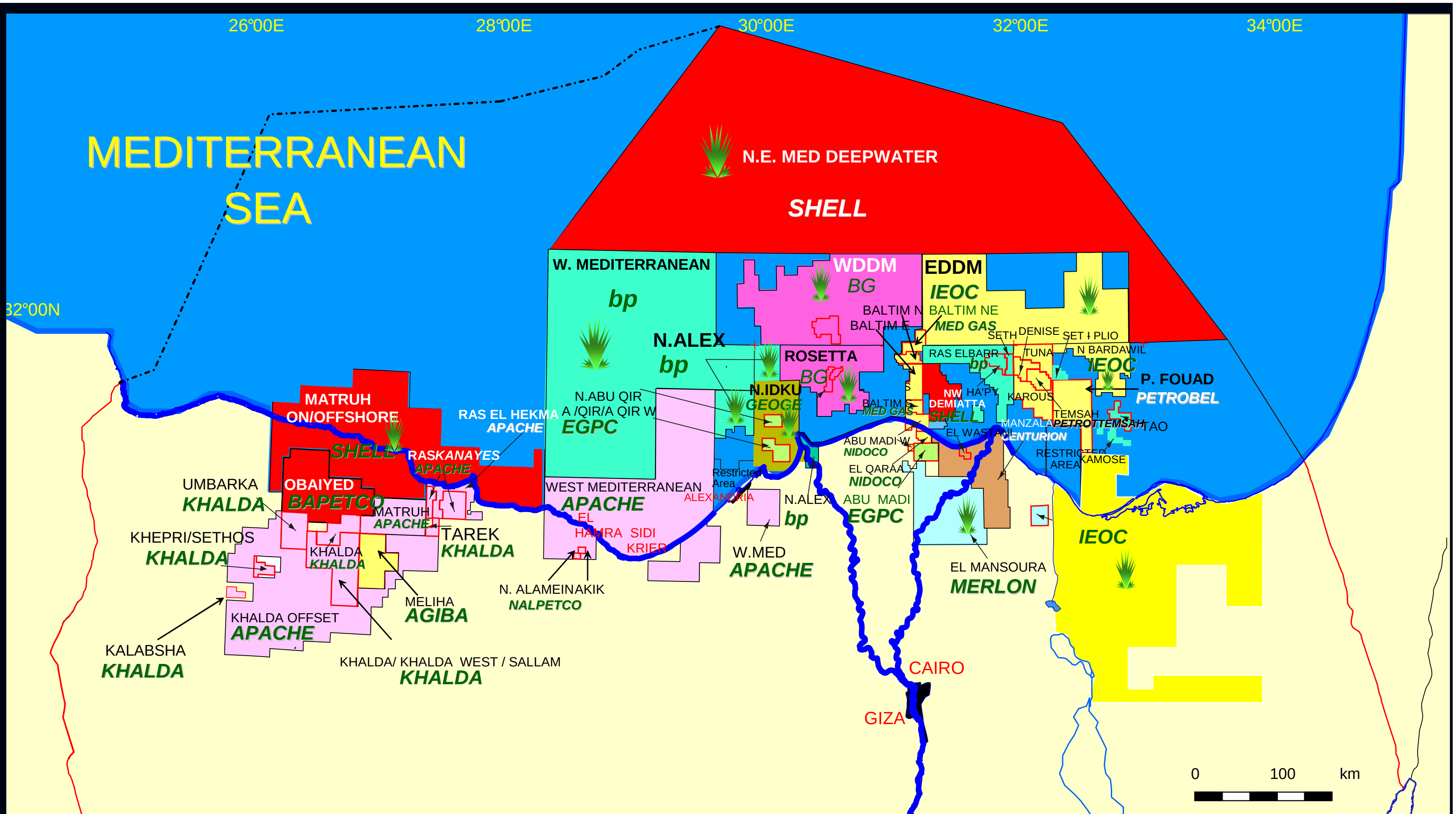
First Gas Production: 1975

Natural Gas Share of Hydrocarbons Energy Production (2005/2006)



Total = 71 Million Tons

Up Stream Activities (Agreements)

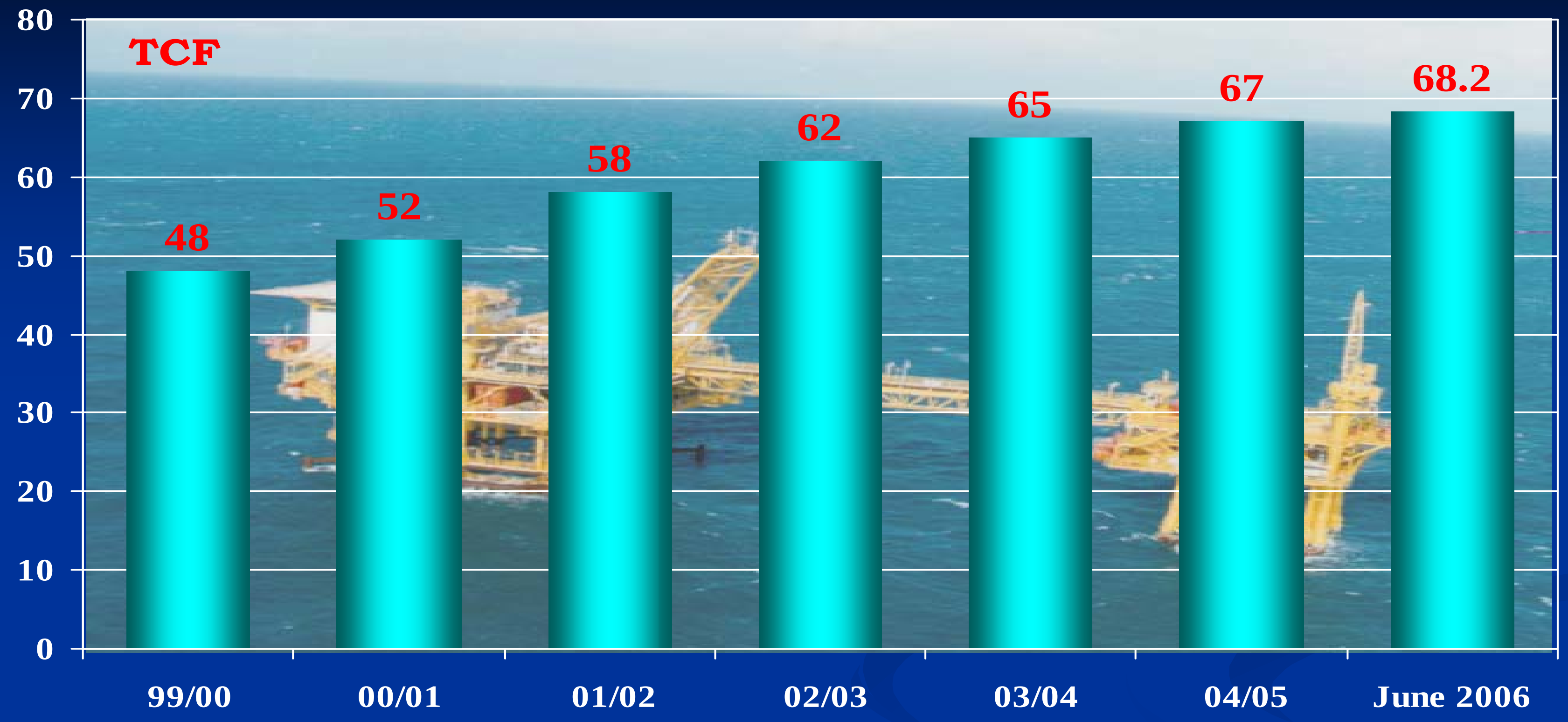


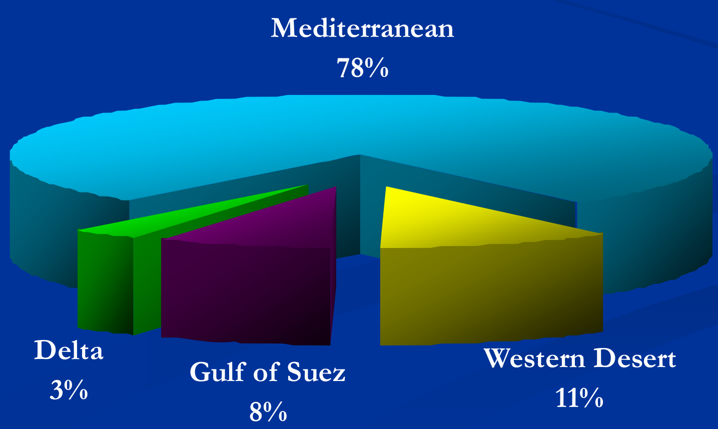
Egypt Gas Acreage Map

APACHE / KHALDA	CENTURION
Bp/ GUPCO	EGPC
BG / RASHPETCO	GEOGE
IEOC / PETROBEL / AGIBA	OPEN AREA
MERLON / EL QANTARA	
SHELL / BAPETCO	

Up Stream Activities (Reserves)

Natural Gas Proven Reserves Development

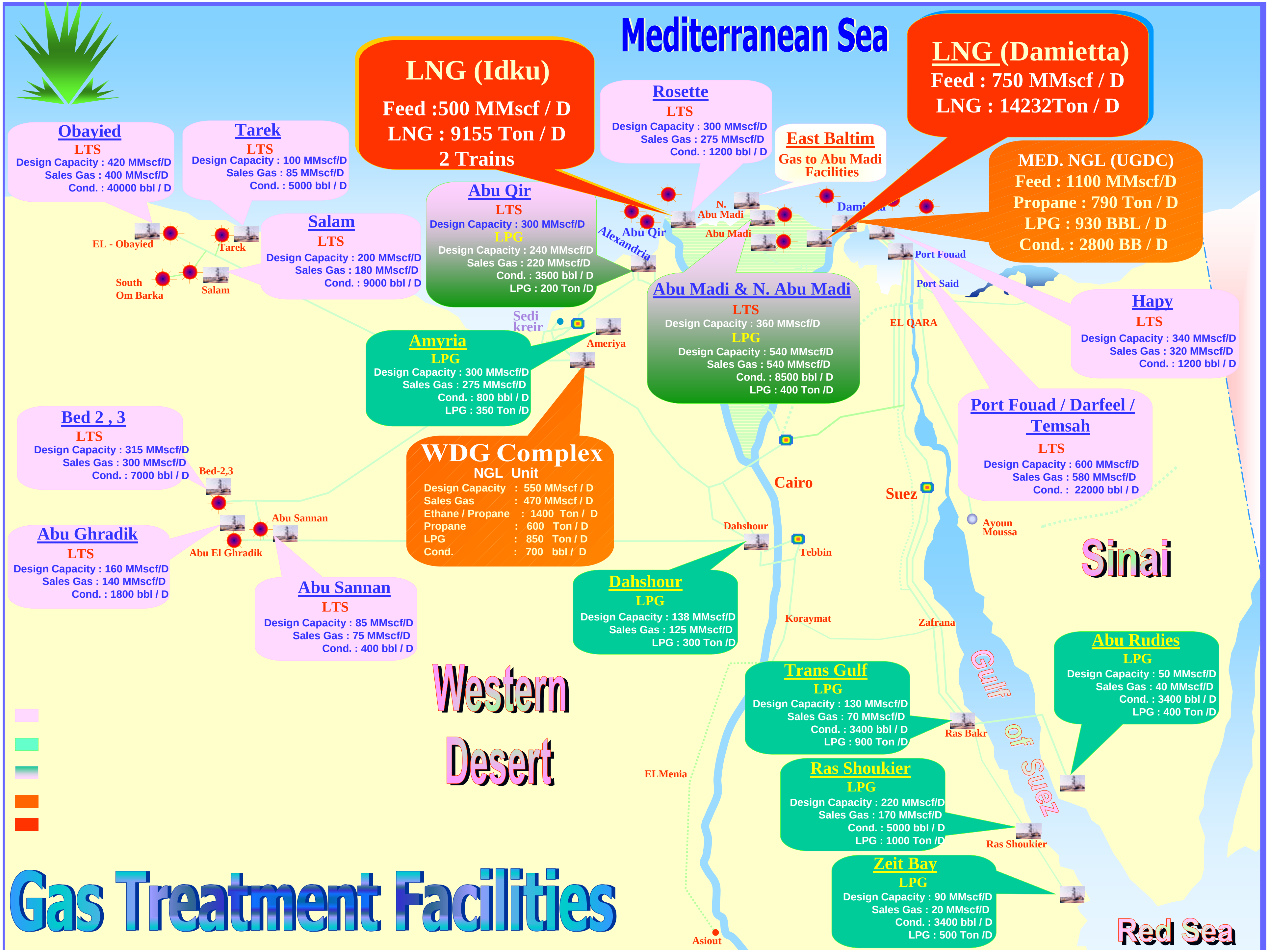




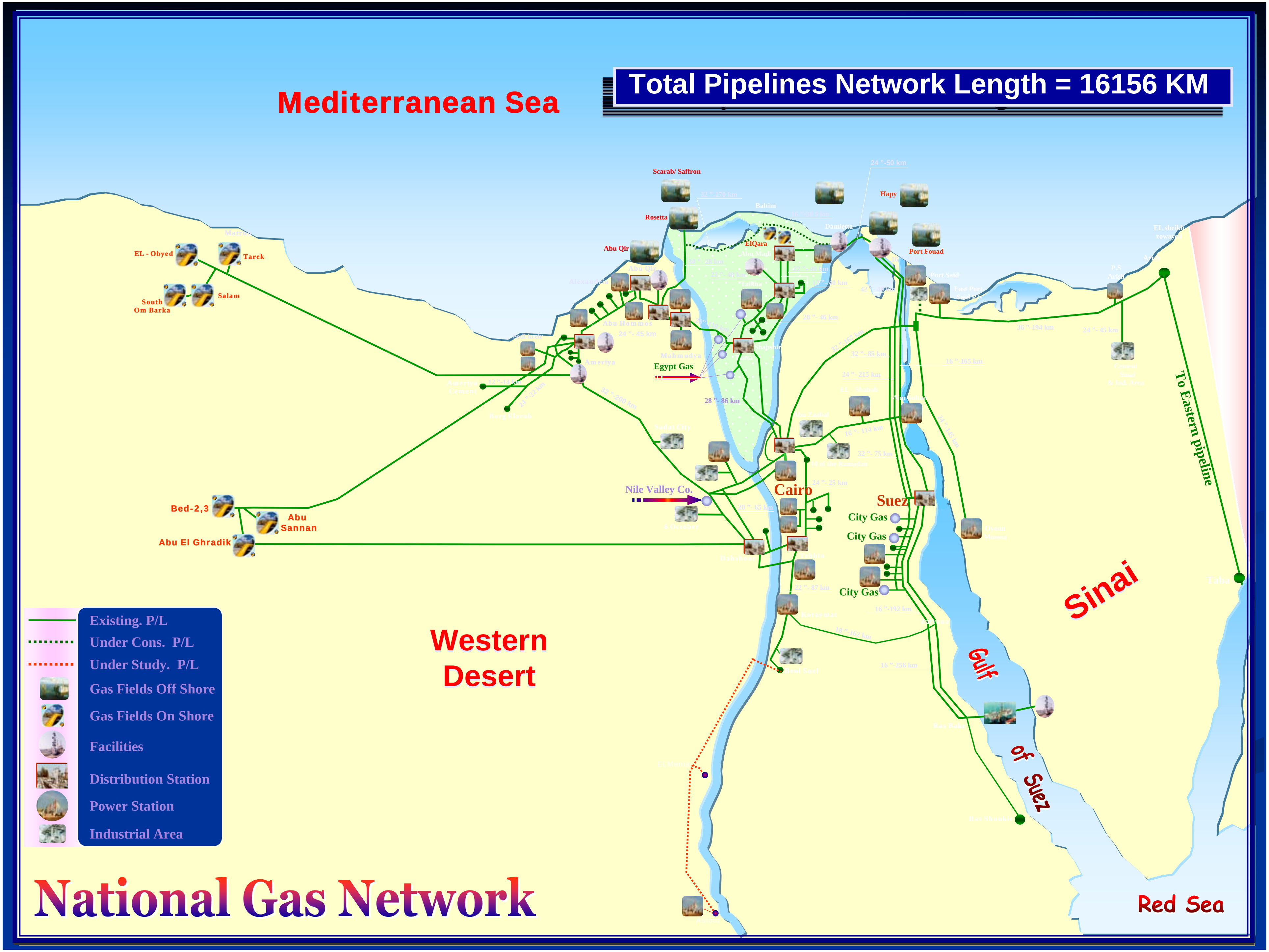
Natural Gas Industry Main Indicators (November 2006)

- Gas Production 5.6 BCF/D
- Gas Sales 5.1 BCF/D
- LPG Production 2.6 K Ton/D
- Propane Production 0.6 K Ton/D
- C_2/C_3 mix Production 1.4 K Ton/D
- Condensates Production 105 KBBL/D



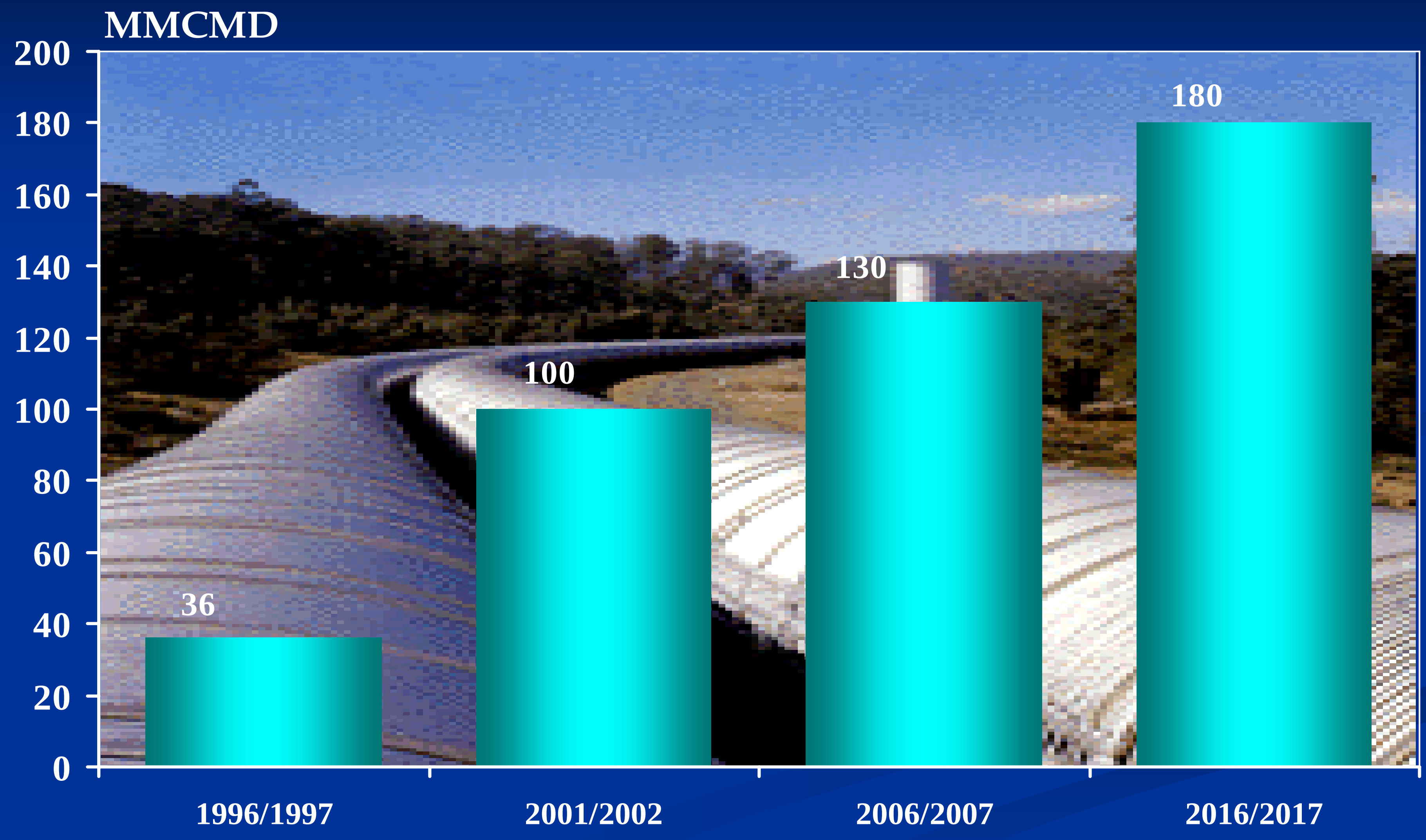


Gas Treatment Facilities
Mediterranean Sea
LNG (Idku)
Feed :500 MMscf / D
LNG : 9155 Ton / D
2 Trains
LNG (Damietta)
Feed : 750 MMscf / D
LNG : 14232Ton / D
Rosette
LTS
Design Capacity : 300 MMscf/D
Sales Gas : 275 MMscf/D
Cond. : 1200 bbl / D
East Baltim
Gas to Abu Madi Facilities
MED. NGL (UGDC)
Feed : 1100 MMscf/D
Propane : 790 Ton / D
LPG : 930 BBL / D
Cond. : 2800 BB / D
Obayied
LTS
Design Capacity : 420 MMscf/D
Sales Gas : 400 MMscf/D
Cond. : 40000 bbl / D
Tarek
LTS
Design Capacity : 100 MMscf/D
Sales Gas : 85 MMscf/D
Cond. : 5000 bbl / D
Salam
LTS
Design Capacity : 200 MMscf/D
Sales Gas : 180 MMscf/D
Cond. : 9000 bbl / D
Abu Qir
LTS
Design Capacity : 300 MMscf/D
LPG
Design Capacity : 240 MMscf/D
Sales Gas : 220 MMscf/D
Cond. : 3500 bbl / D
LPG : 200 Ton /D
Abu Madi & N. Abu Madi
LTS
Design Capacity : 360 MMscf/D
LPG
Design Capacity : 540 MMscf/D
Sales Gas : 540 MMscf/D
Cond. : 8500 bbl / D
LPG : 400 Ton /D
Hapy
LTS
Design Capacity : 340 MMscf/D
Sales Gas : 320 MMscf/D
Cond. : 1200 bbl / D
Amyria
LPG
Design Capacity : 300 MMscf/D
Sales Gas : 275 MMscf/D
Cond. : 800 bbl / D
LPG : 350 Ton /D
Bed 2 , 3
LTS
Design Capacity : 315 MMscf/D
Sales Gas : 300 MMscf/D
Cond. : 7000 bbl / D
WDG Complex
NGL Unit
Design Capacity : 550 MMscf / D
Sales Gas : 470 MMscf / D
Ethane / Propane : 1400 Ton / D
Propane : 600 Ton / D
LPG : 850 Ton / D
Cond. : 700 bbl / D
Port Fouad / Darfeel / Temsah
LTS
Design Capacity : 600 MMscf/D
Sales Gas : 580 MMscf/D
Cond. : 22000 bbl / D
Abu Ghradik
LTS
Design Capacity : 160 MMscf/D
Sales Gas : 140 MMscf/D
Cond. : 1800 bbl / D
Abu Sannan
LTS
Design Capacity : 85 MMscf/D
Sales Gas : 75 MMscf/D
Cond. : 400 bbl / D
Dahshour
LPG
Design Capacity : 138 MMscf/D
Sales Gas : 125 MMscf/D
LPG : 300 Ton /D
Abu Rudies
LPG
Design Capacity : 50 MMscf/D
Sales Gas : 40 MMscf/D
Cond. : 3400 bbl / D
LPG : 400 Ton /D
Trans Gulf
LPG
Design Capacity : 130 MMscf/D
Sales Gas : 70 MMscf/D
Cond. : 3400 bbl / D
LPG : 900 Ton /D
Ras Shoukier
LPG
Design Capacity : 220 MMscf/D
Sales Gas : 170 MMscf/D
Cond. : 5000 bbl / D
LPG : 1000 Ton /D
Zeit Bay
LPG
Design Capacity : 90 MMscf/D
Sales Gas : 20 MMscf/D
Cond. : 3400 bbl / D
LPG : 500 Ton /D
EL - Obayied
Tarek
South Om Barka
Salam
N. Abu Madi
Abu Madi
Abu Qir
Alexandria
Port Fouad
Port Said
Sedi kreir
Ameriya
EL QARA
Bed-2,3
Abu Sannan
Abu El Ghradik
Cairo
Suez
Dahshour
Tebbin
Ayoun Moussa
Sinai
Koraymat
Zafrana
Gulf of Suez
Western Desert
Ras Bakr
ELMenia
Ras Shoukier
Asiout
Red Sea


Total Pipelines Network Length = 16156 KM
Mediterranean Sea
Scarab/ Saffron
Rosetta
Hapy
Port Fouad
Abu Qir
ElQara
EL - Obyed
Tarek
South
Om Barka
Salam
Egypt Gas
Nile Valley Co.
Cairo
Suez
City Gas
City Gas
City Gas
Bed-2,3
Abu
Sannan
Abu El Ghradik
Western
Desert
Sinai
To Eastern pipeline
Gulf
of
Suez
Red Sea
Existing. P/L
Under Cons. P/L
Under Study. P/L
Gas Fields Off Shore
Gas Fields On Shore
Facilities
Distribution Station
Power Station
Industrial Area
National Gas Network

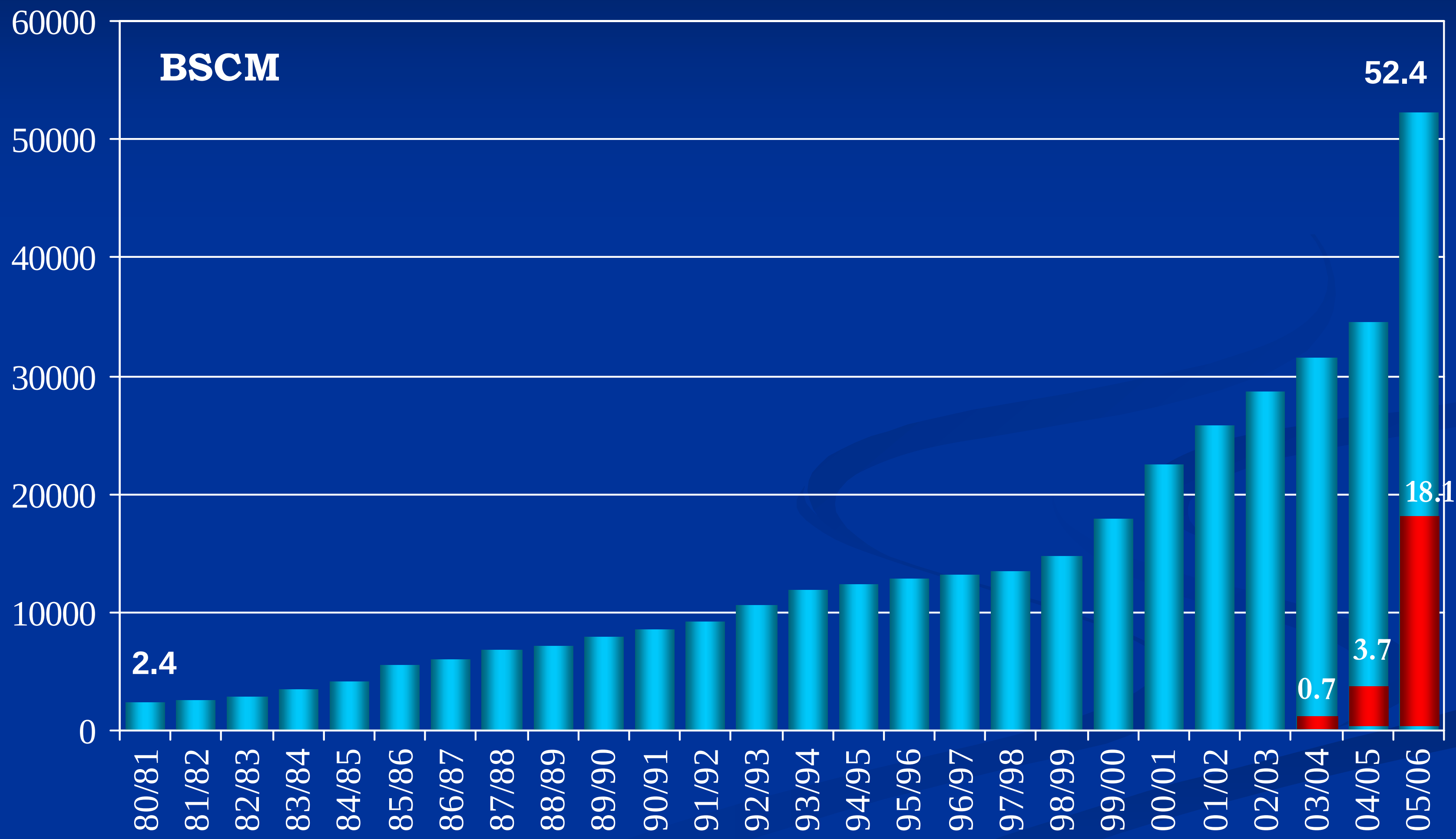
National Gas Transmission Lines Development
(High Pressure)

National Gas Grid Capacity Development



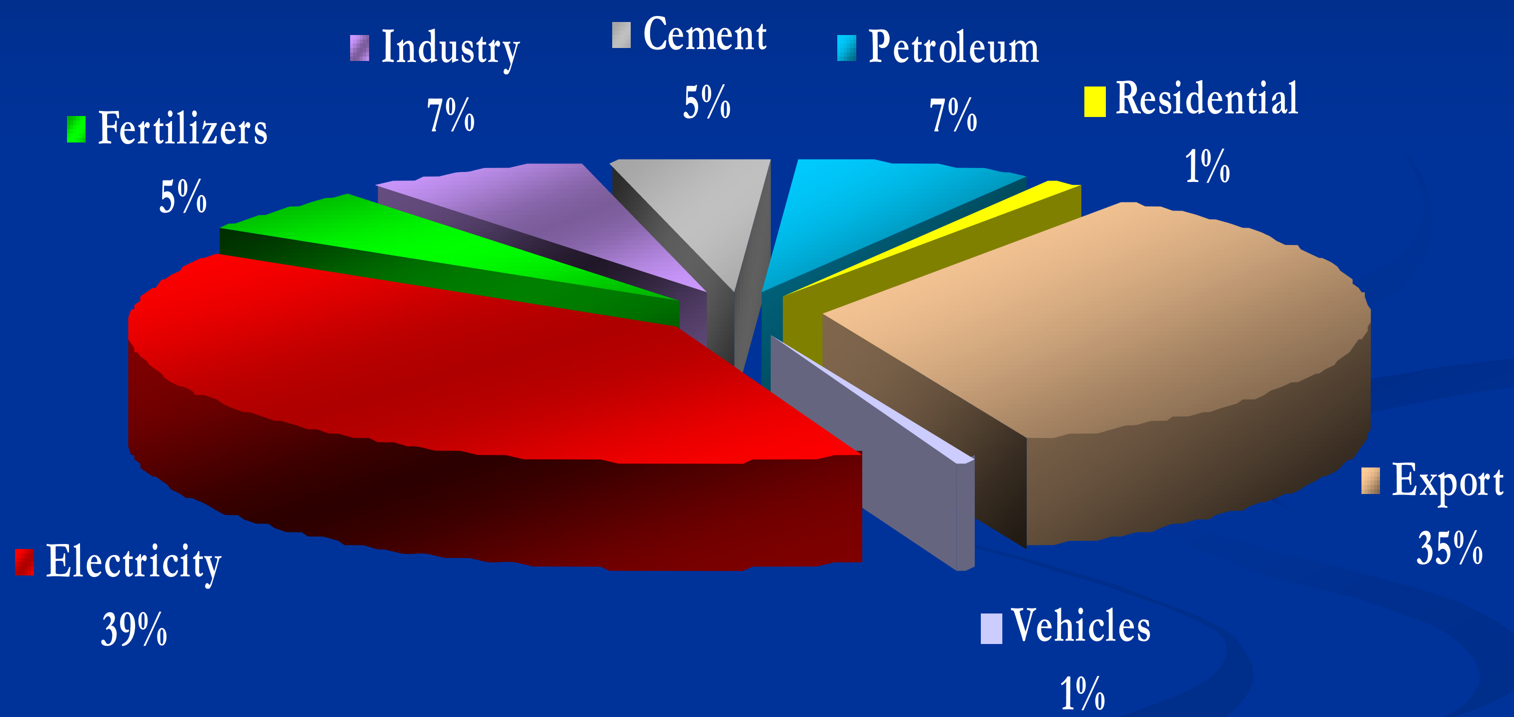
Mid Stream Activities

Natural Gas Demand Development

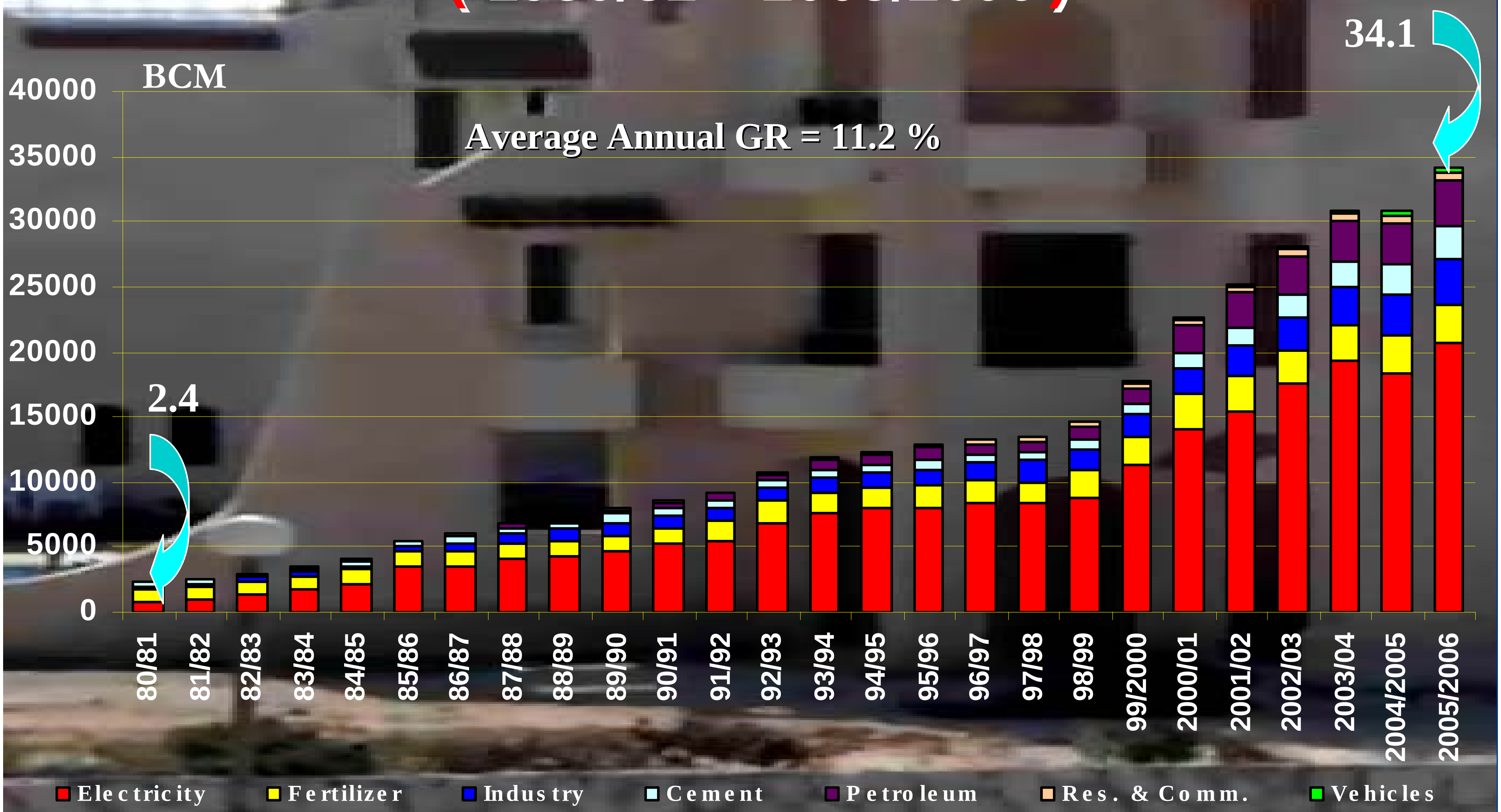


Down Stream Activities

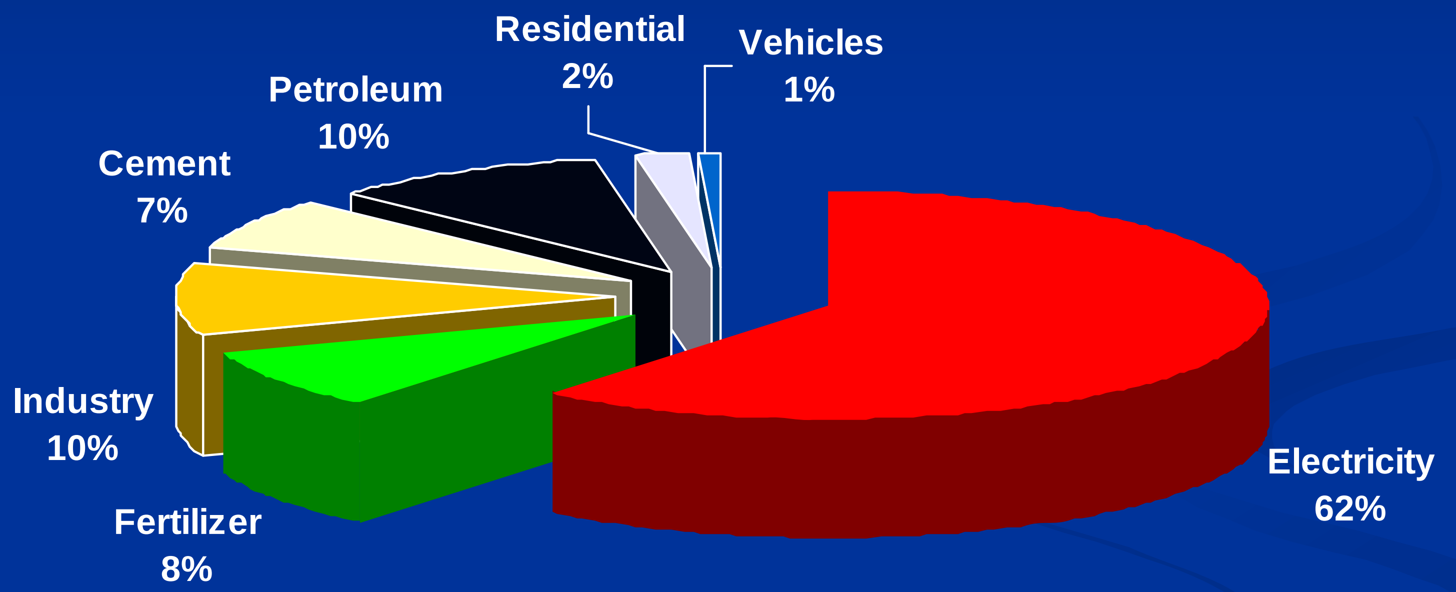
Natural Gas Demand by Sector Share (2005/2006)



Natural Gas Consumption Development
(1980/81 – 2005/2006)



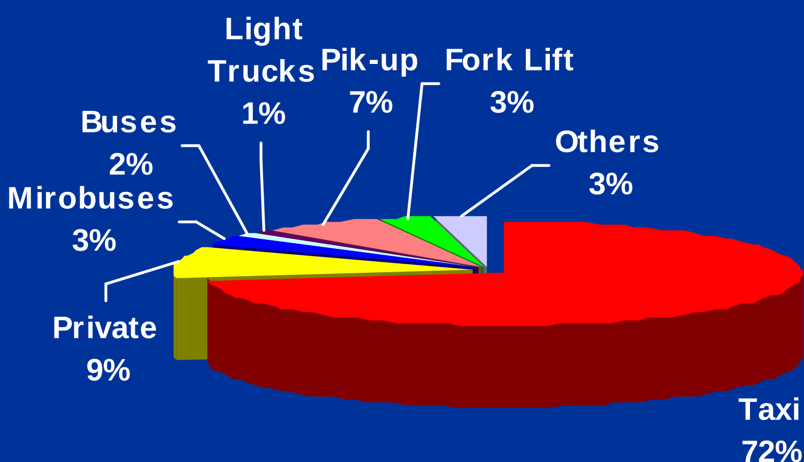
Natural Gas Consumption By Sector Share (2005/2006)



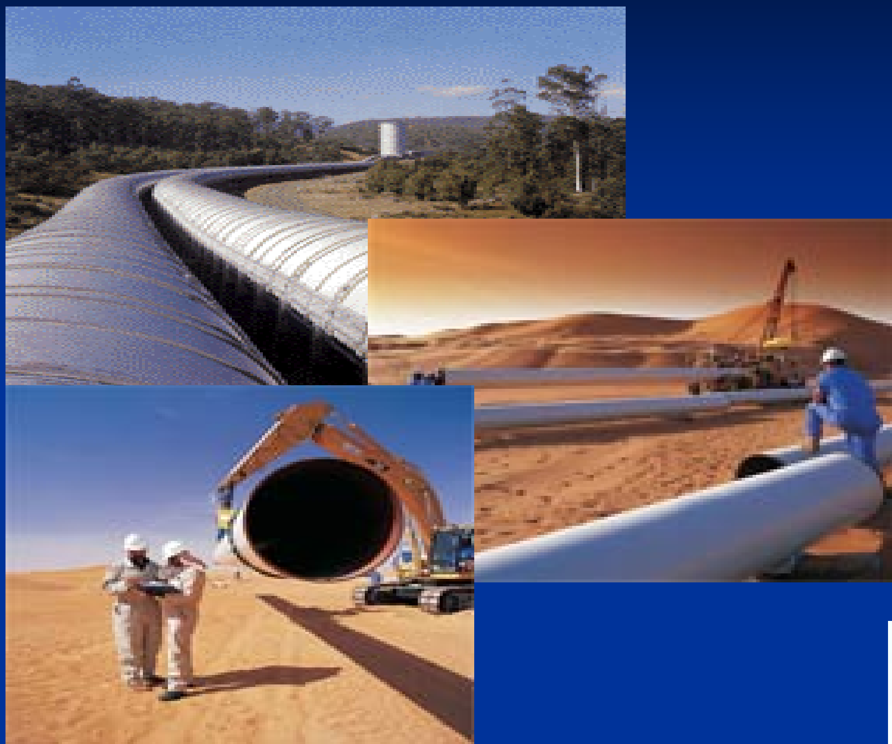
NGV Industry Current Situation

(End of November 2006)

- Operating Companies : 6
- Converted Vehicles : 75 Thousand
- Fueling Stations
  - Operating : 110
  - Under Construction : 17
- Conversion Centers : 54
- Natural Gas Consumption : 27.4 MMCM/Month (Nov.)



Natural Gas Export

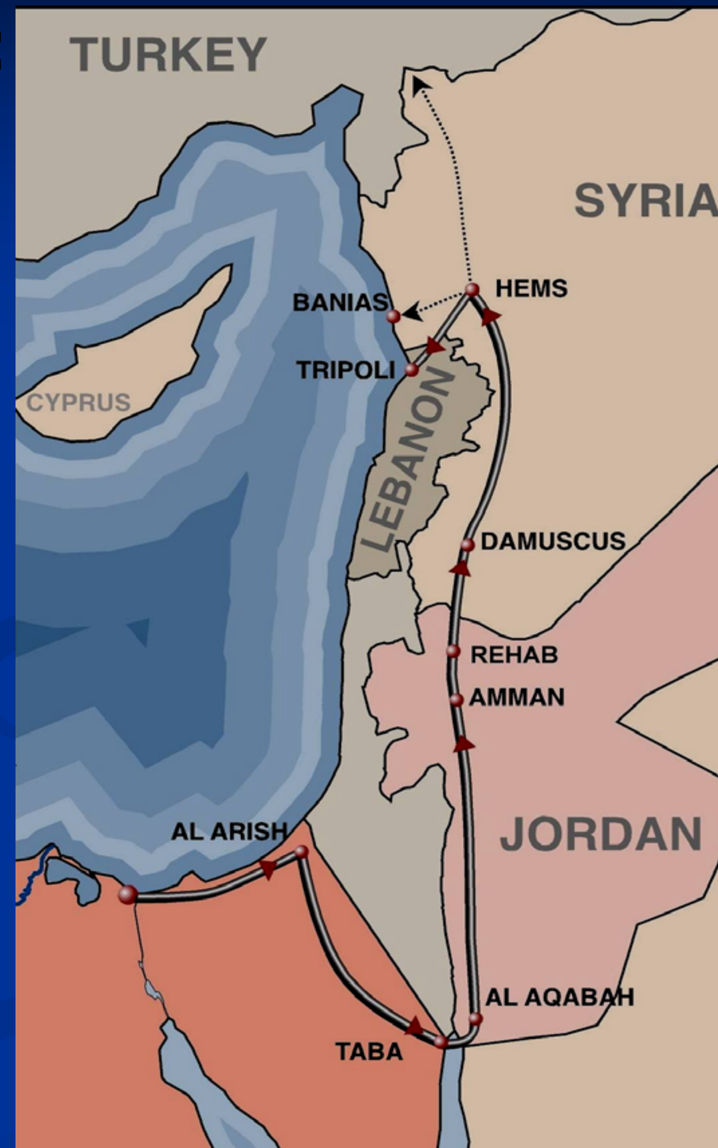


Pipelines

As LNG

Gas Export Projects – Cont.

Through Pipelines:



ArabGas Pipeline:

Total Capacity= 10 BCM

To Jordan, Syria & then to Lebanon, Cyprus and Europe

"Phase I " To Jordan:

(Al Arish – Taba- Aqabah)

Agreement : Signed in Jan. 2001.
Export : 1.1 - 3 Billion CM / Y.
Investment : US $ 200.
Operation : July 2003.11

“Phase II ” Aqaba–Rehab :

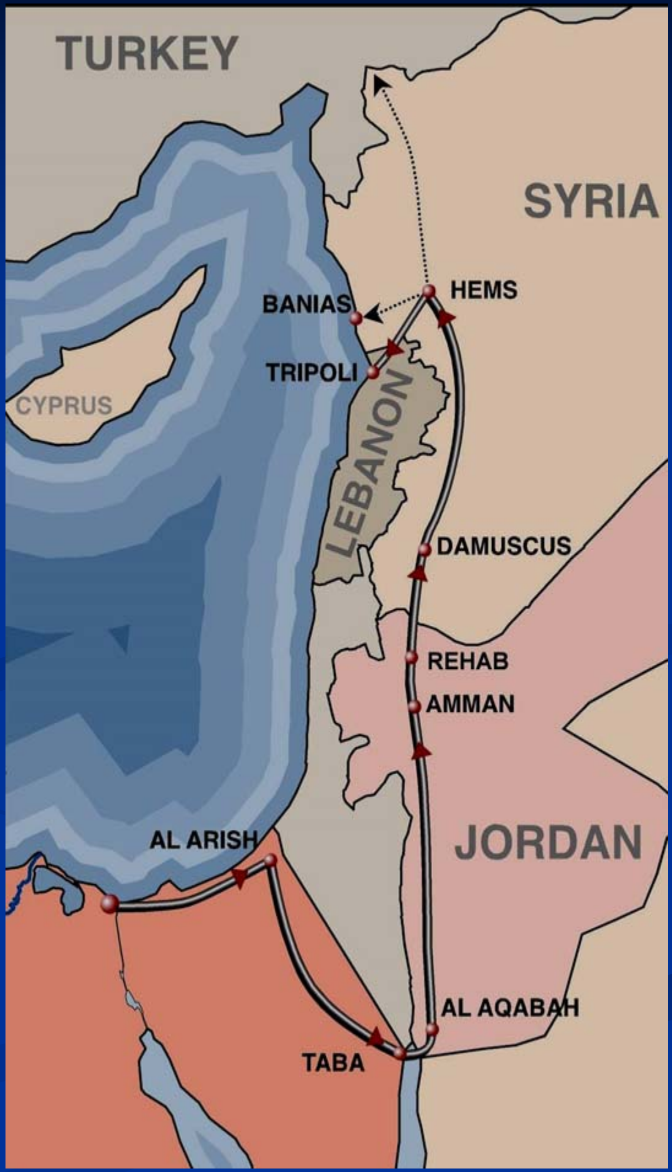
36”/393 Km Pipeline System

Investments: US $ 270 - 300 million

“Phase III ” Jordan/Syria/Turkey

36”/ 540 Km Pipeline System

Investments: US $ 400 - 500 million



As LNG: Two Projects

First Project with Union Fenosa (at Damietta):

- Contract was signed in July 2000.
- One train of a total capacity of 7.6 BCM annually (4.8 million tons LNG).

Investment: over US $ 1.3 billion

(**EGAS 20% & UF 80%)**

•Operation: end of 2004.

Export of the first LNG Cargo: Jan. 20, 2005

Gas Exports Projects – Cont.

The Second Project with BG, Petronas, GDF, EGPC & EGAS (at Idku):

- Contract was signed in April 2001.
- Two trains of total capacity 12 BCM annually (7.2 MM tons).
- Investment: **US $ 1.9 billion**
- **Investment Shares:**

  EGPC & EGAS 24%,
  BG, Petronas 35.5% each,
  GDF 5%

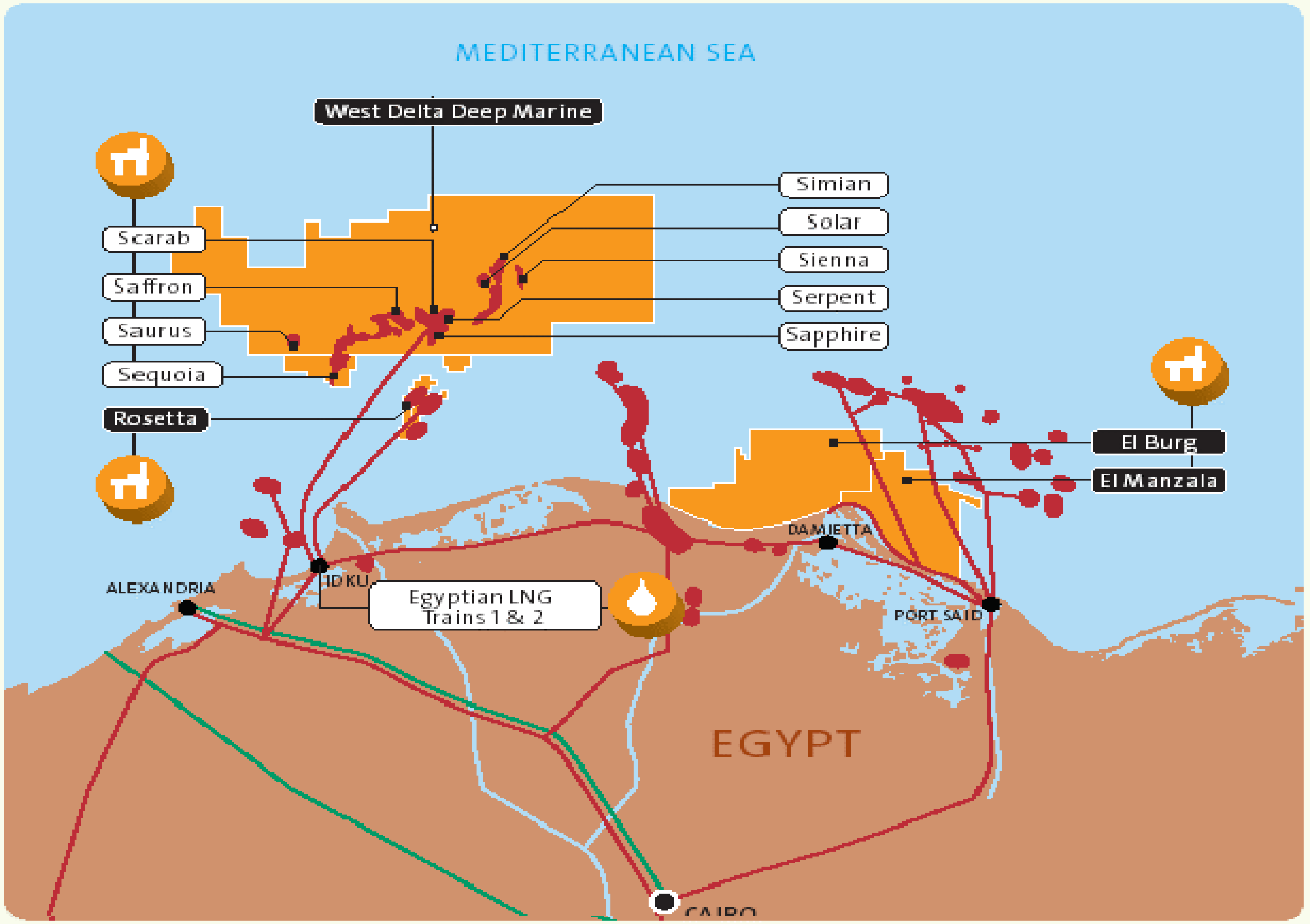
- Operation: mid- 2005.

Export of the first LNG Cargo: May 2005

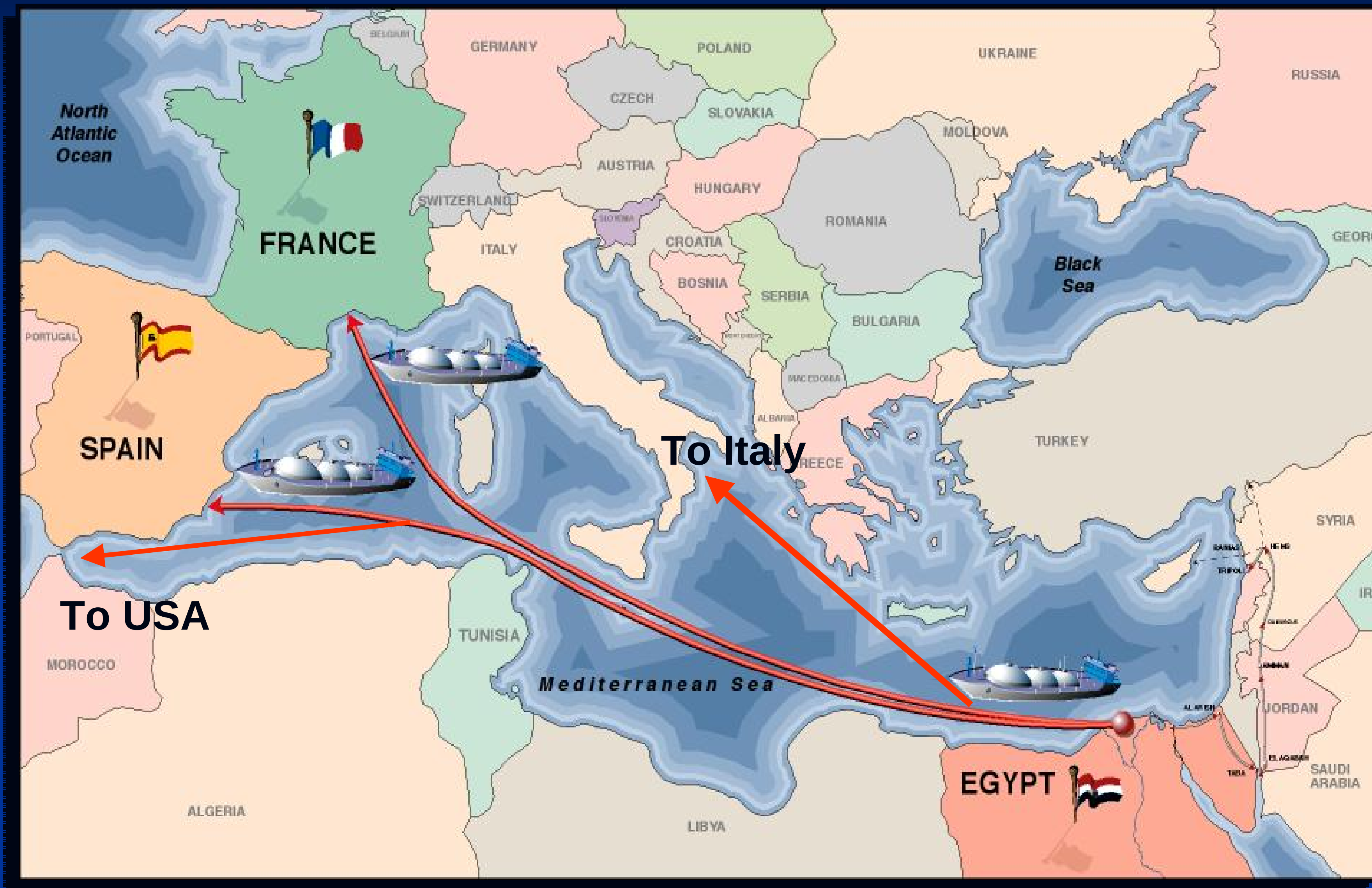
Export of the first LNG cargo from train two: September 2005

2nd Project in Idku (Alex.)

LNG Projects



Egyptian LNG Export



NGL Recovery Development Project (UGD)

Objective :Extract Gas Valuable Derivatives

Capacity :1100 MMSCFD from Offshore Gas Field North Port Said

Operation :End 2004

Ann. Products : 330 thousand tons LPG (local market)

280 thousand tons propane (export)

500 thousand tons ethane (feedstock for Petrochemical industry)

1 million barrel condensates (local refineries)

Production & Export Started January 2005

Thank You