

POWER SECTOR ISSUES



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A Brief Overview of Engro Energy

- ECPL has more than 40 Years of Experience of Synergizing Resources i.e. Financial, Human and technology to carve out challenging and innovative solutions for country needs
- **ECPL Urea Business :**
 - Capacity Increased from 173KT to 268 KT 1968
 - Major Expansion to 600KT – Relocation Project to
 - Current Capacity 950 KT through implementation of Several Revamp & De-bottlenecking Projects Date
- **Launched Urea Business's Major Expansion :** 2007
 - World Biggest Single Train Urea Plant worth over US\$1Billion

Introduction to Engro – Cont.



- **Set up Two Fully Functional JV Companies :**

- Engro Vopak Terminal Ltd. 1997
- Engro Polymer & Chemicals Ltd. 1999
(Major Expansion underway)

- **Launched Three New Businesses :**

- NPK Fertilizer 2001
- Foods (Major Expansion underway) 2006
- Energy 2006

- **Acquired Majority Stake in a Knowledge Based Company :**

- Engro Innovative Automation Ltd 2003
 - Setup a Regional Office in Dubai 2006
 - Bought an IT Company in US 2007

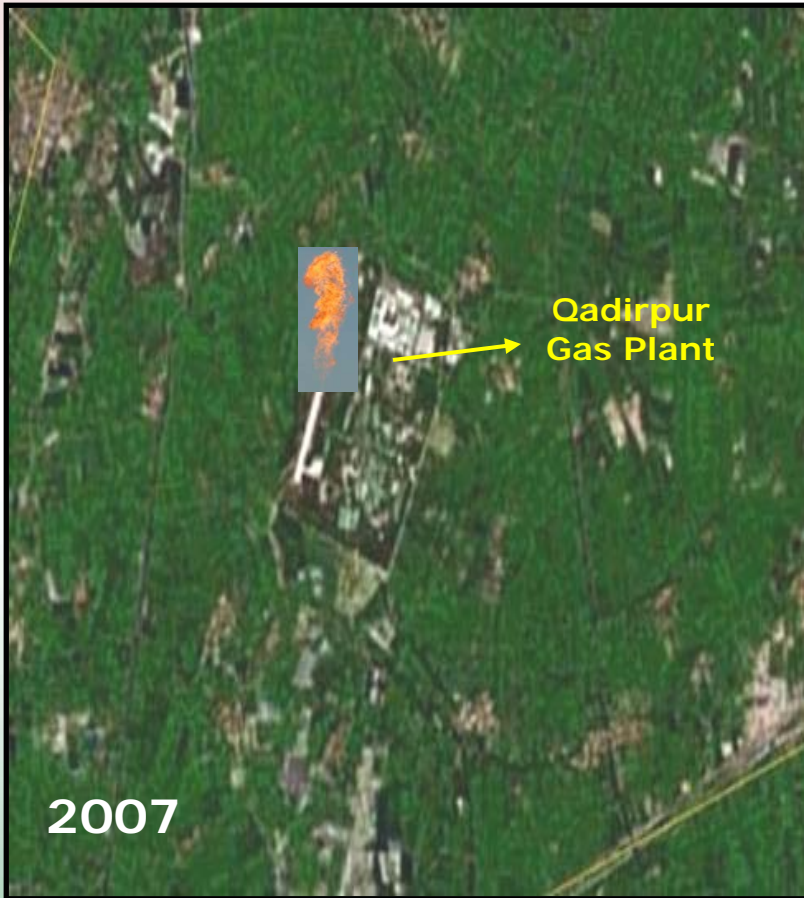
Qadirpur IPP Project



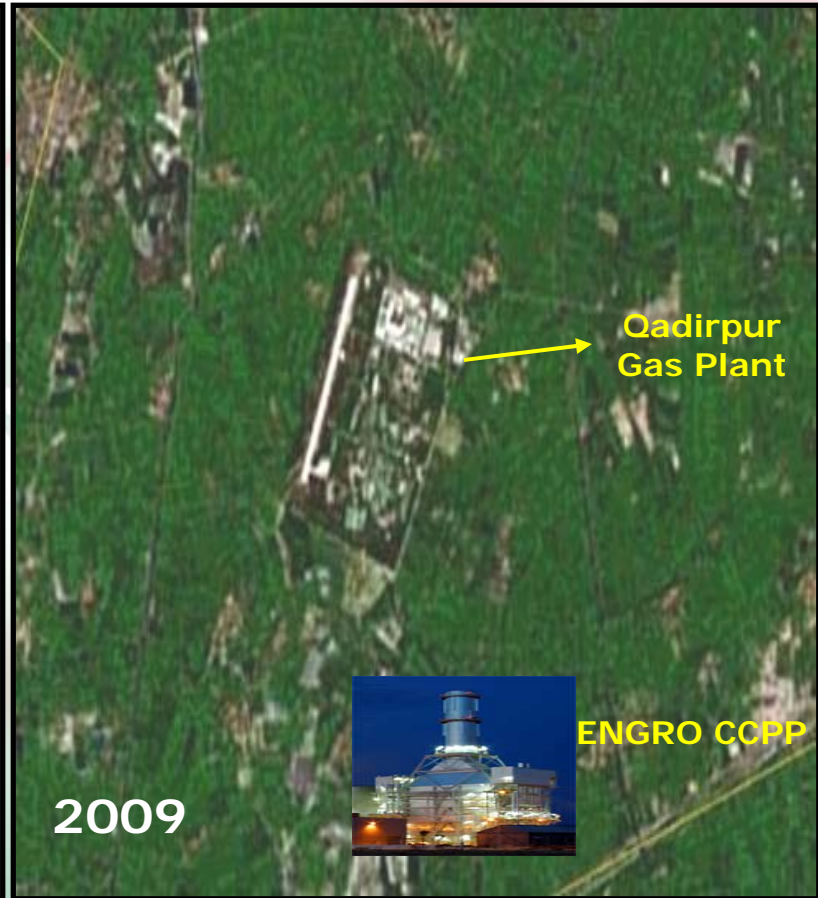
“The Project is Unique as it will convert Low Btu High Sulphur Content Permeate Gas, which is currently being Wasted and Flared, into much needed Electric Power by the Country”



Project Impact



2007



2009



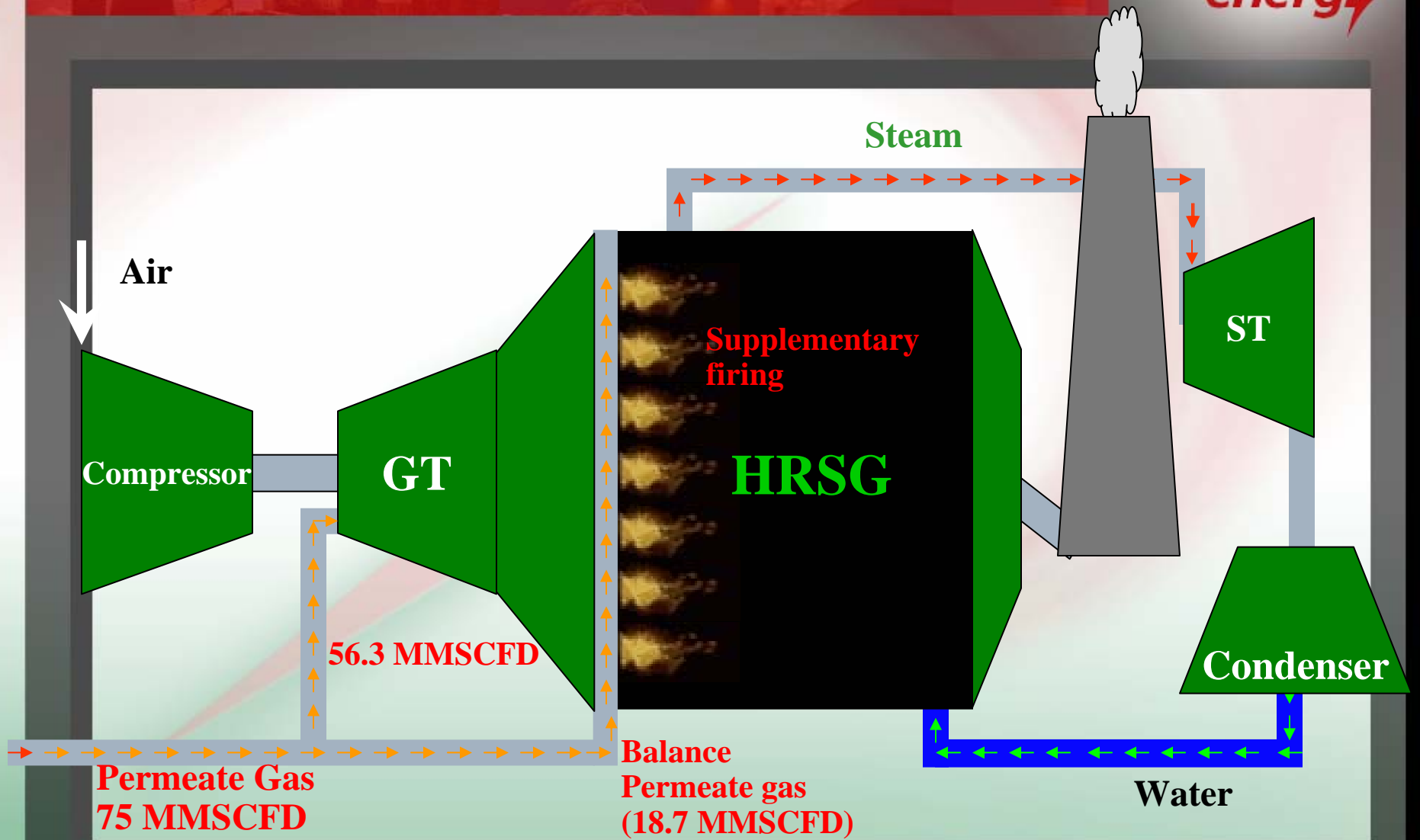
ENGRO CAPP

Salient Features of Qadirpur IPP

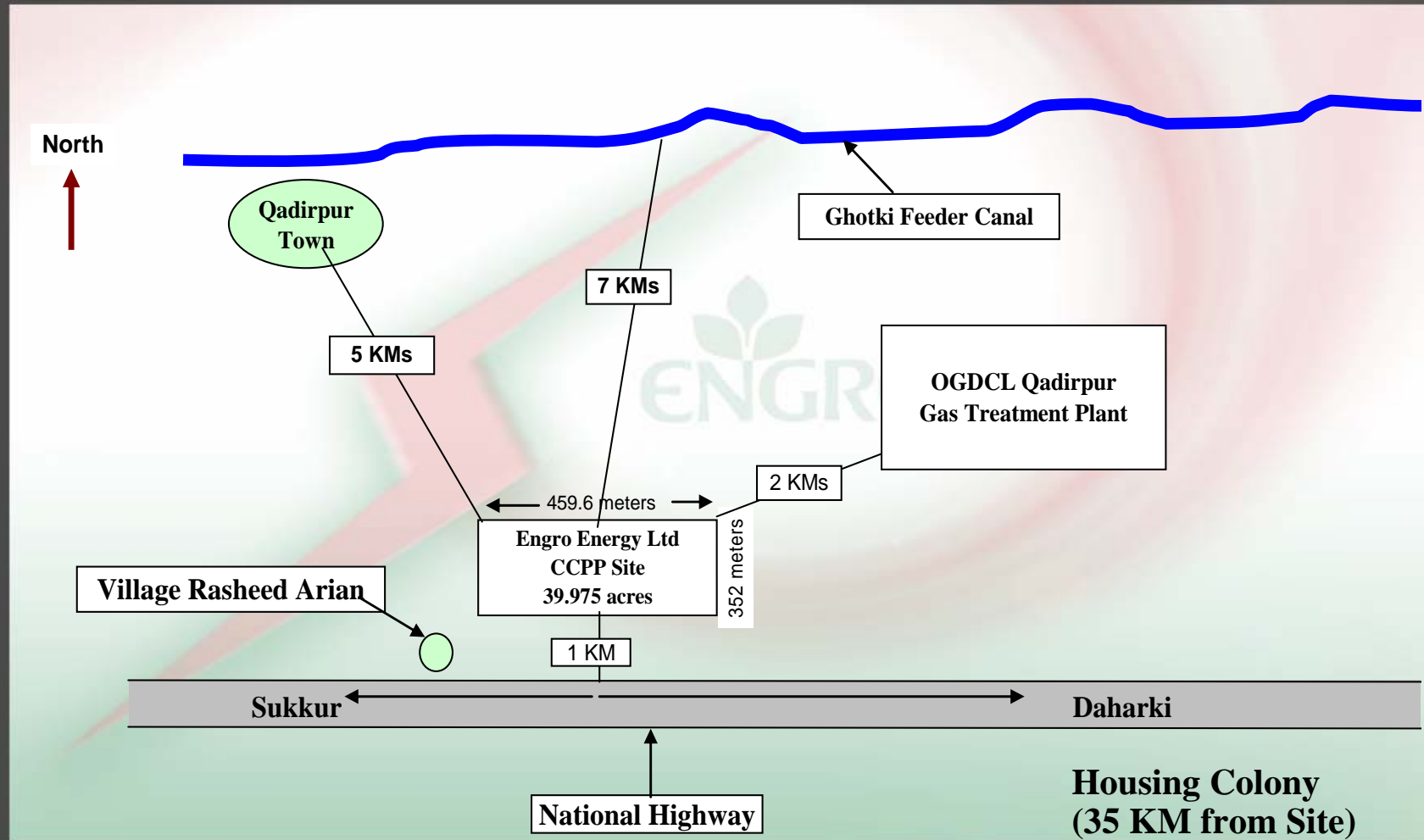


- **Engro Energy** was incorporated under Companies Ordinance act 1984 in Feb 2006 to undertake diversification initiative in Energy & Power Sector
- 100 % Owned Subsidiary of Engro Chemical Pakistan Limited
- First Project on Foreign Financing under 2002 Policy
- 216.8 MW Capacity with Supplementary Firing Configuration adopted to utilize all the allocated Permeate Gas (75MMSCFD) to eliminate flaring of scarce natural resource

Configuration



Project Location



Project Development History

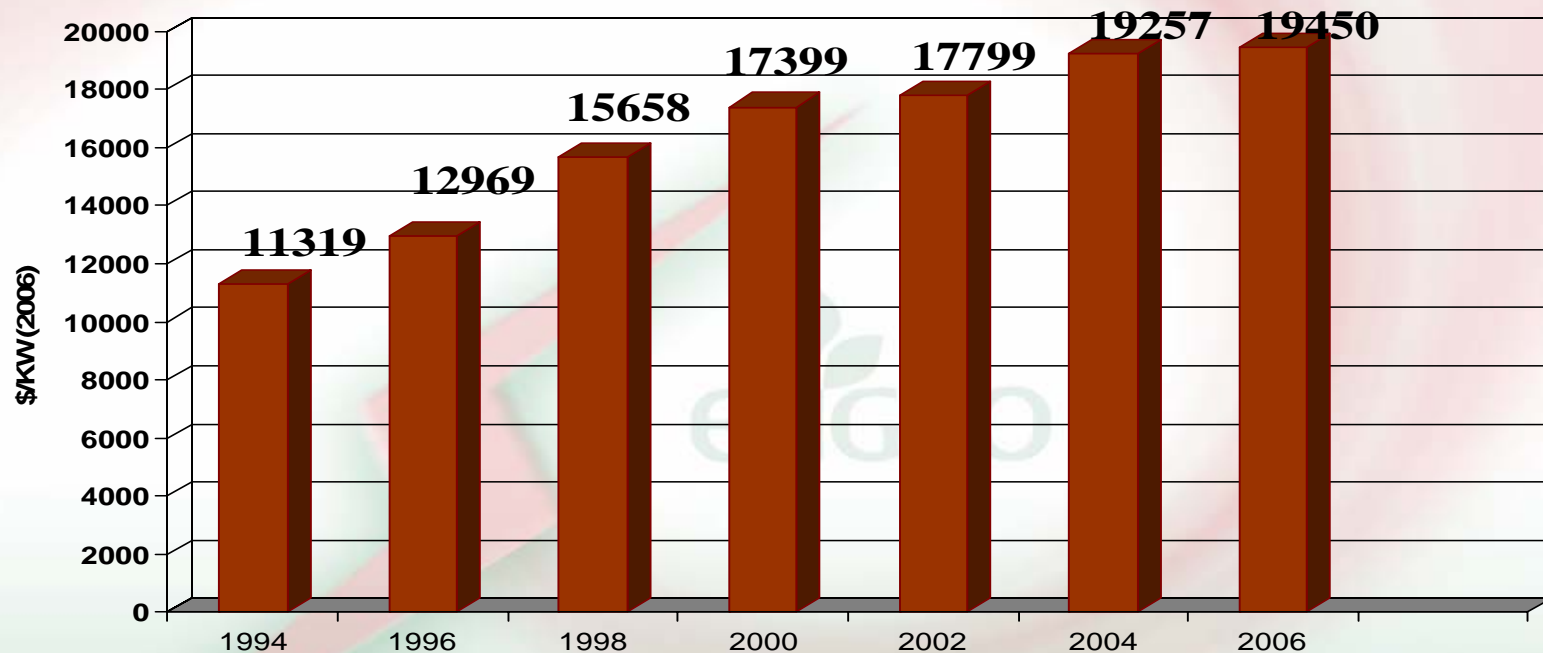


- Proposal Submitted to PPIB Jan. 2005
- PPIB Approved 75 MMSCFD Permeate Gas Oct. 2005
- LOI Issued Jan. 2006
- Feasibility Awarded to Fichtner Jan. 2006
- Feasibility Approved by POE / PPIB Sep. 2006
- Tariff Petition Submitted to NEPRA Feb. 2007
- NEPRA Public Hearing Held Mar. 2007
- NEPRA Tariff Determination July 2007
- Generation License Awarded July 2007
- EPC Contract, PPA & IA Signed Oct 2007
- GSA Signing after OGRA Approval Nov. 2007
- Financial Close Expected Dec 2007



Sponsors's
Concerns on Policy Issues

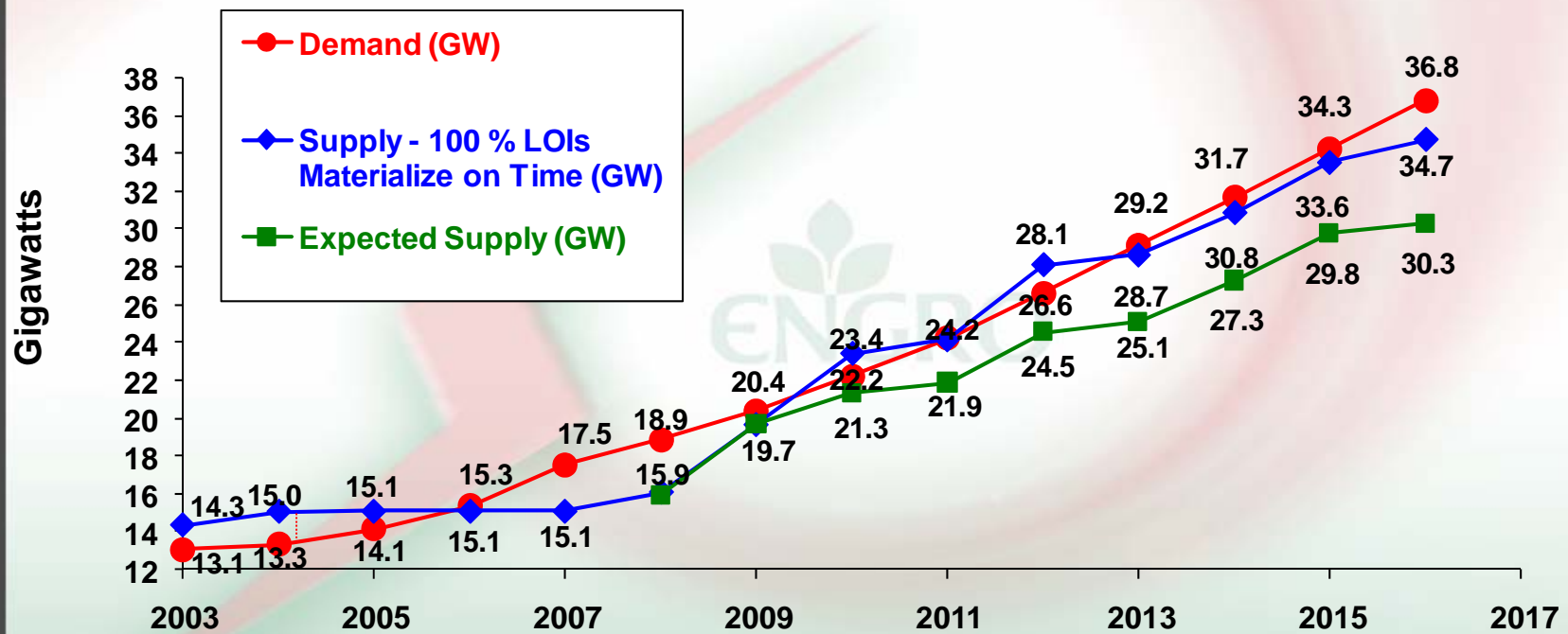
Power - Installed Capacity



Source: Pakistan Energy Yearbook 2006

- Significant Capacity Addition (1996-2000) after 1994 Power Policy
- Capacity Addition between 2000 and 2006 mainly from Ghazi Barotha and Chashma -2 Nuclear Power Plants

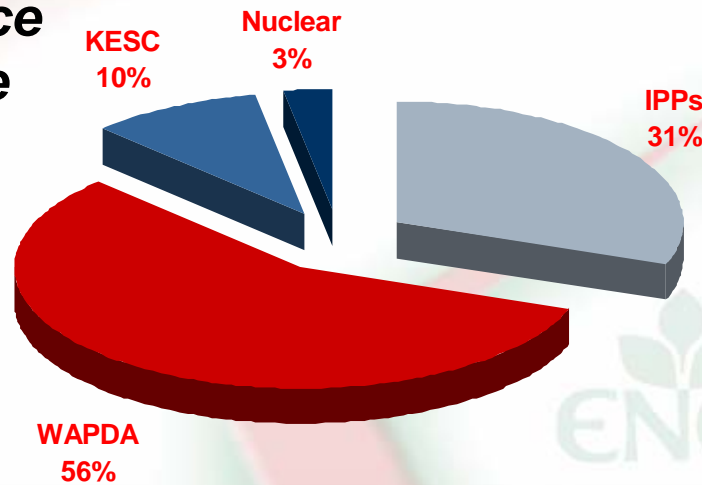
Peak Power Balance - Pakistan



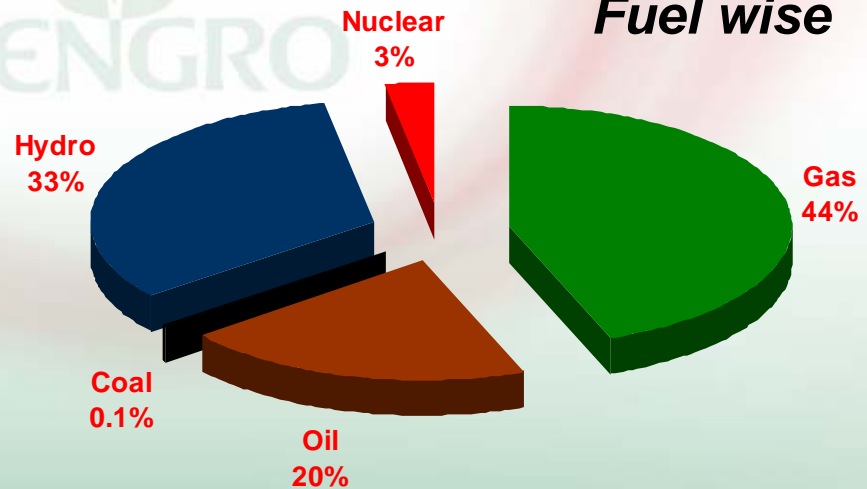
Power Generation - 2006



Source wise



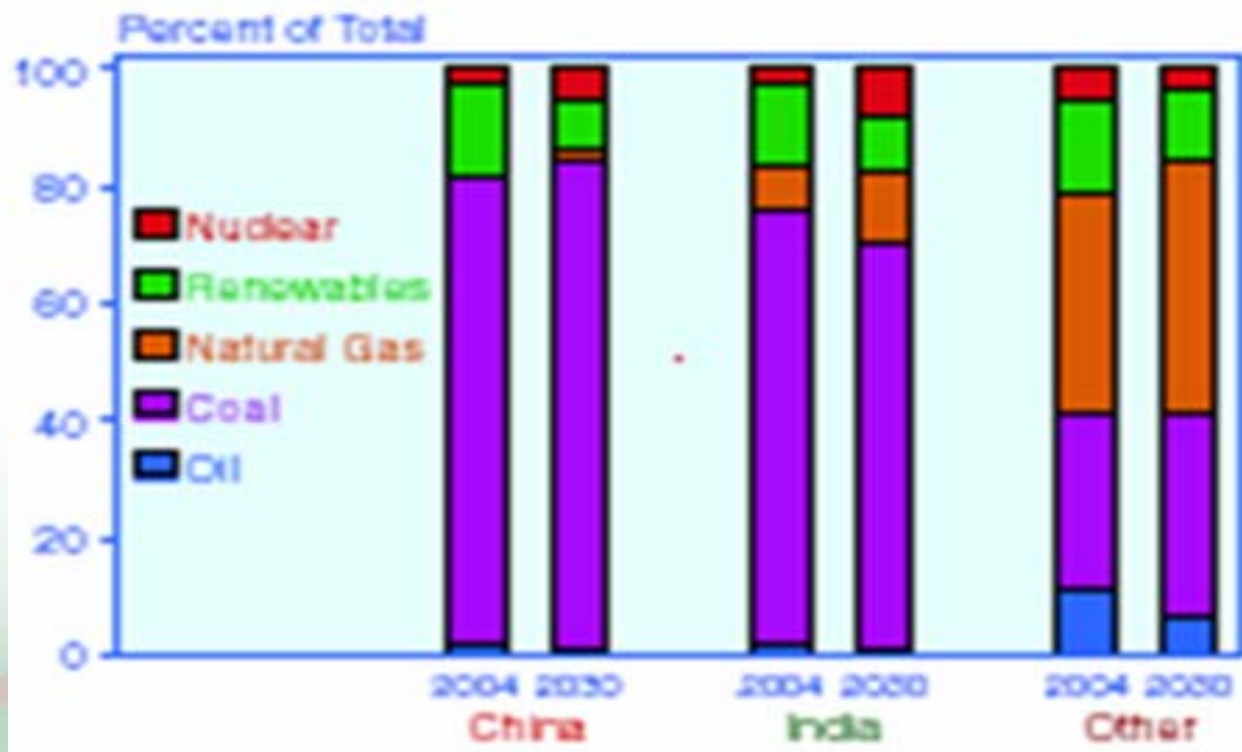
Fuel wise



Gas Based Plants are mainly with the WAPDA / KESC which are Inefficient

Source: Pakistan Energy Yearbook 2006

Power Generation Asia 2004 - 2030



- **LOI's :**
 - Although PPIB/AEDB keep a follow-up of the projects, but still many Sponsors in possession of LOI's have not been serious in projects development
 - **Consider reallocating such LOI's to Sponsors who are capable of developing the projects expeditiously**
- **PPIB – One Window Operation :**
 - PPIB role is to provide assistance & resolve all the relevant issues amongst stake holders during projects development
 - **More coordinated approach is required to resolve issues amongst various stakeholders on fast track basis in addition to taking some policy decisions at board level**

- **EPC Contracts :**

- EPC Contractors availability is scarce currently due to industrial boom in the world in general & Middle East Markets in particular. EPC Contractors are selecting projects on exclusivity and reluctant to pursue opportunities in Countries with higher risk & projects with uncertain timeline
- EPC Contractors are submitting bids on exclusivity basis and offering very short validity of EPC Contracts due to above mentioned reasons & rising equipment & material Prices
- ECC has given instructions to NEPRA to determine tariff with firm EPC Contracts. NEPRA took more than 5 months to determine EEL's tariff. It is almost impossible to get a validity of 6 months in current market conditions
- **NEPRA should reduce the tariff determination time & the signed EPC contracts condition should not be imposed otherwise it will create a tail spin situation**

- **Custom Duties & With holding Tax :**

- Custom duty on import of plant equipment not manufactured in Pakistan is 5%
- Sponsors are negotiating a lump sum EPC Contract & it is impossible to convince the Contractors to pick locally manufactured equipment. They would be reluctant to give warrantees in such case and/or ask high premiums
- There had been no with holding tax on foreign EPC Contractors in the past but current policy is not clear. Sponsors are getting determination without withholding tax on EPC Contractors with an assumption that, if levied, it would be passed through
- **Custom Duty should be 5% on all imports for plant equipment & material and there should be no withholding tax on EPC Contractors**

- **To bridge the gap between demand & supply:**
 - **Privatize the existing Wapda inefficient plants so that after revamp, these could generate additional power more efficiently**
 - **Second hand / slightly used Plants should be allowed to reduce the project cost & lead time**
 - **Power generation with LNG should be encouraged compared to RFO & GOP should take the LNG supply risk**
 - **Launch imported coal based projects to arrest widening supply demand gap**

- **GOP should take the ownership of developing the Thar coal field and relevant infrastructure while Sponsors to construct the Power Plants with appropriate incentives keeping viability in perspective**
- **Gas should be allocated for power generation from upcoming Iran gas pipeline project well in advance so that projects could be implemented in line with gas availability**
- **Awareness Programs to save Power**