

Workshop on
“Carbon Credits Potential in Oil and Gas Sector of Pakistan”
11th & 12th September 2007 in Dream Land Motel, Islamabad

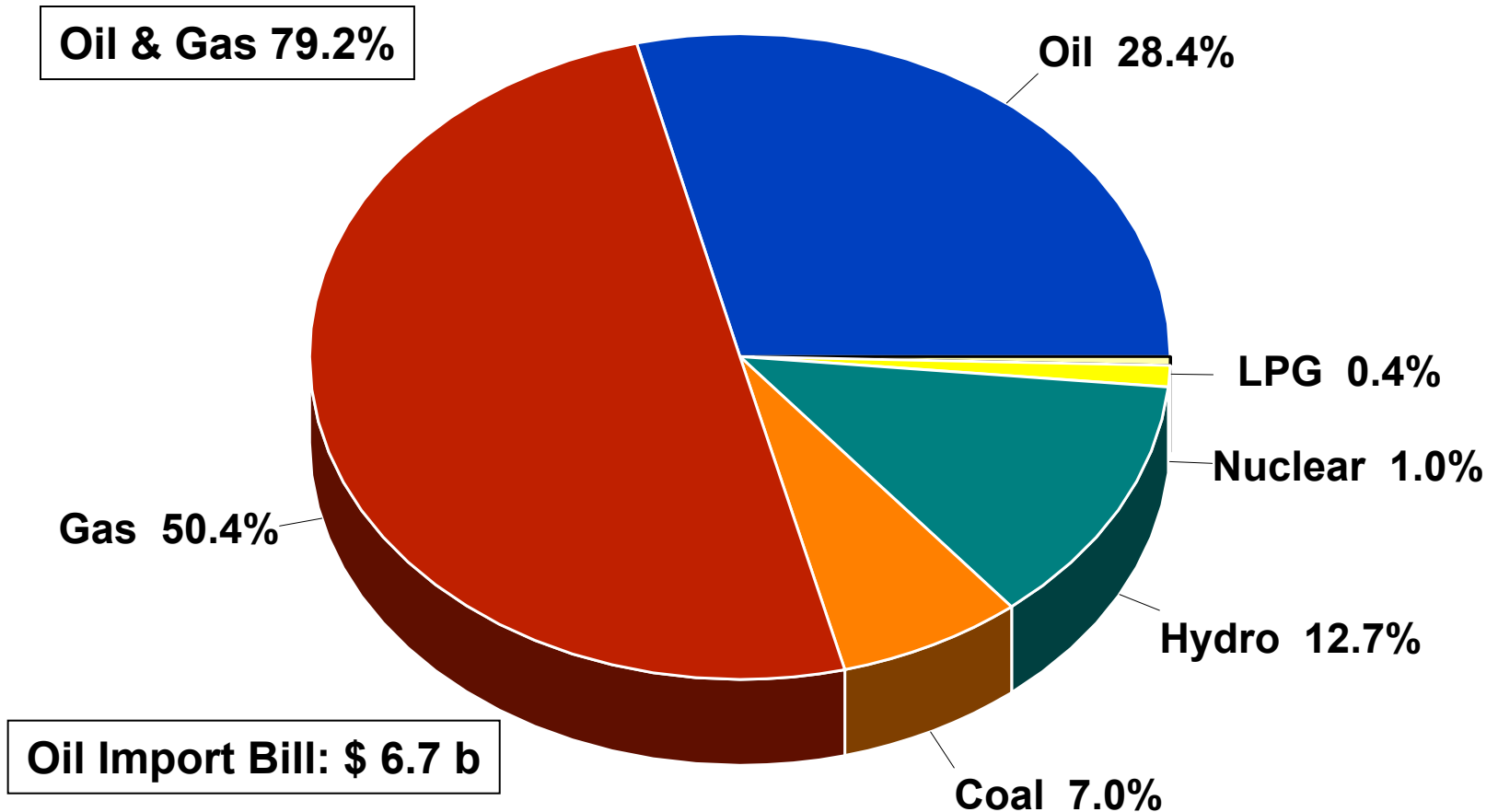
Oil & Gas Sector Overview of Pakistan

by

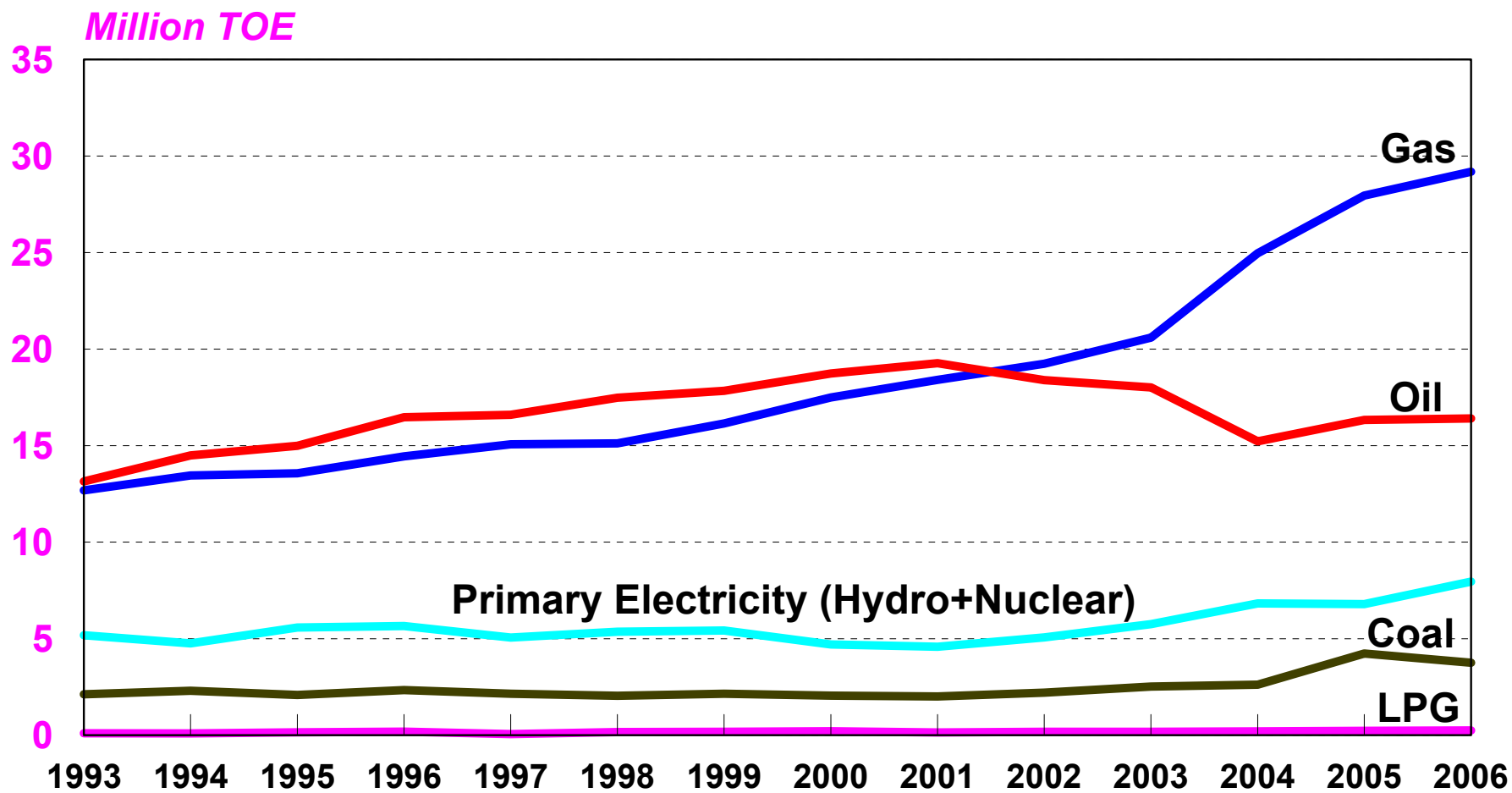
Dr. Muhammad Pervaz
Principal Scientific Officer
Hydrocarbon Development Institute of Pakistan

Energy Supply Mix: 2006

57.9 Million TOE

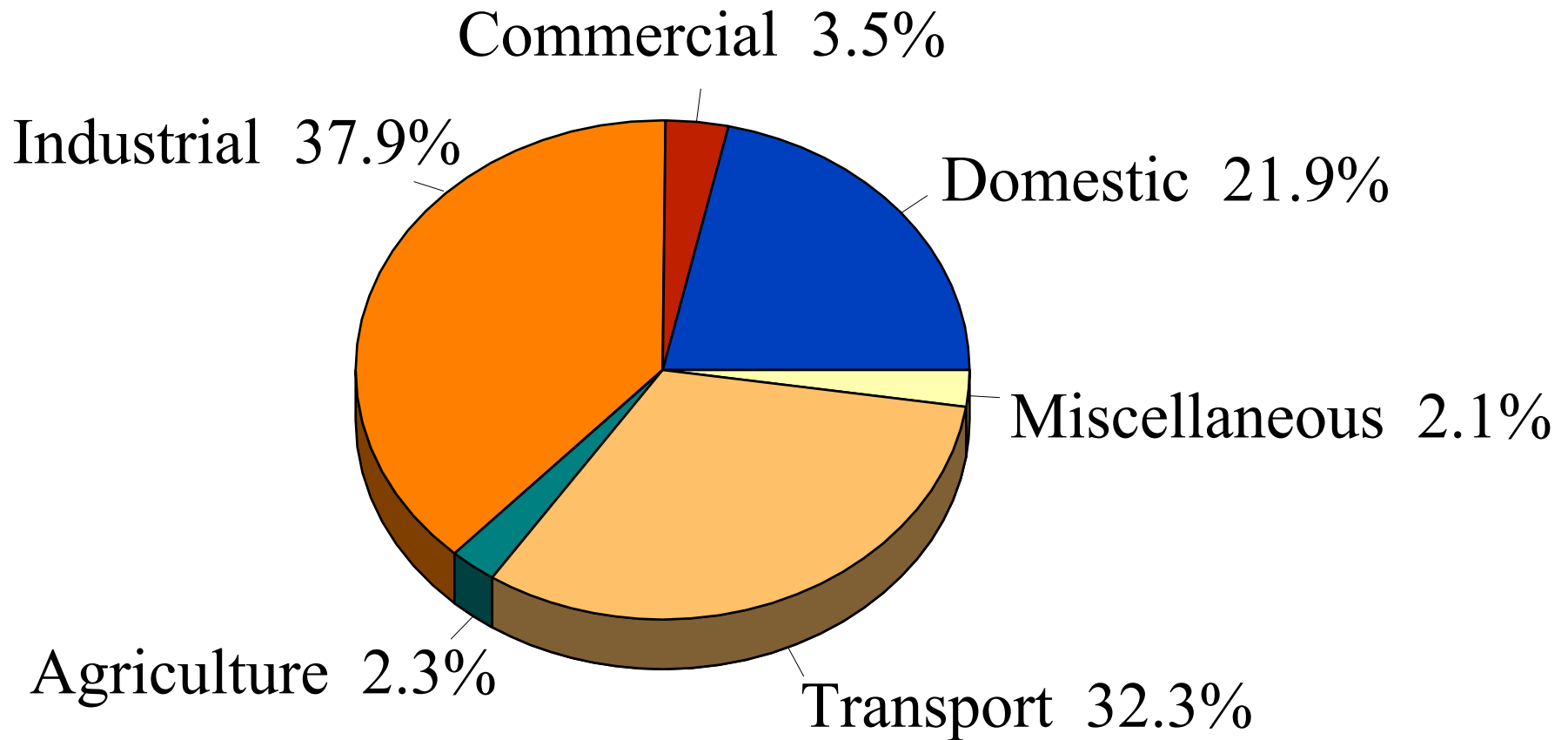


Pakistan Energy Supplies: 1993 to 2006

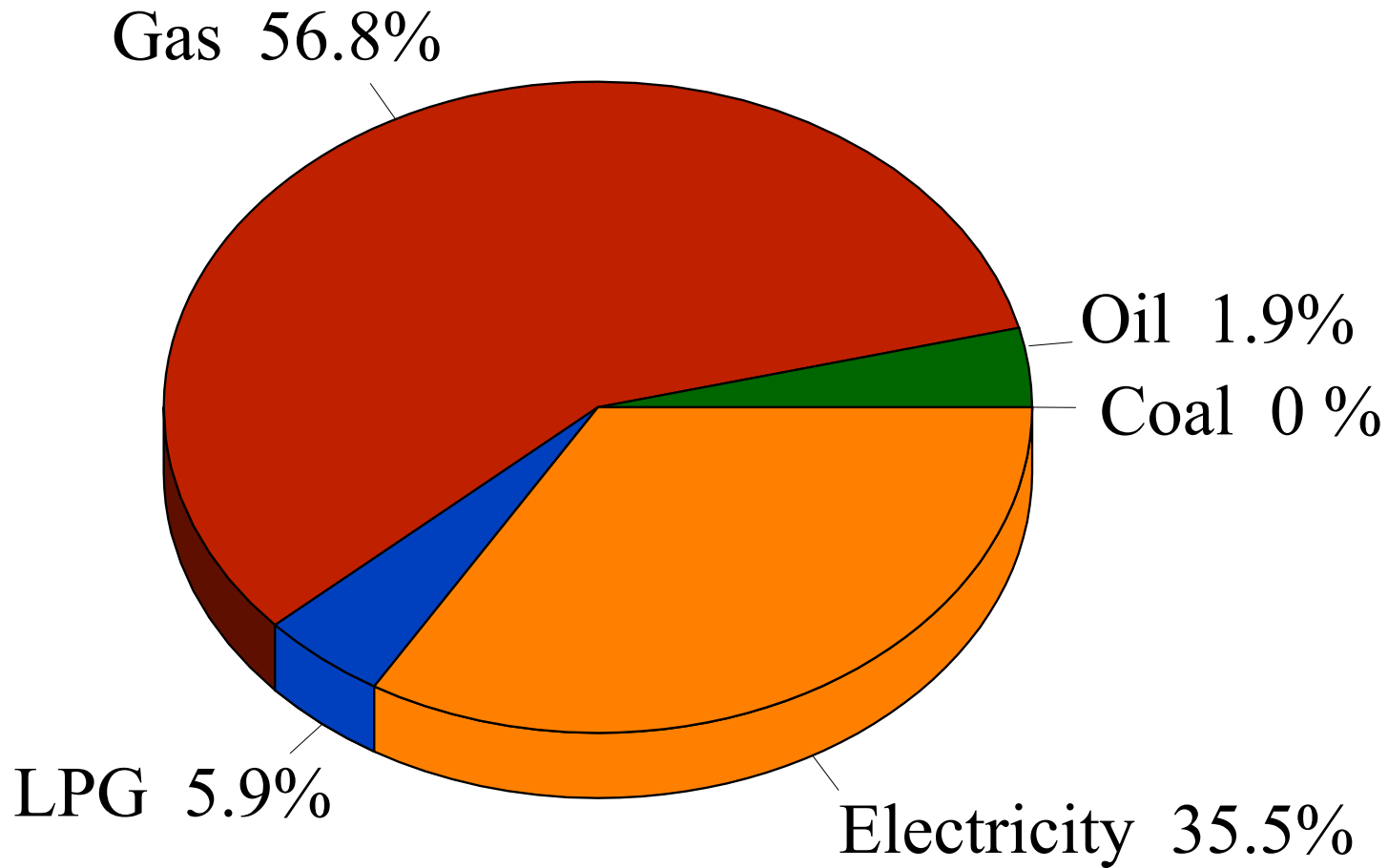


Fiscal years ending 30th June

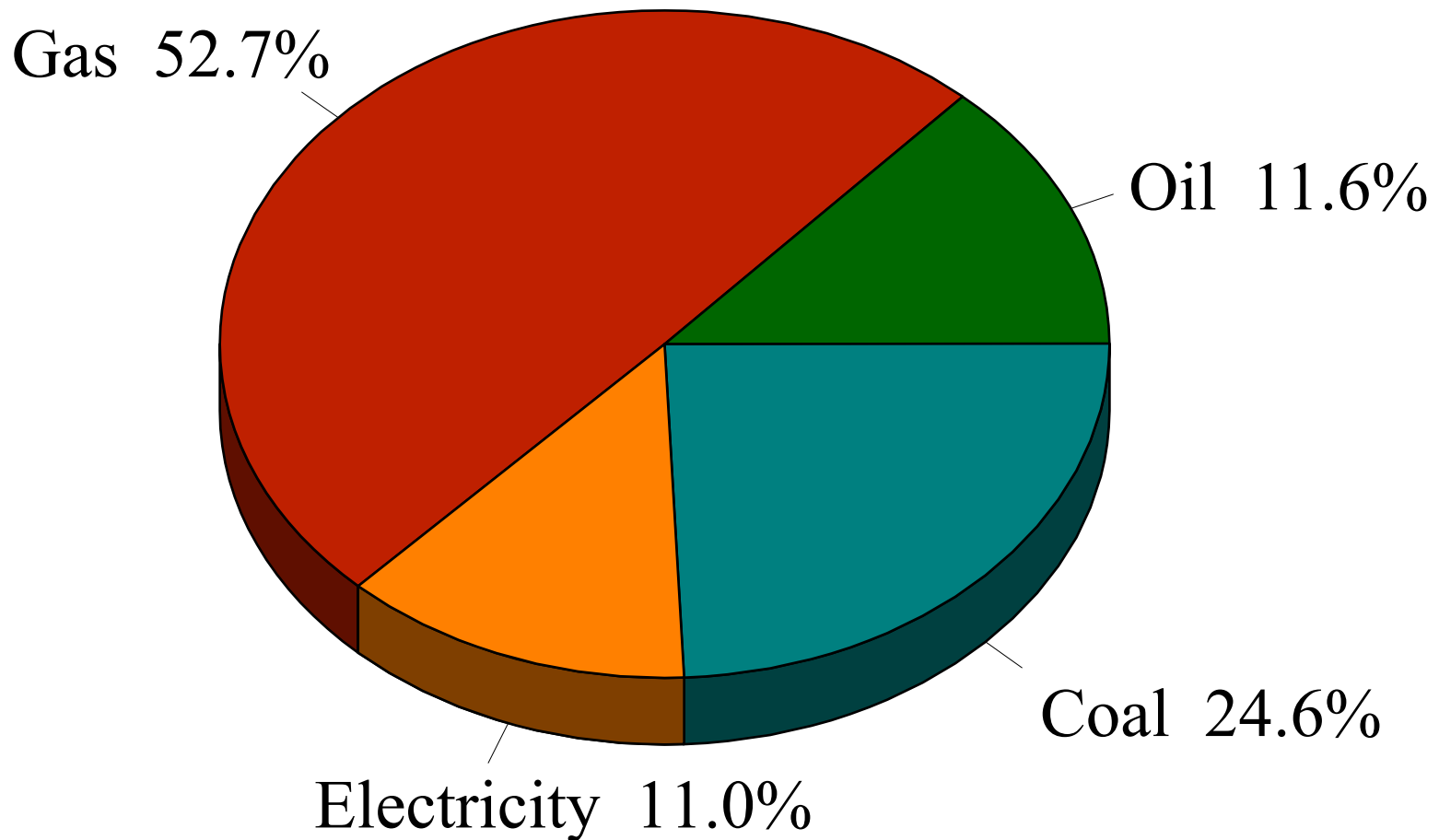
Sectoral Energy Consumption



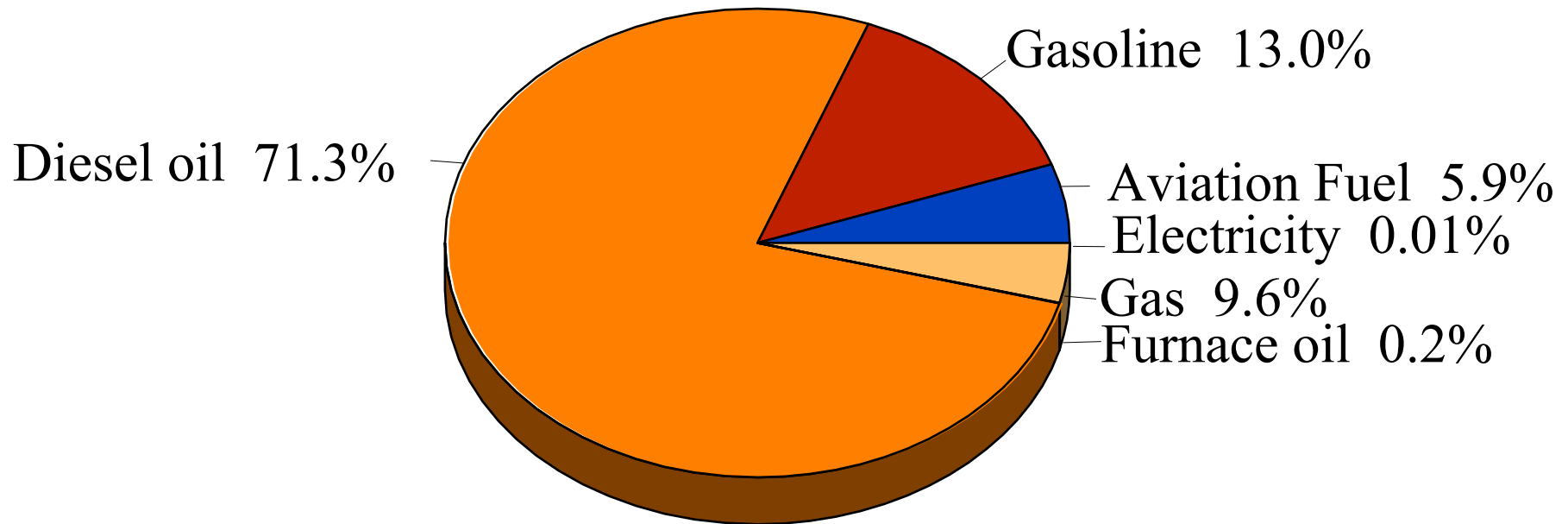
Energy Consumption in Domestic Sector



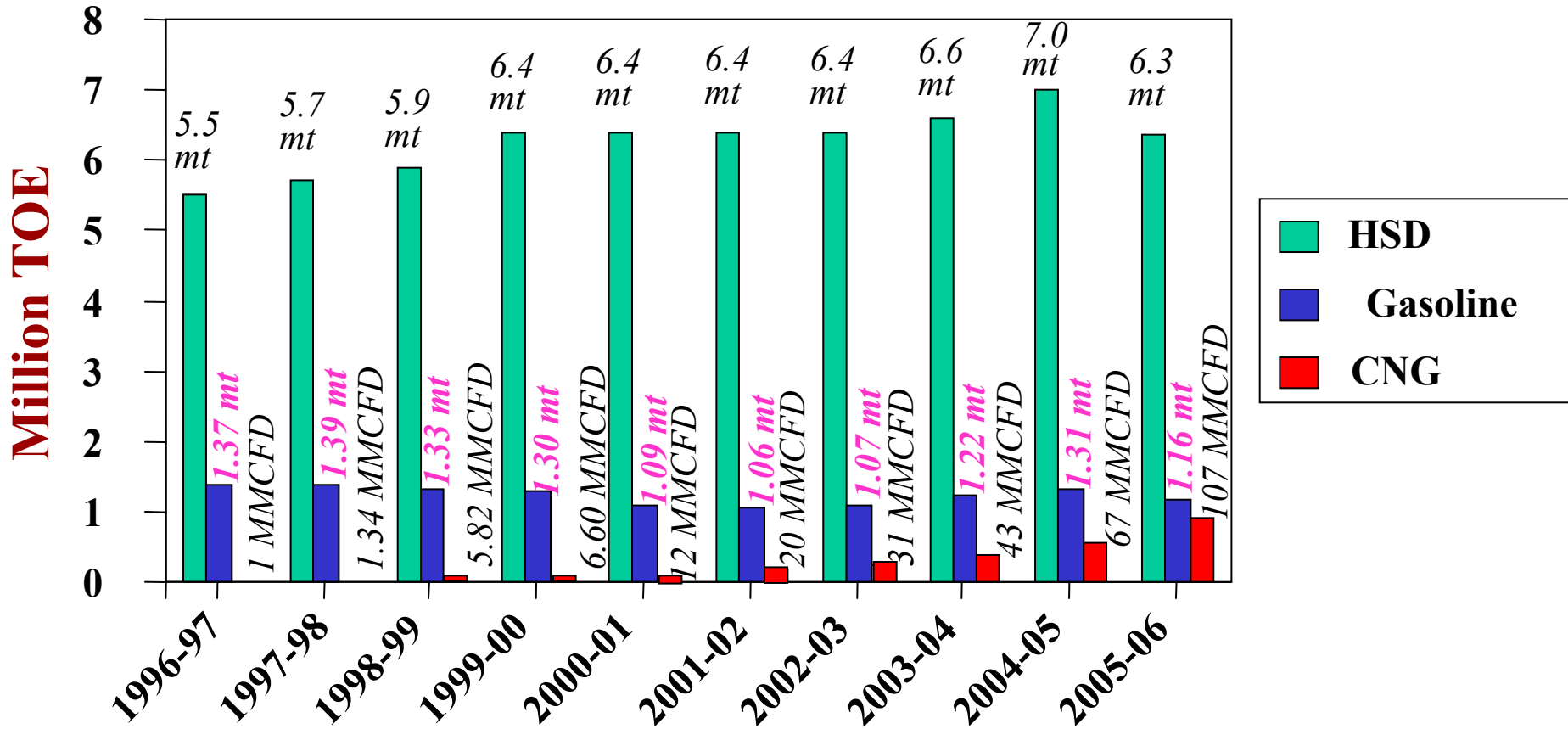
Energy Consumption in Industrial Sector



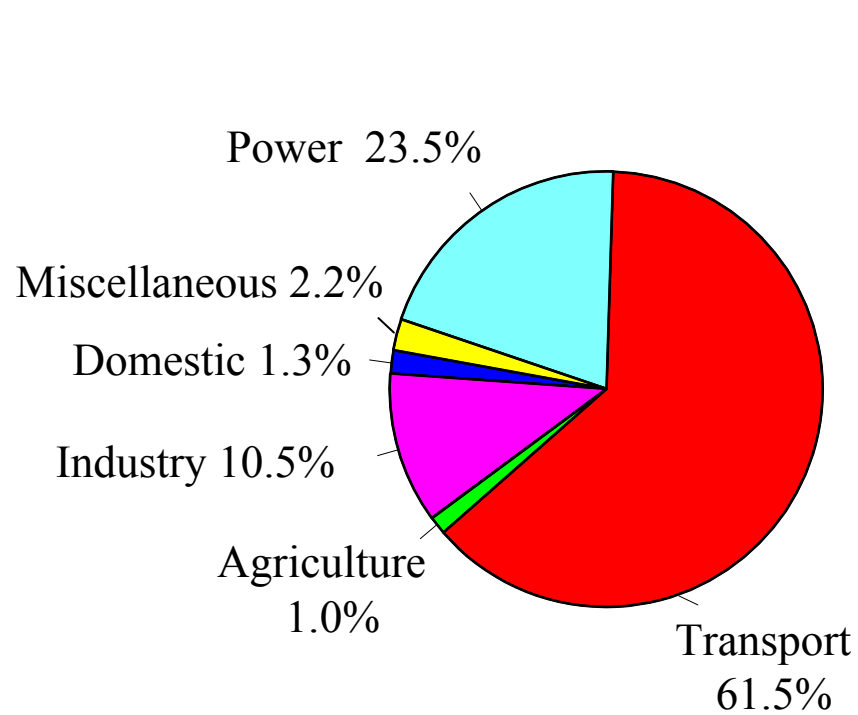
Energy Consumption in Transport Sector



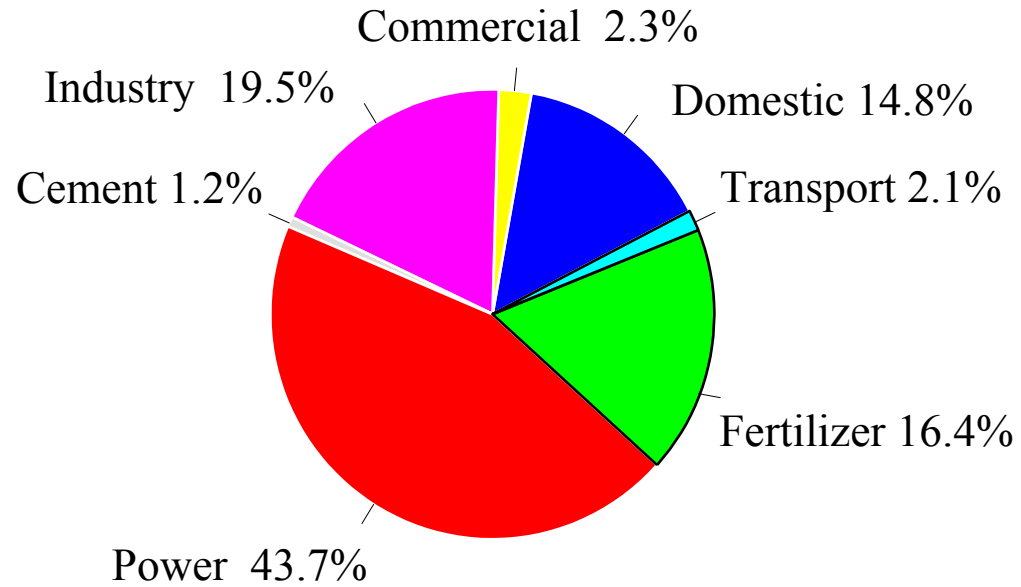
Historical Consumption of Fuels in Road Transport



Sectoral Oil and Gas Consumption



Oil



Gas

Indigenous Production of Oil & Gas

	1999	2004	2006
Oil (bpd)	54,755	62,000	65,577
Gas (bcfd)	2.0	3.3	3.8

Oil Refining Capacities: 2005-06

(Million Tonnes per Year)

ARL 1.82

Bosicor 1.50

PRL 2.10

NRL 2.71

Dhodak 0.12

ENAR Petrotech 0.13

PARCO 4.50

Total: 12.88

OIL & GAS EXPLORATION ACTIVITIES

Total Sedimentary

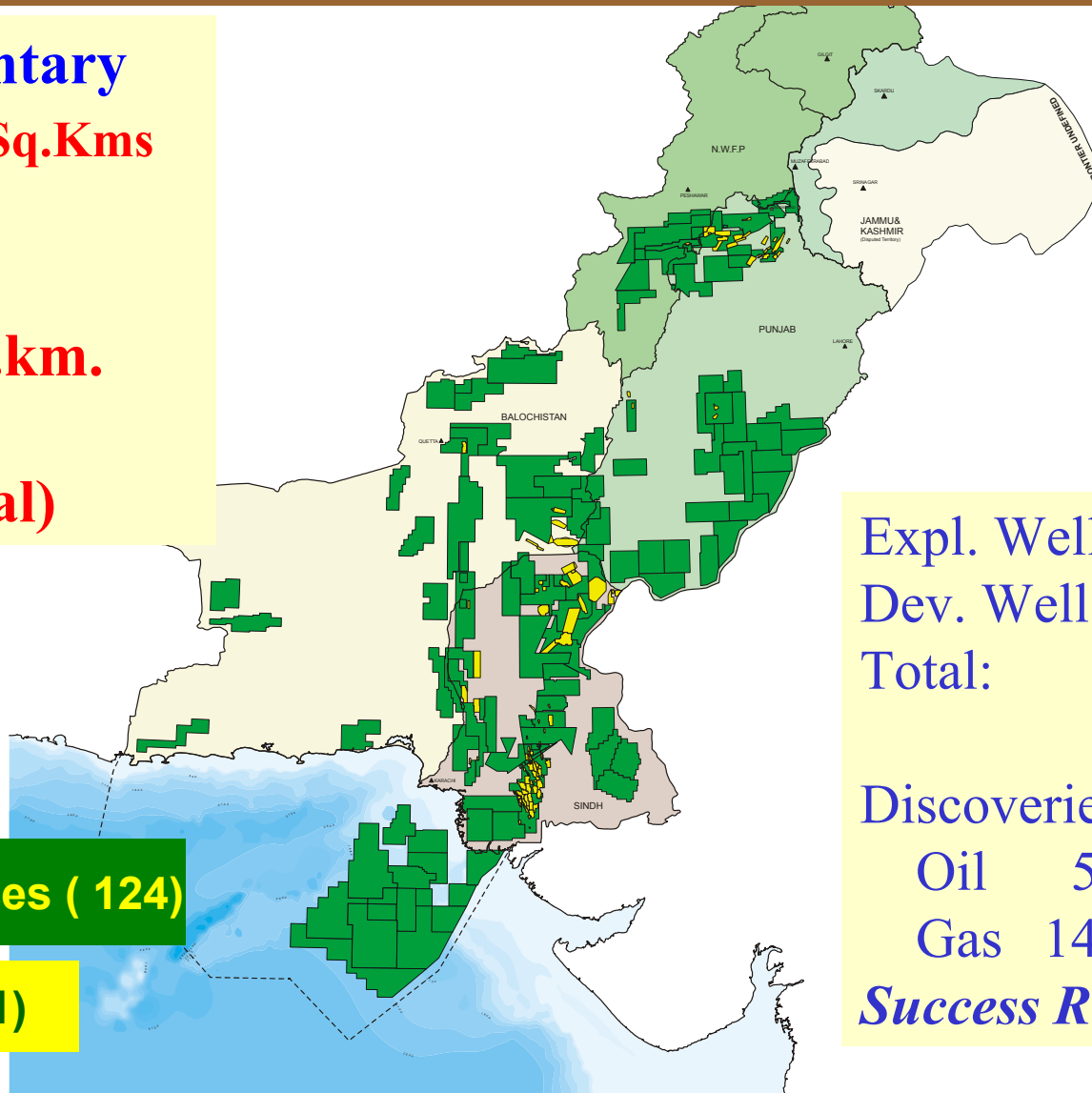
Area: 827,268 Sq.Kms

Area under
Exploration:

265,991.03 sq.km.

Operators:

23 (9 Local)



Expl. Wells	667
Dev. Wells	<u>853</u>
Total:	1,520

Discoveries 195

Oil 52

Gas 143

Success Rate 1:3.4

Exploration Licences (124)

D&P Leases (121)

Reserves, Production and Resources of Oil & Gas

	Oil (million <u>barrels</u>)	Natural Gas (trillion <u>cubic feet</u>)
Discovered	844	51.5
Produced	535	18.7
Remaining	308	32.8
Annual Production	24	1.3

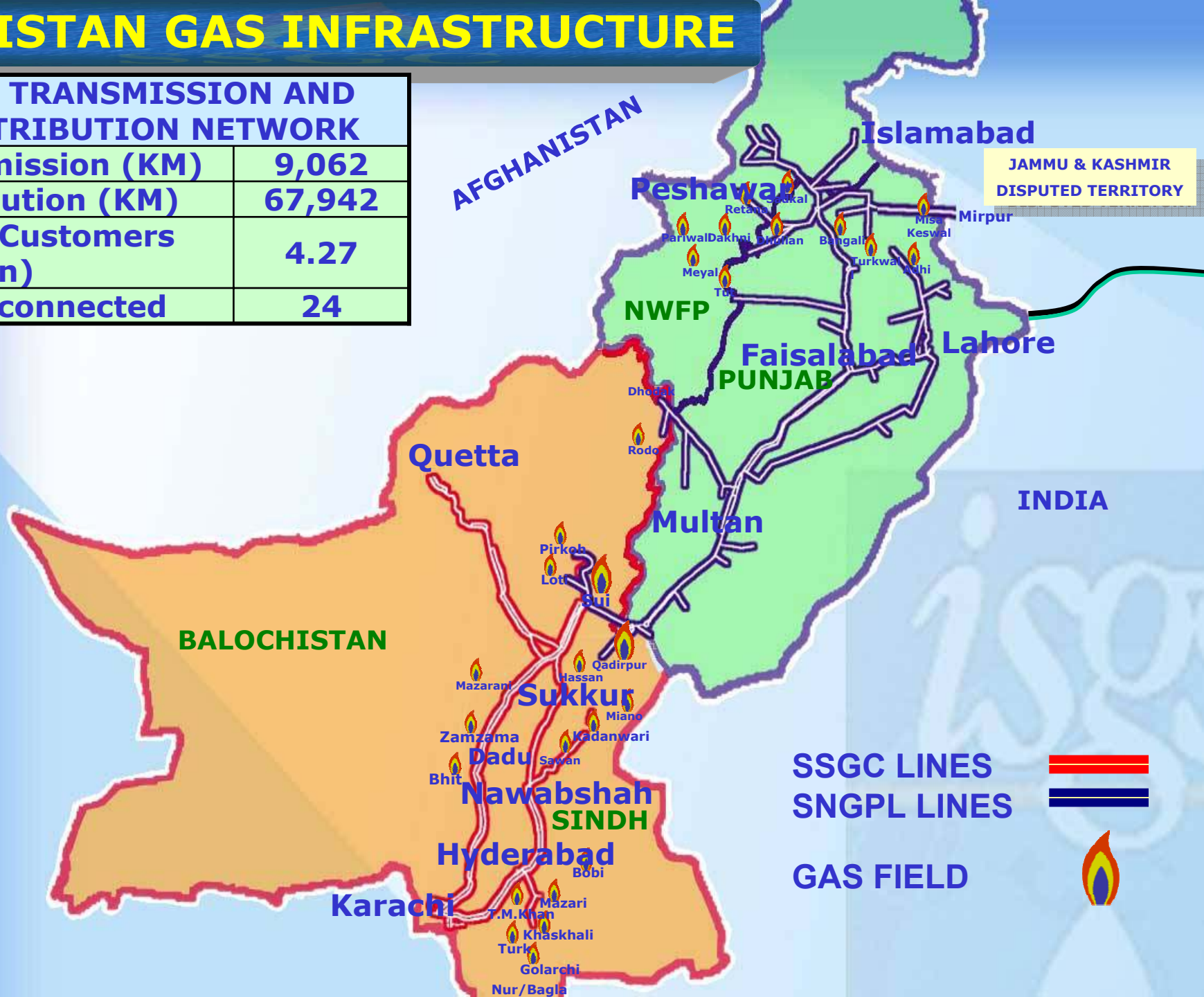
Theoretical Resource Potential

Oil	27 billion barrels
Gas	282 trillion cubic feet

PAKISTAN GAS INFRASTRUCTURE

GAS TRANSMISSION AND DISTRIBUTION NETWORK

Transmission (KM)	9,062
Distribution (KM)	67,942
No. of Customers (million)	4.27
Fields connected	24



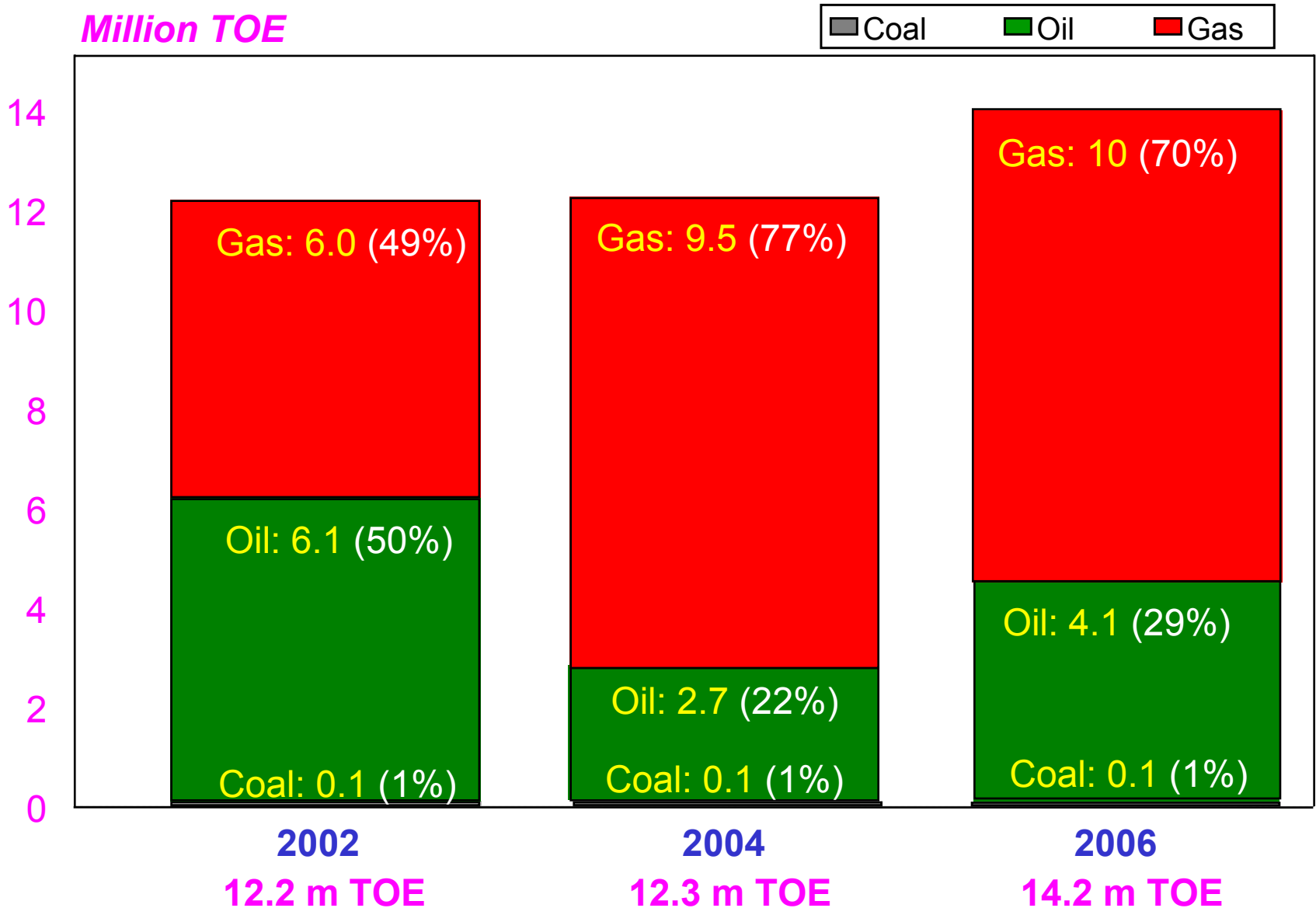
Status of CNG Industry

- Operational CNG stations
(as on 6.9.2007) 1,706
- Vehicles converted on CNG 1.55 million
- Jobs created so far 70,000
- Investment made so far PKR 70 Billion
- Petrol Replacement Achieved
- Diesel Replacement Focused
- Pakistan is leading Asian CNG users and 2nd in World

Electricity Installed Capacity

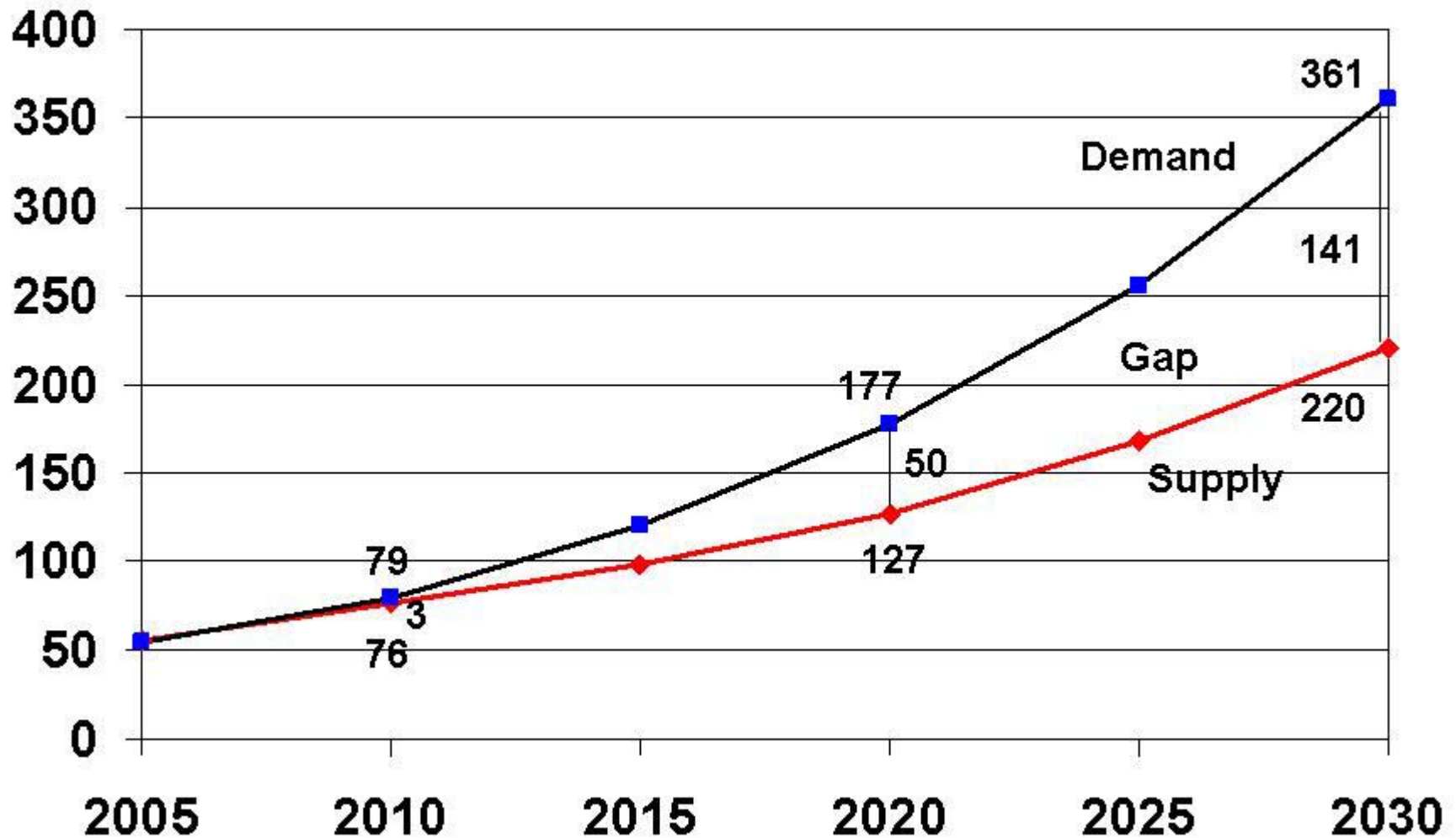
	MW	% Share
Hydel	6,499	33.4%
Thermal (Fossil Fuels)	12,489	64.2%
Nuclear	462	2.4%
Total	19,450	100%

Fuel Consumption in Thermal Power



Supply and Demand Projections 2005 to 2030

Million TOE



Future Outlook for Oil & Gas Availability

- Aggressive exploration for indigenous oil & gas.
- Gas Import options
 - Pipelines
 - Iran
 - Turkmenistan
 - Qatar
 - LNG
- Oil imports

Thank you