## Peaks, Shortages, and Other Oil Market Myths

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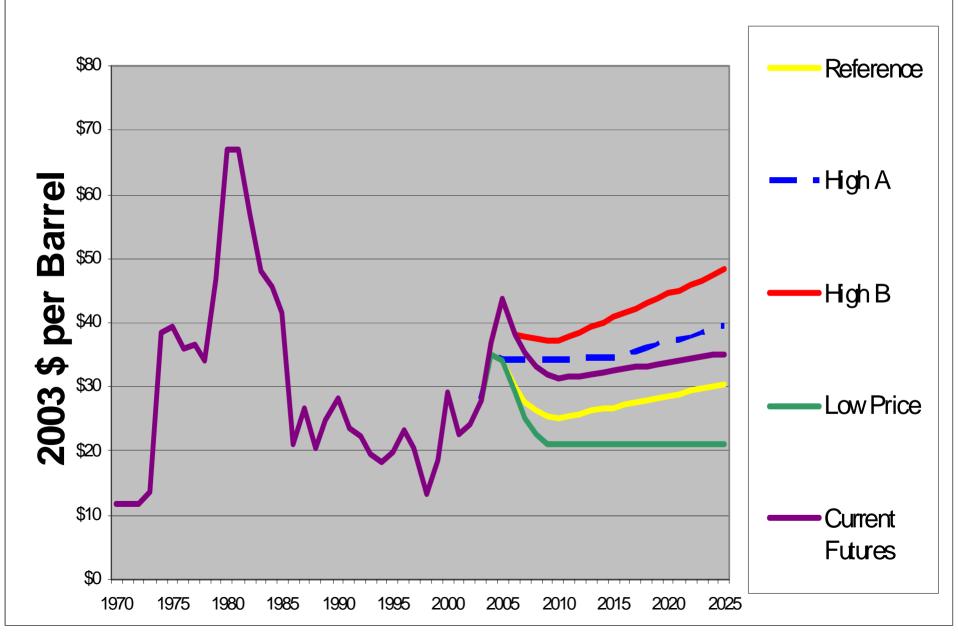
Washington, DC

"The diagnosis of the U.S. energy crisis is quite simple: demand for energy is increasing, while supplies of oil and natural gas are diminishing. Unless the U.S. makes a timely adjustment before world oil becomes very scarce and very expensive in the 1980's, the nation's economic security and the American way of life will be gravely endangered." 1977

"...there is the common misconception that the world is running out of oil, that it will become more valuable over time and that one should take steps now to preserve it for future generations. [In fact,] oil is being discovered in large quantities and reserves continue to increase faster than consumption...Over the next three to four decades...supply will not be an issue...nor are we likely to see any upward trend in the prices of energy."

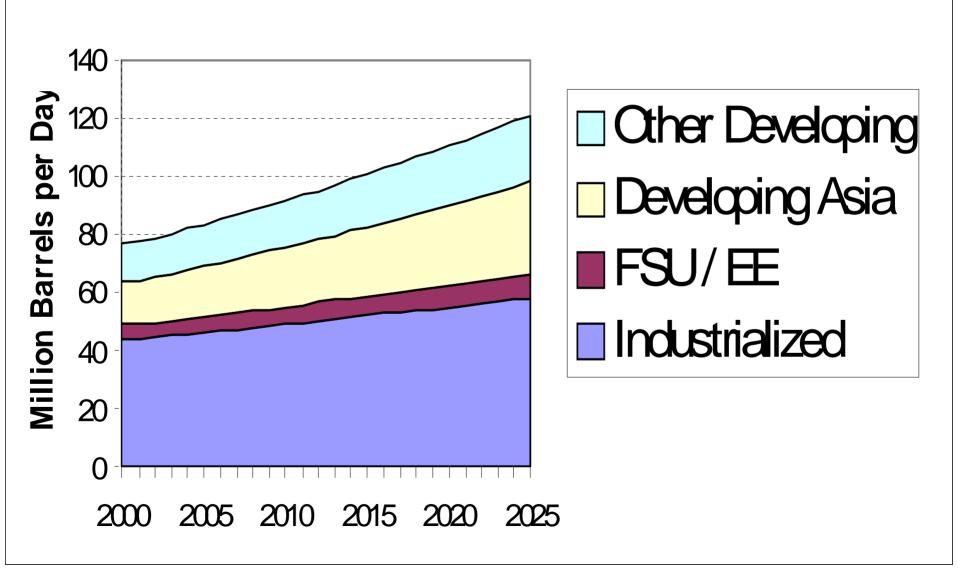
1993

#### World Oil Prices, 1990-2025

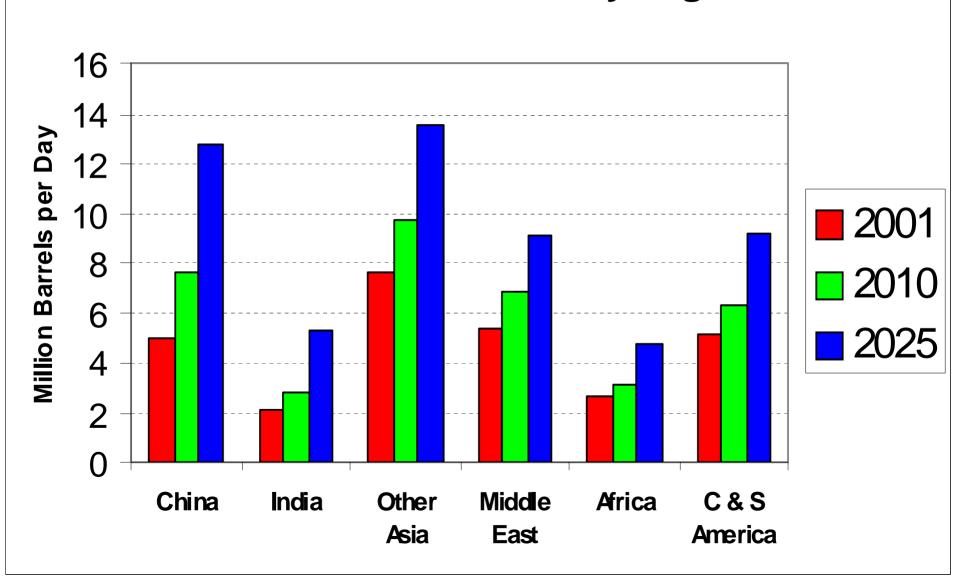


"...it is unsafe to rest in the assurance that plenty of petroleum will be found in the future merely because it has been in the past."

## World Oil Consumption Annual Energy Outlook 2005



## Developing Countries Consumption in the Reference Case by Region



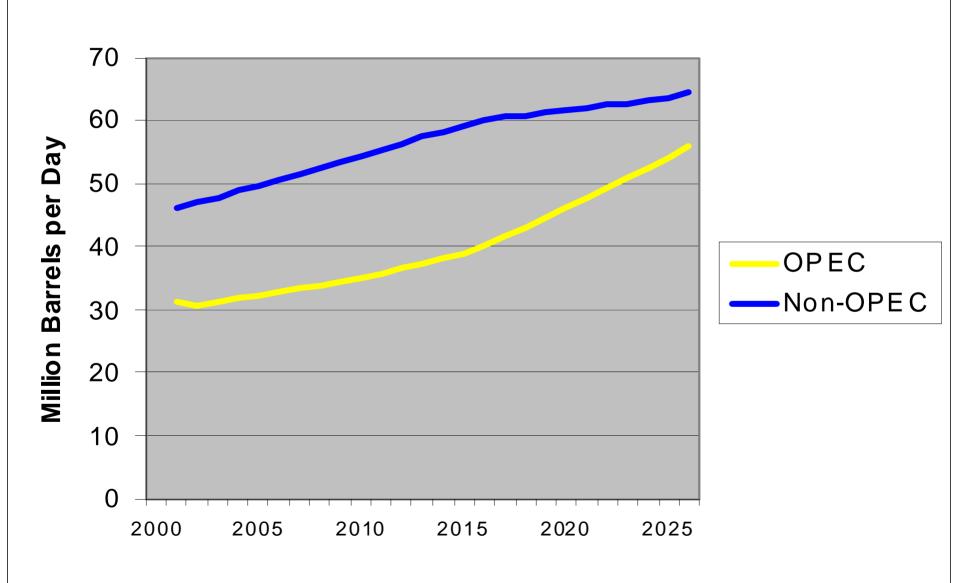
"...the peak of [U.S.]
production will soon be
passed – possibly
within three years."
1919

"... Non-OPEC production in the longer term will at best remain stagnant and is more likely to fall gradually due to resource constraints."

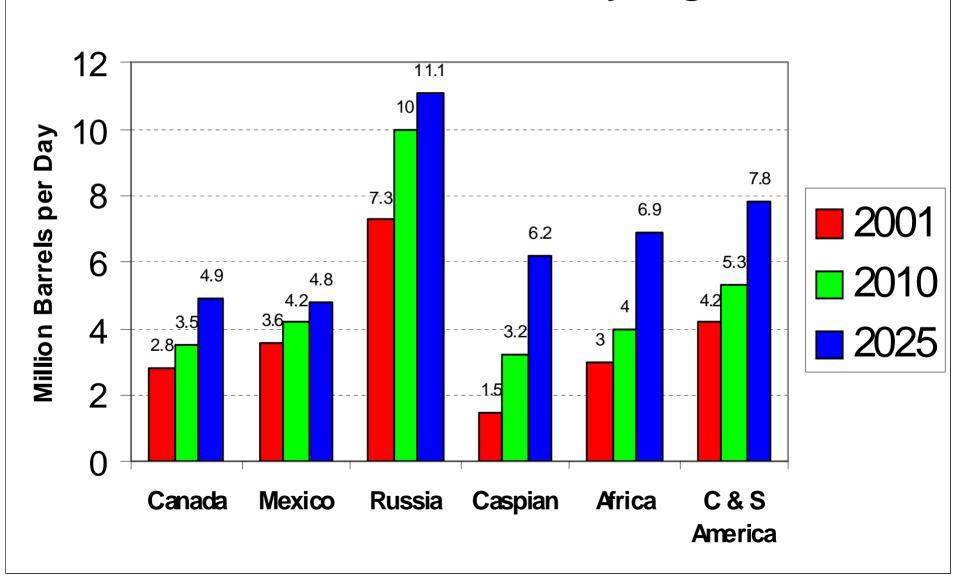
1990

... Higher [resource] numbers are likely to be quoted and used by economists and others lacking insight into the matter..." 1994

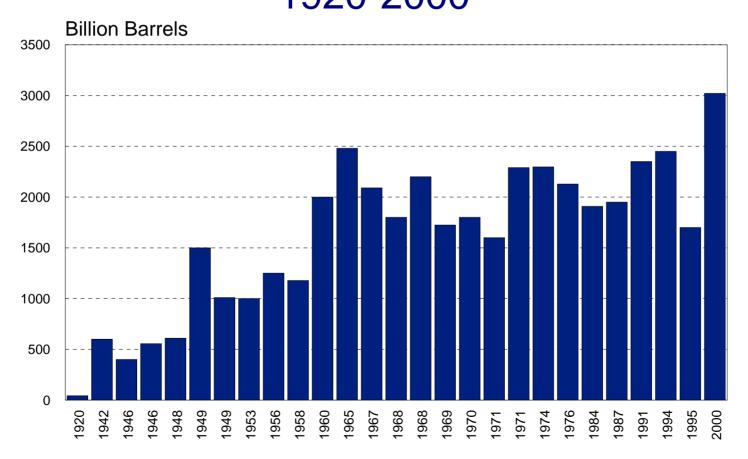
### OPEC and Non-OPEC Production in the Reference Case



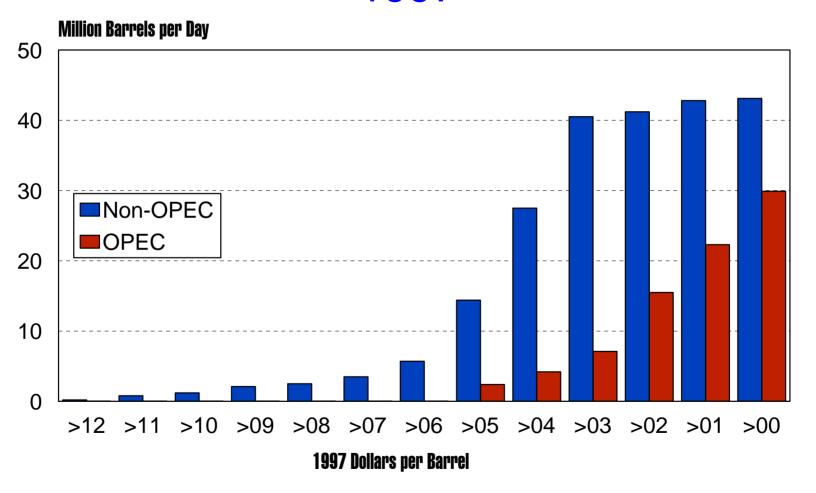
## Selected Non-OPEC Oil Production in the Reference Case by Region



# Estimates of the World Oil Resource Base 1920-2000

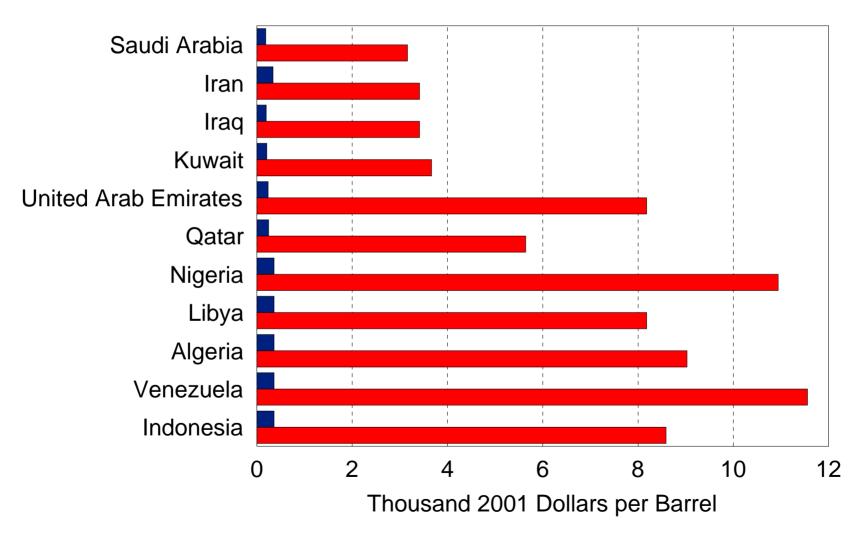


## Marginal Operating Costs of Oil Production 1997



Source: Petroleum Economics Limited

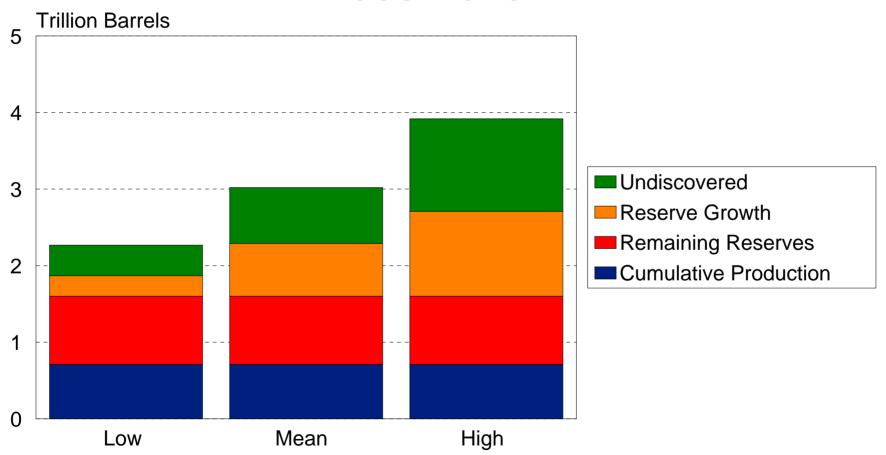
### Costs to Maintain and Expand Oil Production Capacity by One Barrel per Day



Source: Arab Petroleum Investment Corporation

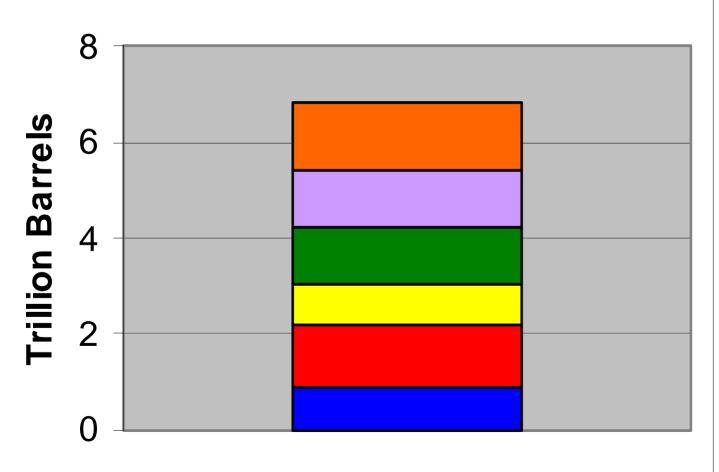
#### World Oil Resources

1995-2025



Source: U.S. Geological Survey

# Abundant Conventional Oil Resources



- Improved Oil Recovery
- Newly
  Conventional
- Undiscovered
- □ Reserve Growth
- Remaining Reserves
- Produced To Date