

Saudi Arabia's "Sustainable" Capacity and Global Energy Supply and Demand



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Macro Dynamics in the Energy Market



Irrational Exuberance Or Rational Expectations?

- ❑ Steady High Oil Prices: conventional supply-demand forces, or a “bubble” ?
- ❑ Lee R. Raymond, CEO of Exxon Mobil said “We are in the mode where the fundamental of supply and demand really don’t drive the price...Oil is a commodity and history tells us the commodity prices never stay high forever.”
- ❑ Saudi Oil Minister, Ali Al-Naimi, said that the Kingdom is able to increase its production by 1 million bpd, but he argued that “It depends on demand, all we need is customers...The perception in the market is that there is not enough supply, which is untrue. There’s plenty.”

Macro Forces

- ❑ **The geopolitics, security, and stability of oil exporting nations:** The Gulf contains over 65% of the world's "proven" reserves, and stability in these countries, security of oil fields and routes of transportation in the region are of paramount importance to oil market.
- ❑ **The sustainable and spare capacity of oil producing countries:** Growing debate over spare capacity of OPEC nations, and their ability to "balance the market." Perceptions are as important as realities. The market lack of confidence in the producers to meet the demand adds a risk premium to any estimates and pushes prices up.
- ❑ **The long-term elasticity of demand:** The development of alternative sources of energy, efficiency, and conservation have long-term effect on the market, but time lags, investment costs, and delivery prices uncertain at best in the foreseeable future.
- ❑ **The Long-term elasticity of supply:** Major debates exist over the size of proven, possible, and potential resources' rates of discovery, development and production costs, fields life, and the impact of advanced technology.

Macro Forces

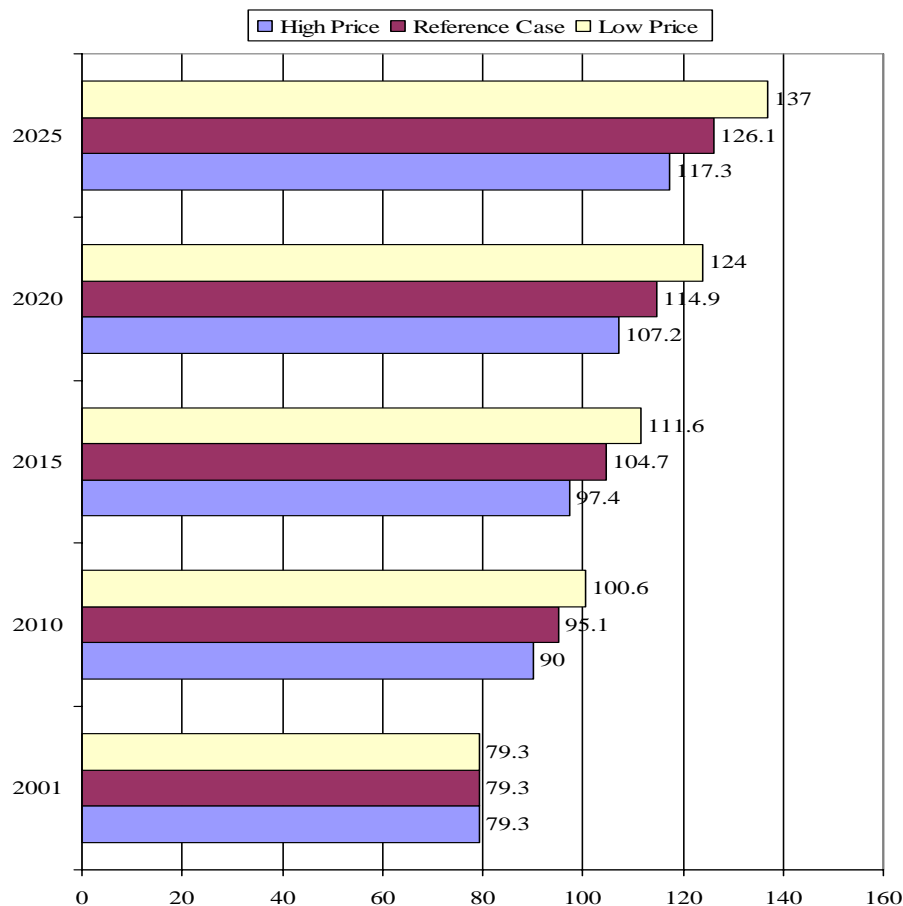
- ❑ **The refining capacity and inventory build up of the importing nations:** The lack of ability by importing states to refine crude oil and distribute to the domestic market in a timely manner can build bottlenecks that not only squeeze the average consumer but also have negative impact of demand and the pushes ups the price of crude oil futures.
- ❑ **The overall health of the global economy:** While it is clear that oil prices and economic growth in developed countries are negatively correlated, it works both ways. High oil prices have negative effect on economic growth in consuming states, but low economic growth in industrialized nations causes a decrease in demand for oil and lower oil prices.
- ❑ **The rise of China and India:** In recent years, the oil market has experienced an unexpected increase demand of oil from countries in Asia such as China and India. According to the IMF, this surge from emerging countries could account for 40% of the increase in oil demand in 2004.

Why Today's Macro-Oil Forecasts “Suck”

- ❑ Demand-driven models base on moderate prices (\$16.98; \$24.17-\$27.00; \$33.27-35.03 for 2001-2005) at constant cost of oil and low marginal production costs.
- ❑ Resource availability, cost to produce and production risk not explicitly modeled. Country plans and risk are not modeled.
- ❑ Transparent and predictable (rational “genius bargainer”) economy with smooth curves and no lags.
- ❑ Supply-demand don't interact within the model in realistic ways.
- ❑ Massive unknowns in demand elasticity: Conservation efficiency, substitution and real world lags relating to risk, investment, marketing, and demand.

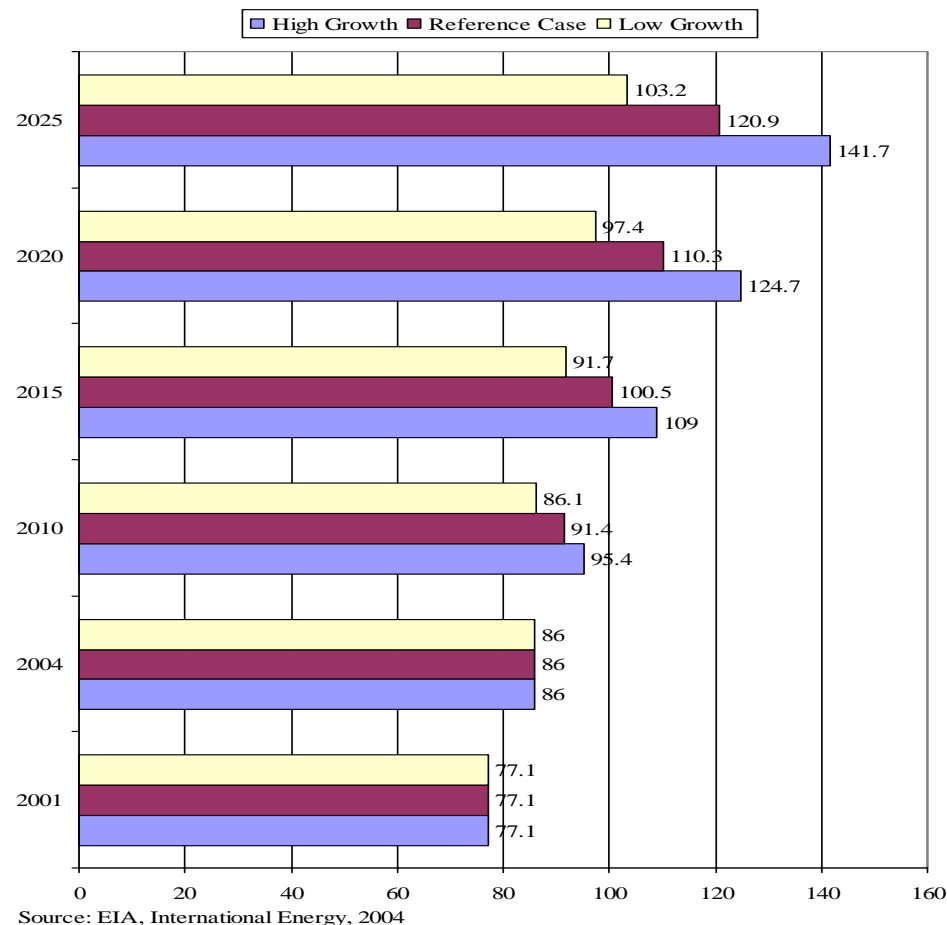
Guessing the World Energy Market 2001-2025?

Supply Capacity in MMBD



Source: EIA, International Energy Outlook, 2004.

Demand in MMBD



Source: EIA, International Energy Outlook, 2004

Demand Forecast By Growth Rates: 2025

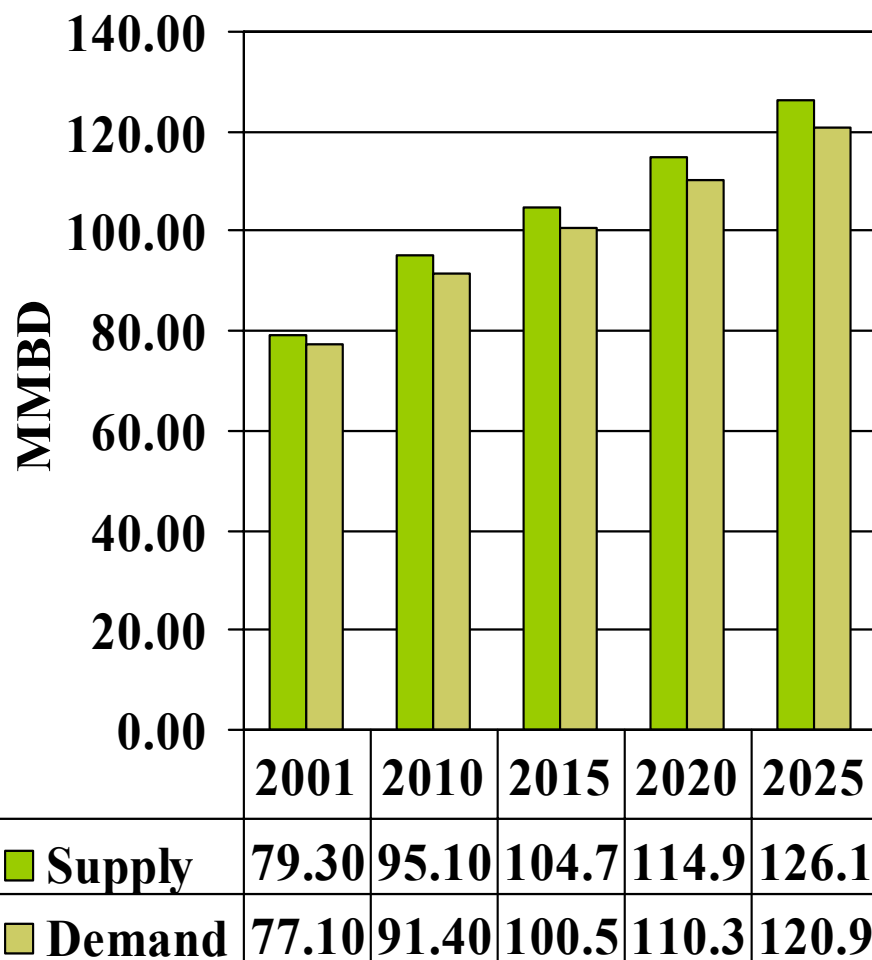
EIA Estimates of Oil Demand by Region: 2001-2025
(Consumption Million bpd)

	2001	2025		
		Low	Reference	High
USA	19.65	25.9	28.3	30.6
W. Europe	14.87	14.6	15.7	16.7
Japan	5.53	5.6	5.8	6.3
Russia	2.73	3.3	4.3	6.2
China	4.92	10.6	12.8	15.2
India	2.18	4.4	5.3	6.5
S. Korea	2.13	2.4	2.9	3.5
Other Asia	5.50	8.2	10.7	13.1
Other ME	4.70	6.2	8	10
Africa	2.61	3.4	4.7	7

□ For High Growth Rates:

- China, India, & the rest of Asia will at least double—developing Asia growing from 14.7 MMBD to 38.3 MMBD.
- Russia, Africa, & Middle East will almost double.
- US will increase by 40%
- Western Europe and Japan will plateau.

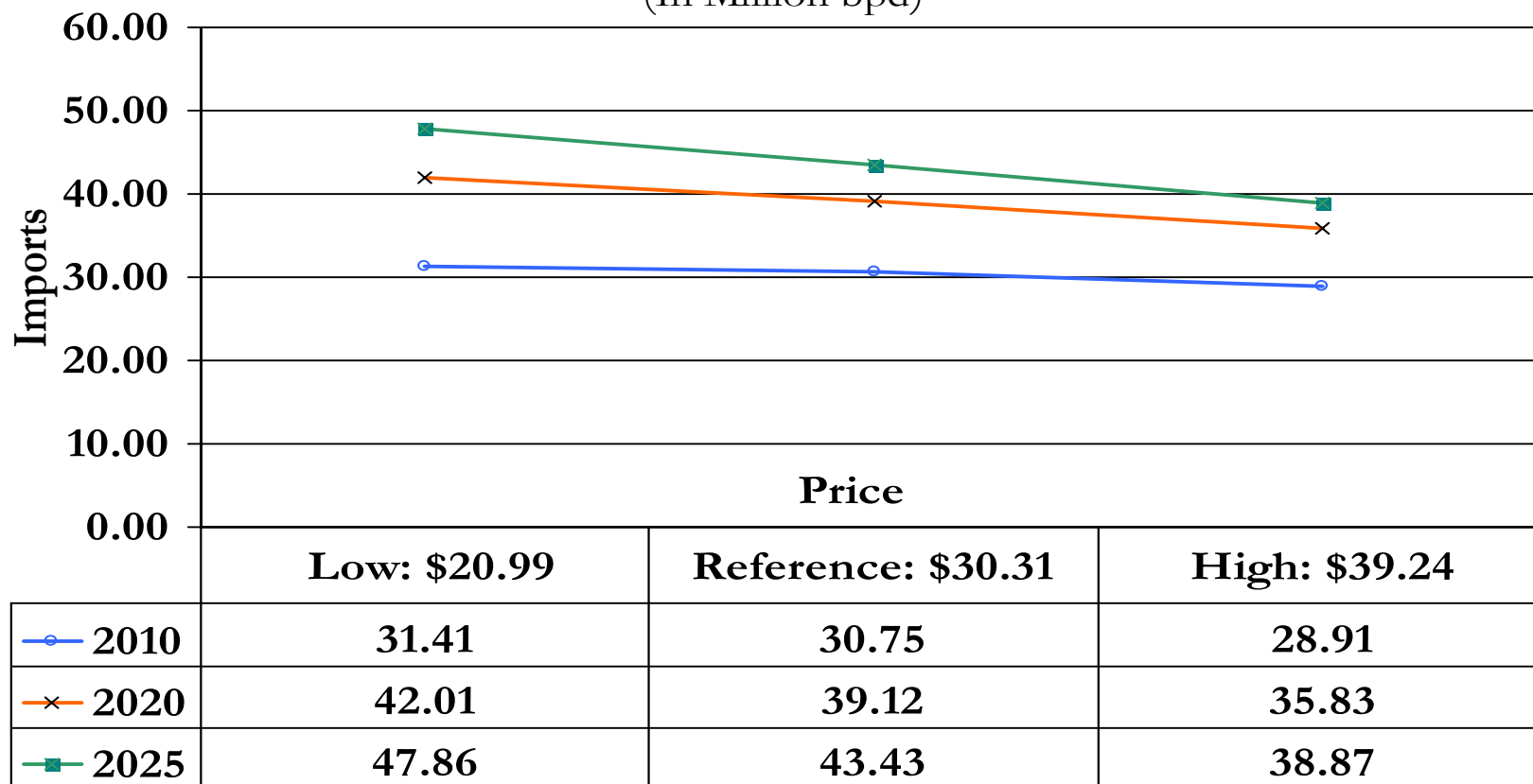
Supply-Demand: EIA Comparison?



- Hard to compare supply and demand.
- Supply: varies with price/barrel
 - Reference: price range is too low (\$25-\$27/barrel). Increasing excess supply (spare capacity) over time.
 - High price: \$35/b is still too low. In 2025, it increases supply from 117.3 to 126.1 million bpd, or by 7.5%
- Demand: varies with economic growth rate
 - Low growth: cause excess supply in any price case.
 - Reference: cause excess demand if the price is high (\$35)
 - High growth: cause excess demand regardless of price, will push price even higher. In 2025: high growth increases demand by 17%

US Imports Elasticity: 2025

Core Petroleum US Import Elasticity: Forecast for 2025
(In Million bpd)



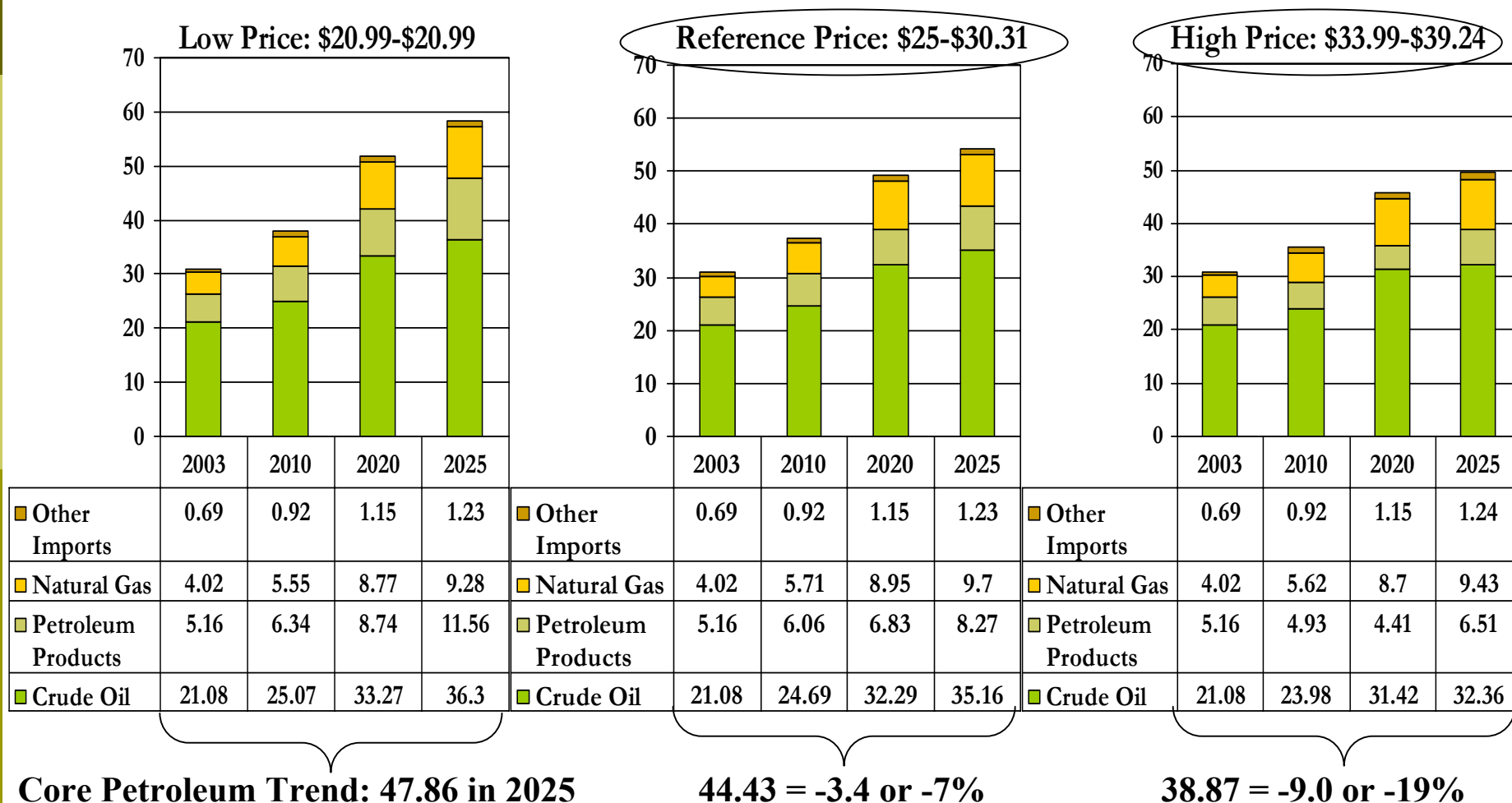
A Note on Analysis & Estimates

- ❑ Estimate of overall reserves or capacity of any country are uncertain at best. In MENA, reserves highly politicized since fall of Shah.
- ❑ Involve many economic assumptions, technological capabilities, and intricate simulations models.
- ❑ EIA country analysis indicate all MENA countries but Bahrain are under explored. Simmons questions whether current giant and super-giant fields can ever be replaced.
- ❑ Modeling has major pricing, elasticity, and transparency problems.
- ❑ Saudi Aramco proven to be credible over the years, but some analysts are asking them for more transparency.

Last Year's Conventional Wisdom: Projection in 2004

<u>Forecast</u>	<u>March</u> <u>2005</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>
<u>Oil Prices (\$/barrel)</u>					
<u>EIA</u>					
Reference Case	48.55	24.17	25.07	26.02	27.0
High Price Case	-	33.27	34.23	34.63	35.03
Low Price Case	-	16.98	16.98	16.98	16.98
<u>IEA</u>	48.55	21.75	23.82	25.89	27.96
<u>Outside Expert (High): GII*</u>	48.55	22.26	22.93	23.85	24.77
<u>Outside Expert (Low): NPC**</u>	48.55	18.00	18.00	18.00	18.00
<u>Global Production (MMBD)</u>					
<u>EIA (Reference Case)</u>	72.87	91.10	100.2	110.0	120.6
<u>IEA</u>	84.20	88.90	?	104.1	?

US Imports Comparison in 2005: Low, Reference and "Higher" Price Cases

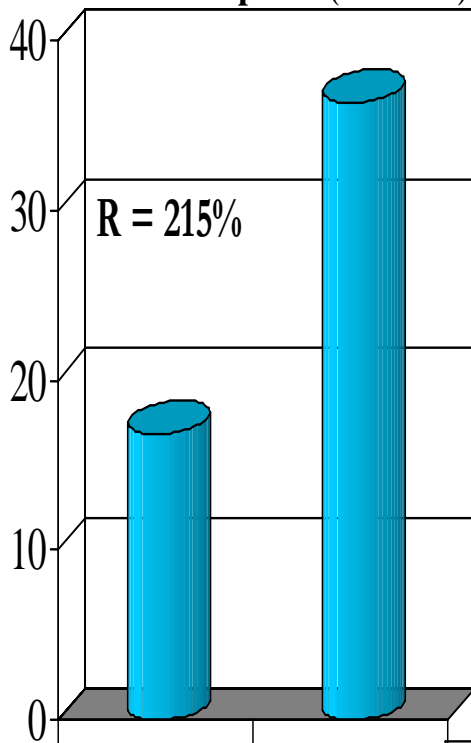


Saudi Arabia's Importance to the Energy Market

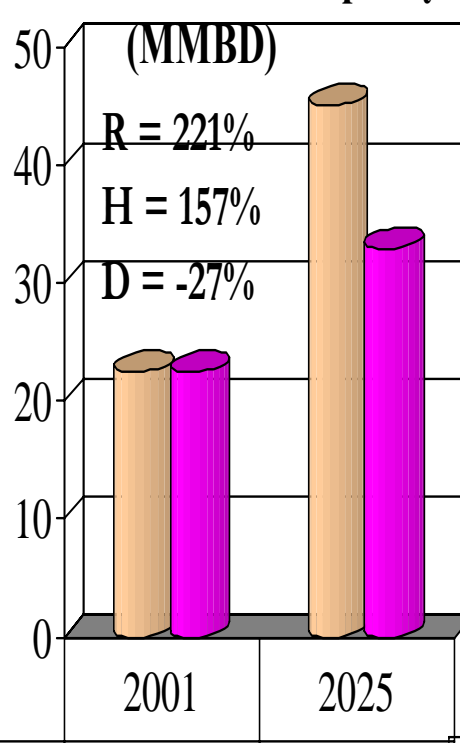


Demand-Driven Impact on Saudi & Gulf: at \$24-\$27/BL Vs \$33-\$35/BL

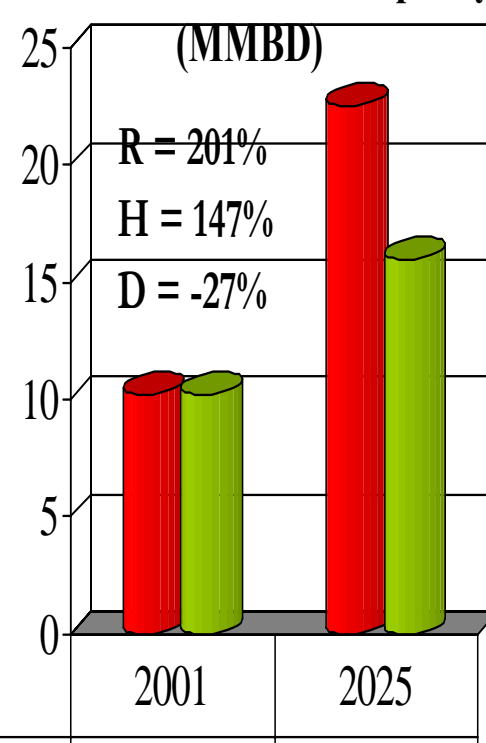
Gulf Oil Exports (MMBD)



Gulf Oil Production Capacity (MMBD)



Saudi Oil Production Capacity (MMBD)



■ Reference	16.9	36.4	■ Reference	22.4	45	■ Reference	10.2	22.5
			■ High	22.4	32.9	■ High	10.2	16

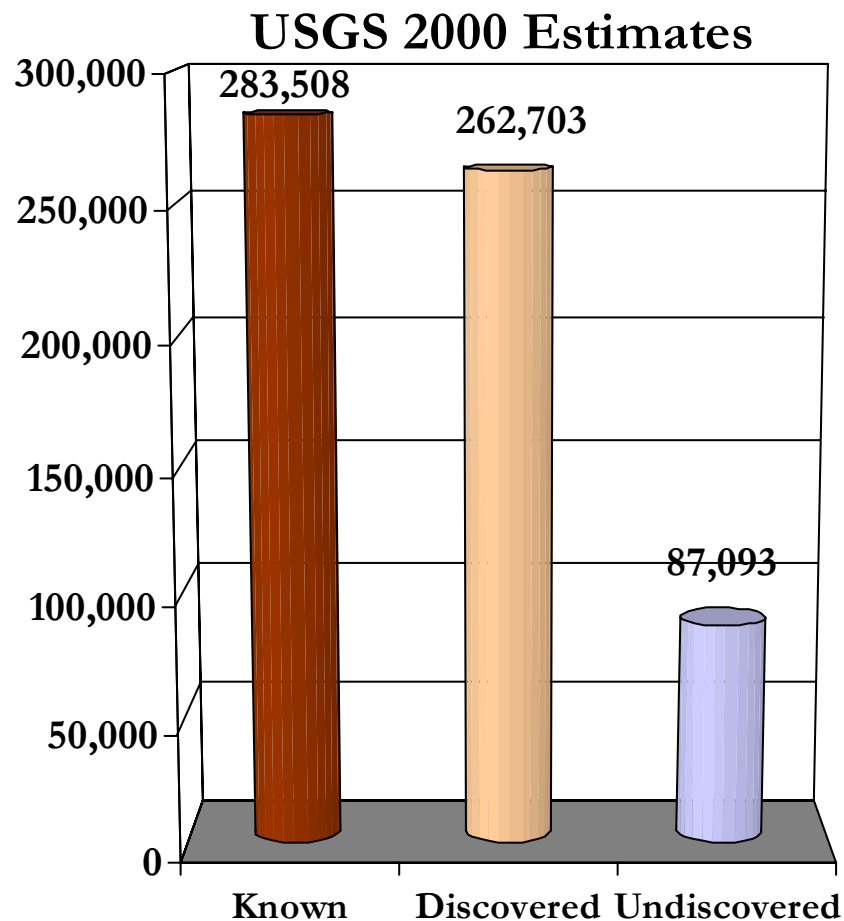
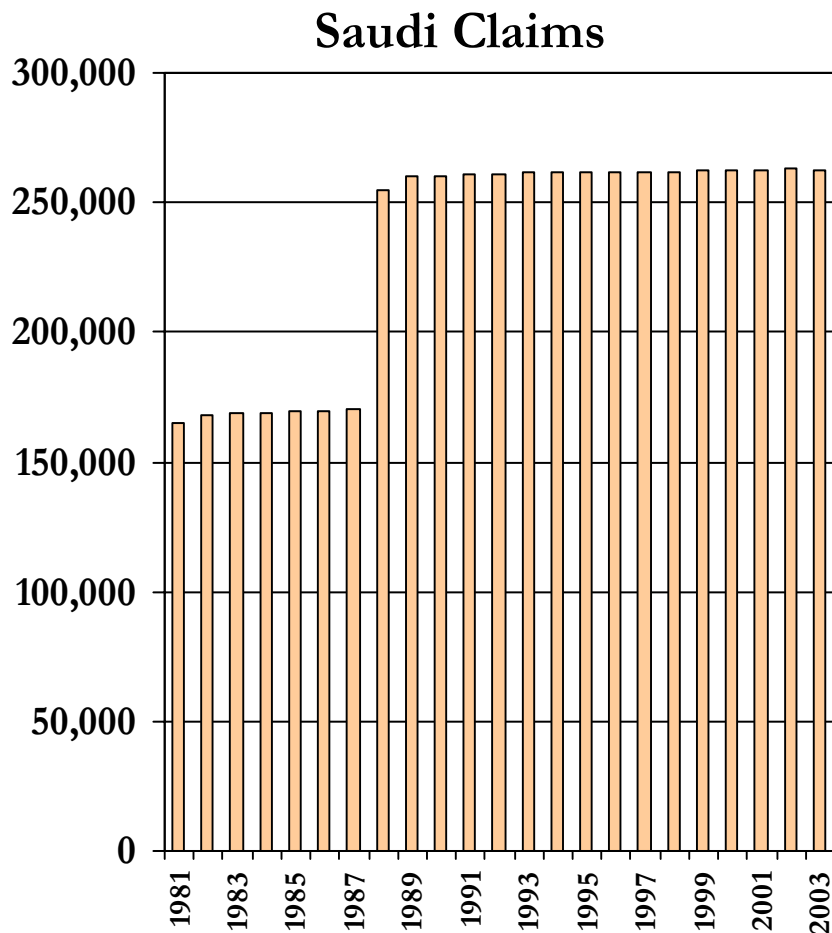
Major Unknowns in Saudi (and everyone else's) Production

- ❑ Will Saudi Arabia meet short-term bench marks?
- ❑ True nature of resources.
- ❑ Producability at given prices
- ❑ Impact of technology gain.
- ❑ Ability to substitute for current super-giant and giant fields.
- ❑ Rate and size of new developments and discoveries
- ❑ Saudi internal security
- ❑ Crisis and surge in demands imposed by problems in other exporters.
- ❑ Rate of decline in fields.
- ❑ Elasticity in importer conservation, efficiency, and alternative supply and time/uncertainty lags.

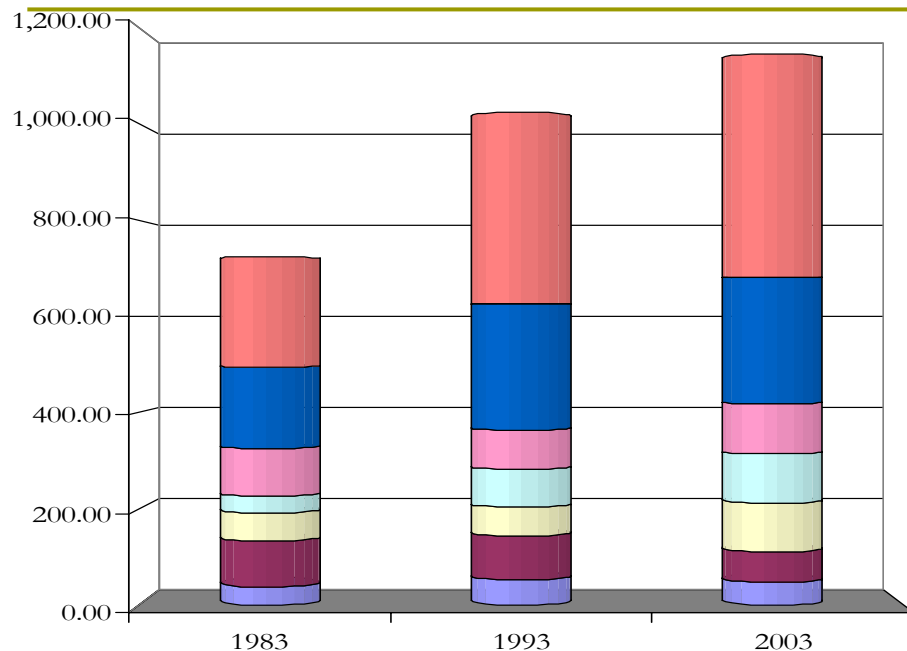
Saudi's Place In Energy Market

- ❑ **The largest oil reserves in the world?:** Saudi Arabia claims 25% of the world's proven reserve (260 billion barrels), and 200 billion barrels more as "possibility."
- ❑ **The largest oil producer in the world:** Saudi Arabia produces 12.5% of world total production, and has been the only past oil producer that consistently sought to maintain surplus oil production. EIA forecasts in 2025, Saudi production capacity will be 22.5 million bpd.
- ❑ **An influential member of OPEC:** Saudi Arabia continues to play a central role in the decisions of OPEC, due to its immense reserves and influence over the other member states, especially the Gulf countries.
- ❑ **Claims largest spare capacity:** The Kingdom has claimed goal of 1.5-2.0 million bpd of spare capacity. Claims to have 12.5 million bpd by 2009, and be "easily capable" of producing 15 million bpd within the next 15 years. This claim, however, is not verifiable.
- ❑ **Central to Gulf Security:** The Kingdom has the largest and most modern military and internal security apparatuses in the Gulf, and continues to play an important role in the stability of GCC states.

Saudi Oil Reserve Histogram (Billion Barrels)



Saudi "Proven" Oil Reserves vs. the World's



	1983	1993	2003
■ Middle East*	228.10	398.70	463.90
■ Saudi Arabia	168.80	261.40	262.70
■ Europe & Eurasia	100.10	80.40	104.30
■ S& C America	33.70	79.10	102.20
■ Africa	58.20	60.90	101.80
■ N. America	95.00	91.00	63.00
■ Asia Pacific	39.00	52.00	47.00

Source: BP Statistical Review of World Energy, June 2004, P.4-5.

Note: *The Middle East reserves does not include Saudi Arabia.

- According to BP in 2003:
 - Saudi "proven" reserves: 262.7 billion barrels (22.9%)
 - World "proven" reserves: 1,147.7 billion barrels.
- Saudi Aramco *claims* Saudi reserves:
 - are 262 billion barrels
 - are underestimated
 - could increase by 200 billion barrels through new discoveries and upgrading of their existing fields.

Matthew Simmons' Views

- ❑ A large portion of the Kingdom's production is based on a small number of giant and super-giant oil fields. All of the giant and super giant Saudi oil fields, but two, have been discovered along time ago.
- ❑ Saudi giant and super-giant oil fields have matured, which means that they peaked and are on the decline.
- ❑ They have high natural depletion rates of the giant and super-giant oil fields are higher than Aramco is reporting.
- ❑ Aramco has used intense water management to keep reservoir pressures high and postpone the natural depletion on the 5 large Saudi fields.
- ❑ Data from Aramco, OPEC, the EIA, and the IEA contradict each other, and have proved to have many holes in them.
- ❑ "Easy oil" era is over. Vertical wells in Saudi Arabia appear to be obsolete. MRC (maximum recovery contract) horizontal wells anchor future production.
- ❑ Aramco has explored the Kingdom thoroughly, and it is unlikely that future exploration will discover any new giant or super-giant oil fields to take the place of the aging fields.

Matthew Simmons' Views

Continued

- ❑ Claims that Aramco and other oil companies “overbooked proven reserves” because, “They all assumed that 3-D seismic and computer modeling could effectively replace the old practice of drilling a multiple number of appraisal wells and coring/flow testing them. This still remains the only way to predict with any accuracy the extent of original hydrocarbon in place and the ultimate recoverable reserves.”
- ❑ Simmons argues that, “multilateral horizontal wells can create very high flow rates but these are simply turbo-charged super straws and probably create pressure drops far faster than it production is slowed way down.” This technology, he argues, cannot increase reserves or recovery.
- ❑ Simmons argues that higher depletion rates mean higher chances of the field collapsing. That Ghawar’s depletion rate is a lot higher than the 48%, reported by Aramco. He cites Aramco’s engineers’ warning in 1979 that:
 - North Uthmaniyah in Ghawar will start an irreversible decline in 1989, and
 - Ain Dar/Shedgum will start its irreversible decline in 1992-1994 period.

The Other Side of Uncertainty in Reserves: The Saudi-Canadian “Synergy” in World Oil Supply

- ❑ “New” sources of liquid fuels include coal liquifaction, gas liquifaction, biomass, natural generation, oil shale and tar sands.
- ❑ Canada claims 179 billion barrels in tar sands, second only to Saudi Arabia
- ❑ Largely certified by National Energy Board and Alberta government (175 billion barrels) – second only to Saudi Arabia.
- ❑ Already have invested \$US 28 billion during 1996, and producing more than 1 MMBD.
- ❑ Expect \$US 36 billion more invested during 2005-2010, and production to rise to 2.7 MMBD.
- ❑ Current production costs are \$8-13 bbl for Bituman; \$18-23 bbl for synthetic light oil.
- ❑ Extraction from mining and upgrading produces 20% recovery.
- ❑ Steam assisted gravity drainage (SAGD) and solvents expected to produce 80% ultimate recovery.

The EIA Forecast of Canadian Energy Production

- ❑ The “High B” Case examines \$43-\$48 bbl oil.
- ❑ This case reduces the growth in US import dependence substantially. Is now 56%. Reference price case raises to 68% in 2025; “High B” case keeps at 58%.
- ❑ EIA largely accepts 175-179 billion barrels of Canadian tar sands reserves; issue is cost of production and upgrading.
- ❑ Role of Canadian Tar Sands is critical. Total production is estimated to rise from around 1 MMBD today to 3.5 MMBD in 2025 in Reference Case, and 4.7 MMBD in High B case.
- ❑ Rise in production matched by conversion from largely bitumen to largely synthetic liquids.

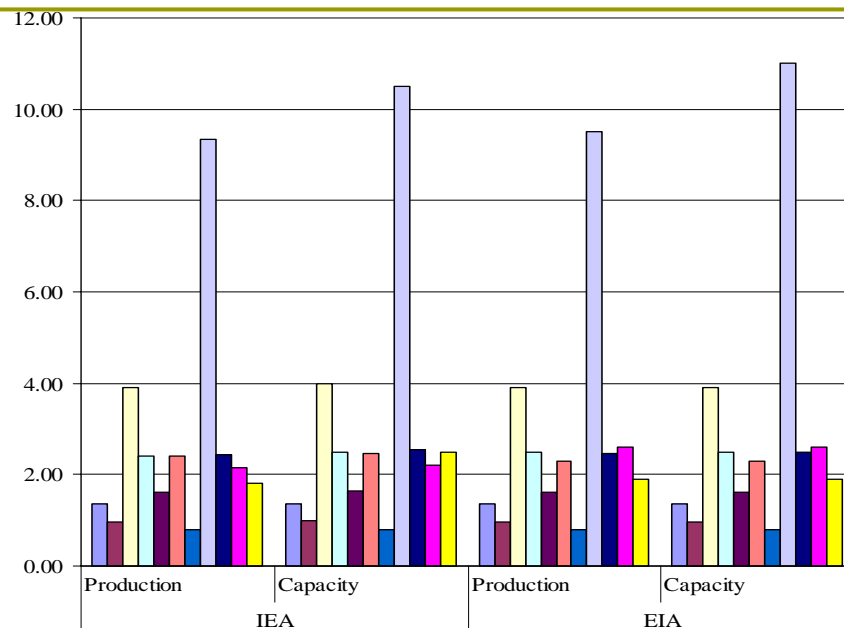
Saudi Arabia's Current Crude Production



Saudi Current Production

- ❑ Al-Naimi said, “Notwithstanding the uncertainly prevalent in assumptions about future supply and demand levels, projections show an increase in demand in the latter part of the year which would require additional crude oil to satisfy. Accordingly, to adequately fulfill this year’s additional demand, Saudi Arabian output shall be increased from current levels at a later time this year.”
- ❑ March 31, 2005, Al- Naimi said that Saudi Arabia can go up a million and a half barrels per day, but argued that the issue in the market is not supply, “there is plenty.”

Saudi Production Capacity in 2005



Capacity (Saudi claims):

- 10.6 mbpd in January
- 10.8 mbpd in February. (IEA estimates: 10 mbpd, EIA, 9.5mbpd)
- 11.0 mbpd in March (IEA estimates: 10-10.5 mbpd, EIA, 10.5-11 mbpd)
- abandoned policy to eliminate excessive inventory buildup in the OECD March 14, 2005.

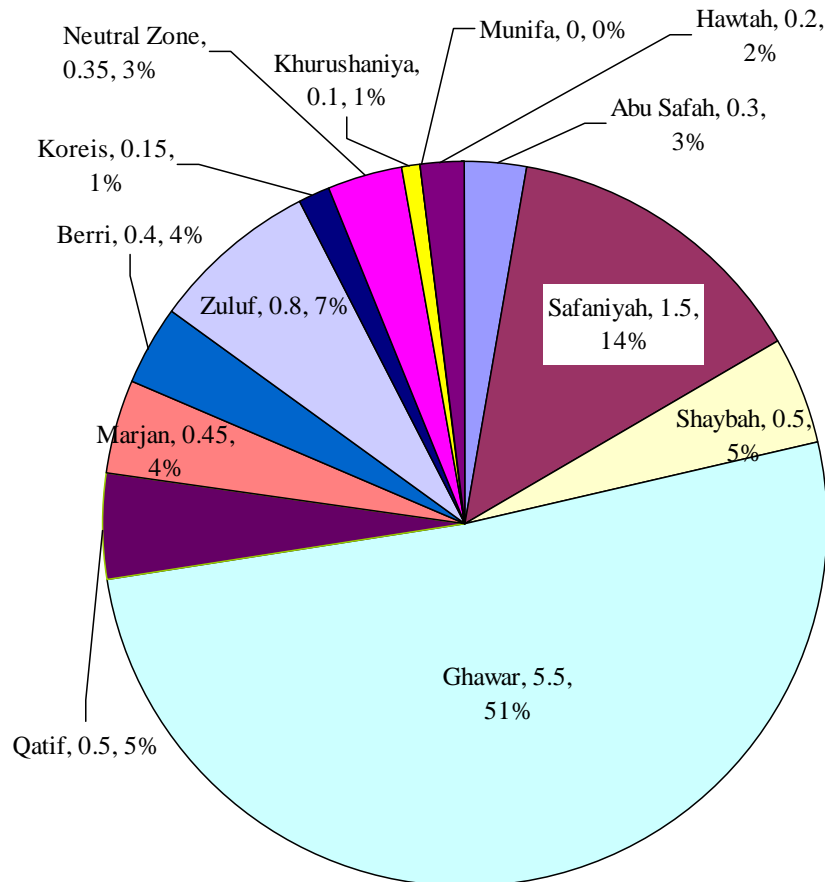
Production (Saudi claims):

- 9.25 mbpd in February
- 9.5 mbpd in March & April
- 10 mbpd in May (expected)

Source: Adapted from IEA *Oil Market Report*, April 12, 2005; and EIA *Short-Term Energy Outlook*, April 2005.

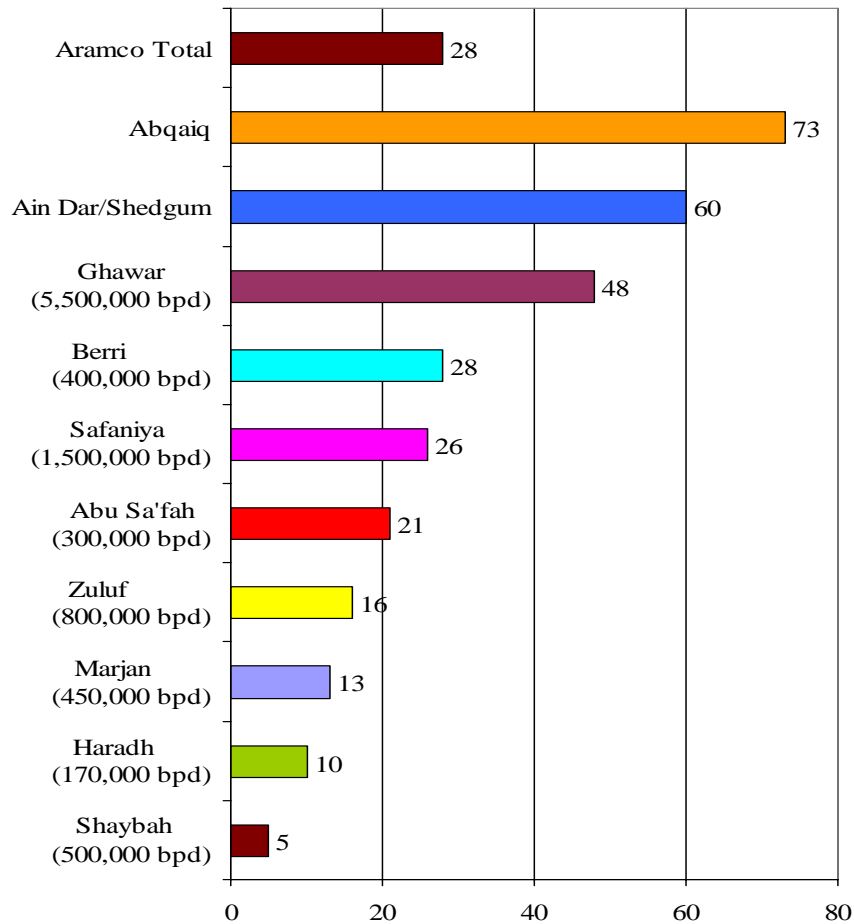
Note: Saudi capacity according to the IEA was 10.0-10.5, and the EIA was 10.5-11.0

Saudi Oil Fields Production in 2004



- Has 80 fields & 1,000 wells.
- More than 50% of reserves are contained in eight fields.
- Ghawar and Safaniyah produced 65% of the Kingdom's oil.
- Munifa is offline.

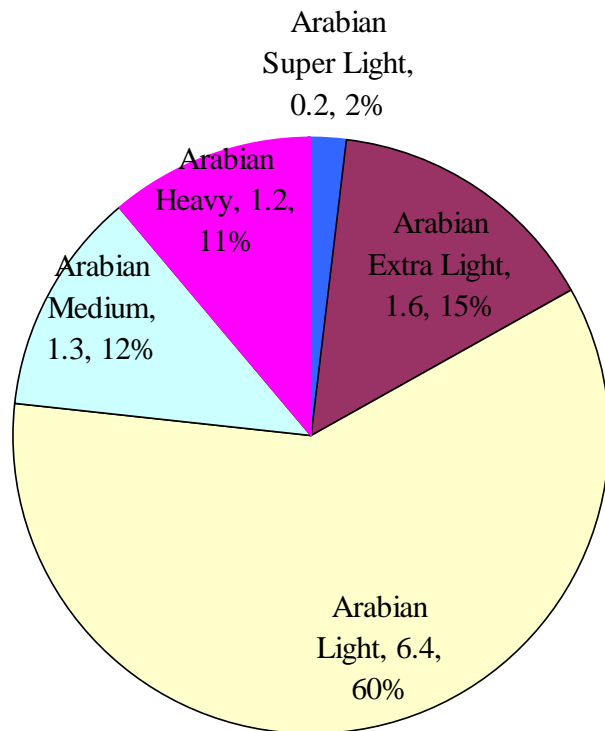
Oil Fields' Depletion Rates & Capacity



Source: Saudi Aramco

- Total depletion rates: % of the estimate oil resources has been pumped.
- Saudi oil fields total depletion rate: estimated to be 28%-30%
- To keep the same capacity, need more discoveries.
- Total producible oil at given cost very difficult to estimate, as is gain from secondary and tertiary recovery.

Current Saudi Production Grade



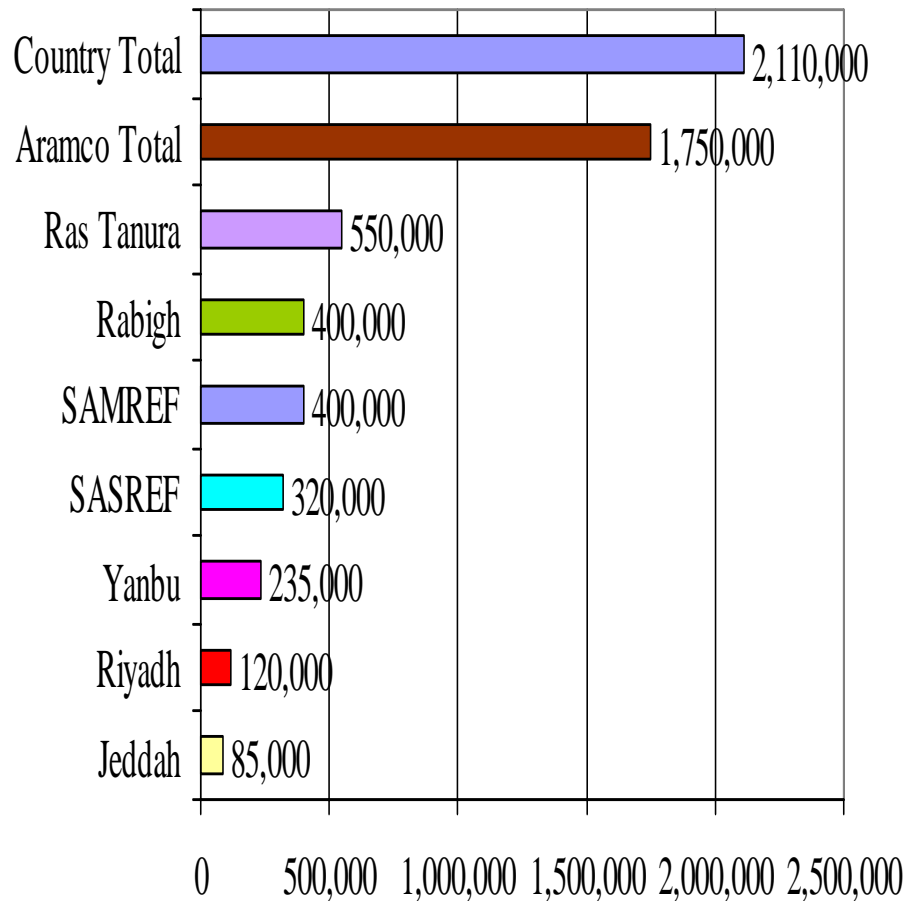
Source: Saudi National Security Assessment Project

- 65-70% of the Saudi production capacity is considered light gravity. The remainder is either medium or heavy
- The country is moving towards reducing these two grades.
- **Ghawar:** the major producer of Arabian light crude.
- **Abqaiq:** producer of Arab Extra Light crude. An enormous field, containing 17 billion barrels of proven reserves.
- **Shaybah:** with estimated (EIA) reserves of 15 billion barrels – produces a mix of Arabian light and Arabian Extra Light.
- **Munifa:** is still offline, but it could reach 1 million bpd of Arabian Heavy.

Uncertainty Regarding Saudi Current Production Capacity

- ❑ Most remaining spare capacity claimed to be in heavy crude production from the offshore Safaniyah field.
- ❑ Some analysts have published production capacity estimates for Safaniyah of 1.2 million bpd. These estimates have provoked some skepticism as to whether Saudi's actual spare capacity is 1.5 million bpd above its stated current production, since the Kingdom is currently producing significant volumes of heavy crude from Safaniyah.
- ❑ These capacity estimates may be referring to wet-crude handling facilities, which consist of two trains of 600,000 bpd each, completed in 1986.
- ❑ As part of Saudi Aramco's Crude Expansion Program in the late 1980s, 60 wells in Safaniyah were recompleted in previously shut-off zones.
- ❑ Safaniyah is one of the few crude streams which does not contain hydrogen sulfide and does not need to be stabilized before it is shipped in tankers.
- ❑ Pumped directly to the Juaymah export terminal. The main constraint to its usefulness as spare capacity is the lack of high-conversion refining capacity.

Saudi Refining Capacity



- Saudi has 8 refineries, with a combined crude throughput capacity of roughly 1.75 million bpd, and about 1.6 million bpd of overseas refining capacity.
- The Kingdom expects domestic demand for refined products to reach 4 million bpd by 2010.
- The Kingdom plans to upgrade and expand its current plants, which could produce 2.1 million bpd with an estimated cost of \$1.5-\$2.0 billion.

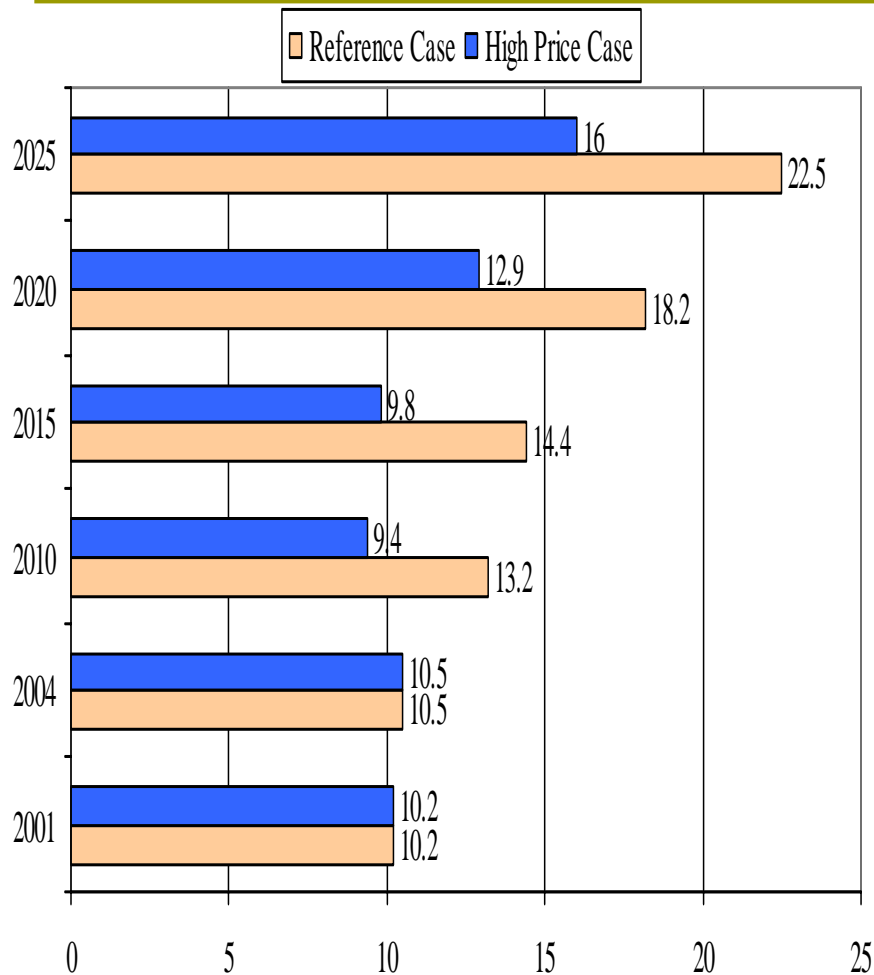
Saudi Arabia's Future Crude Production



Production Capacity Projection Sensitivity

- ❑ IEA, OPEC, & EIA have not published detailed global cases where oil prices go above \$35-\$37/barrel.
- ❑ In the EIA forecasts, in the high price case, production goes down in short-run because developing countries' demand falls.
- ❑ Complex mix of unknown long-term & short-term elasticities change long-term demand & supply.
- ❑ Forecasters need a credible estimates of short and mid term plans to producer proven reserves, and availability of long-term plans to produce additional reserves, and the bottom line is that no country has the level of transparency necessary for these models.
- ❑ But equal lack of transparency and credibility in modeling demand relative to price, conservation, efficiency, and alternative fuels.

Future Saudi Production Capacity



Source: EIA, International Energy Outlook, 2004.

- Reference case (\$25-\$27/barrel) & High price (\$35-\$37/barrel).
- Aramco claims that Reference case is unrealistic. Plan is 12.5 million bpd but says that Saudi capacity “could” reach 15 million bpd.
- High price case is more realistic. It takes into account substitution effect.
 - Cuts capacity goal by 6.5 million bpd or 29%
 - Demand for capacity in 2025 may be 10-12.5 million bpd at \$50/barrel

Abdullah-Bush Texas Summit

- ❑ The US “signaled” to the Saudis that it wanted a commitment to increase oil supply in the short-run to ease the high oil prices.
- ❑ Saudi Arabia reiterated that it thinks that one of the reasons for the high gas prices is the bottleneck created by aging US refineries. Possible Saudi investments in US refineries.
- ❑ The Saudis presented their plan to invest \$50 billion in the energy sector to increase production capacity to 12.5 million bpd by 2009 and to reach 15 million bpd within 15-20 years.
- ❑ The joint statement said, “Both nations pledge to continue their cooperation so that the oil supply from Saudi Arabia will be available and secure. The United States appreciates Saudi Arabia's strong commitment to accelerating investment and expanding its production capacity to help provide stability and adequately supply the market.”

Saudi New Production Contributing to 12.5 million bpd Capacity in 2009

Oil Filed	Grade	New Capacity (bpd)	Date
Abu Safah & Qatif	Arab Light & Extra Light	500,000-550,000	2004/2005
Haradh	Arab Light	300,000	2006
Khursaniyah	Arab Light & Extra Light	500,000	2007
Shaybah	Arab Extra Light	400,000-500,000	2008
Khoreis	Arab Extra Light	1.0-1.2 million	2009
Total		2.70-3.05 million	2004-2009

Source: Saudi National Security Assessment Project

11,000,000 bpd Estimated sustainable capacity in March 2005
 + **2,400,000 bpd** Estimated increase in capacity on stream 2005-2009
 - **800,000 bpd** Will go into replenishing the natural decline curve 2005-2009
 ≈ **12,600,000 bpd** Estimated sustainable capacity in 2009

Note: this is **not** \$3 per incremental barrel oil. Investment costs may be of \$12 to \$15 billion 2003-2009.

Saudi Fields “Mega Projects”

- **Munifa:**
 - In January 2004: was offline
 - Aramco claims it could produce up to 1 million bpd in the foreseeable future (no decision has been made to develop the field because it produces Arabian Heavy).
- **Abu Safah & Qatif:** Completed late 2004 and its cost was \$4 billion.
 - In January 2004: produced 300,000 bpd
 - In early 2005: came on stream and produced 500,000 bpd
- **Khursaniyah:** Signed March 2005. The budget was approved for \$3 billion.
 - In January 2004: produced 100,000 bpd
 - By 2007: Aramco claims will reach 500,000 bpd
- **Khoreis:** The budget was approved for \$5 billion.
 - In January 2004: produced 150,000 bpd.
 - By 2009: Aramco claims will increase to 1-1.2 million bpd
- **Haradh:** Inaugurated January 2004, its estimated cost is \$ 1 billion.
 - In January 2004: it was reported to produced 170,000 bpd
 - By 2006: the project is expected to expand it to 300,000 bpd
- **Shaybah:** Its estimated cost is \$1 billion.
 - In January 2004: produced 500,000 bpd.
 - By 2008: Aramco claims its new capacity will be 400,000-500,000 bpd.
- **According to Aramco, the decision has been made to develop all these fields except Munifa.**

Saudi Petroleum Security



Oil Infrastructure Security

- ❑ The Saudi security budget is estimated to total more than \$8.0 billion in 2004.
- ❑ Between 2002 and 2004, \$1.2 billion to increase security at all of its energy facilities.
- ❑ Oil fields are large area targets, with many redundant facilities.
- ❑ Air surveillance from helicopters and round the clock F15 patrols. On the perimeter, heavily equipped National Guard battalions stand guard.
- ❑ At any one time, it is estimated that there are between 25,000 to 30,000 troops protecting the Kingdom's oil infrastructure.
- ❑ Saudi Arabia's terminals are similarly well defended. Each terminal and platform has its own specialized security units, comprised of Saudi Aramco security forces and specialized units of the National Guard and the Ministry of Interior. The Coast Guard and components of the Navy protect the installations from the sea.

General Vulnerabilities

- ❑ Under MOI: representatives from the Special Security Forces, Special Emergency Forces, the General Security Service, regular forces of the Public Security Administration, the Petroleum Installation Security Force (PISF), specialized brigades of the National Guard, the Navy, and the Coast Guard.
- ❑ The weakest link in the system is the estimated 17,850 km of pipeline in the Kingdom.
- ❑ Short of a spectacular strike on the scale of 9/11, or some form of systematic sabotage from inside Saudi Aramco or other key energy industries, most foreseeable assaults are likely to be quickly confined and any resulting damage is likely to be repaired relatively quickly.
- ❑ Energy security will, however, be a continuing problem for Saudi Arabia and the world. Moreover, global energy use expected to rise by more than 50% by 2025, and the security of Saudi energy exports will play a steadily more vital role in the world's economy.

Saudi Oil Revenues and Internal Stability



Saudi Oil Revenues & Stability

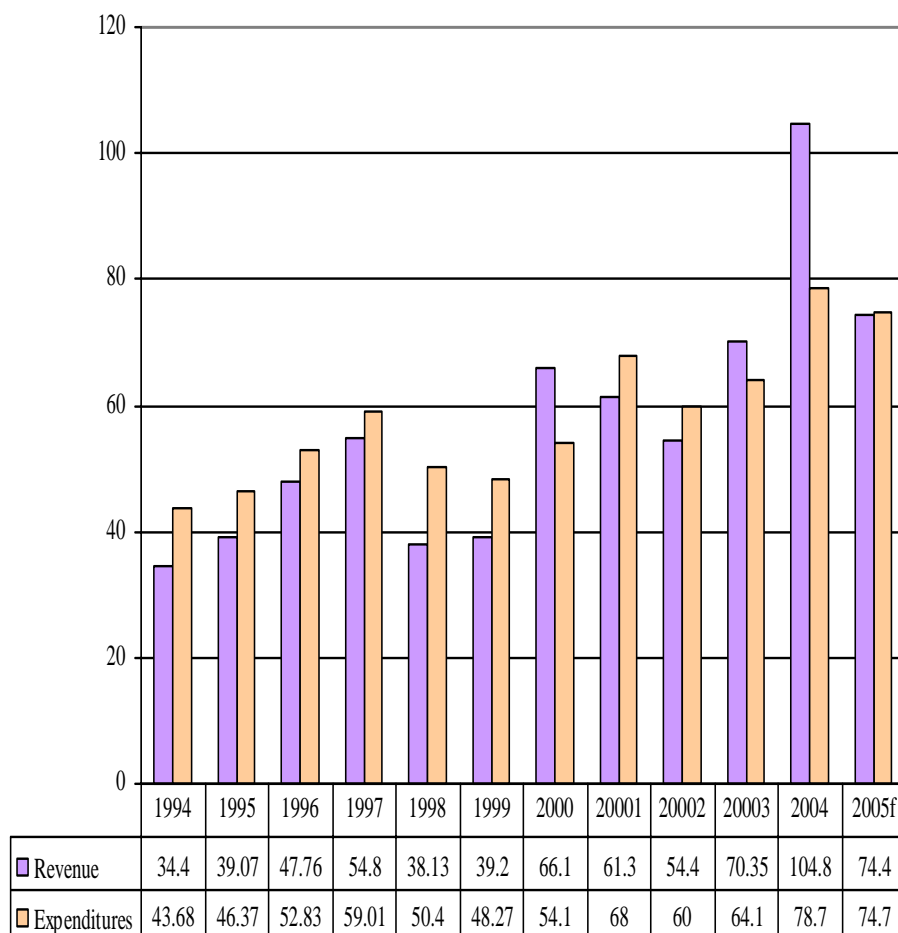
- According the EIA, oil revenues made up 90-95% of total Saudi export earnings, 70%-80% of state revenues, and approximately 40% of the Kingdom's GDP.
- High Oil revenues came at the right time:
 - Unsatisfied public with a budget deficit since 1982 & the rising public debt.
 - High costs of internal security following the May 2003 bombing.
 - The budget surplus gave the leadership an opportunity to practice transparency in government spending.
 - Finance aging infrastructure
 - Support social programs & entitlements given high unemployment rates

OPEC Oil Revenues

	Nominal \$Billions				Constant 2004 \$Billions				
	Change 2004/2003	2004E	2005F	2006F	1972E	1980E	1998E	2005F	2006F
Algeria	32%	\$22.60	\$25.30	\$25.10	\$4.80	\$25.60	\$6.30	\$24.80	\$24.20
Indonesia	-111%	-\$0.20	-\$1.30	-\$1.60	\$3.20	\$29.60	\$3.50	-\$1.30	-\$1.50
Iran	36%	\$32.50	\$32.30	\$32.00	\$14.90	\$26.10	\$11.70	\$31.70	\$30.80
Iraq	105%	\$20.00	\$21.30	\$24.80	\$5.20	\$53.80	\$7.50	\$20.90	\$23.90
Kuwait	40%	\$27.40	\$28.00	\$30.00	\$10.00	\$37.30	\$8.90	\$27.50	\$28.90
Libya	38%	\$18.10	\$19.40	\$19.60	\$10.60	\$44.30	\$6.60	\$19.00	\$18.90
Nigeria	46%	\$29.80	\$30.60	\$32.10	\$7.50	\$47.50	\$9.80	\$30.10	\$30.90
Qatar	43%	\$13.50	\$13.80	\$13.60	\$1.60	\$10.70	\$3.80	\$13.50	\$13.10
Saudi Arabia	35%	\$115.10	\$113.80	\$111.00	\$16.80	\$207.80	\$39.00	\$111.70	\$107.00
UAE	32%	\$30.30	\$31.30	\$32.40	\$3.80	\$37.50	\$10.70	\$30.70	\$31.20
Venezuela	47%	\$29.10	\$30.30	\$29.80	\$11.00	\$36.20	\$13.20	\$29.70	\$28.70
TOTAL	39%	\$338.40	\$344.70	\$348.90	\$89.50	\$556.20	\$120.90	\$338.40	\$336.30

Source: Adapted EIA, "OPEC Revenue Fact Sheet," January 2005.

Oil Revenues & Budget Deficit



- In 2004, government revenues totaled \$104.8 billion, while government spending was \$78.7.
- The government announced that the \$26.1 billion surplus would be spent on two broad areas.
- \$15.2 billion be used to pay down the Kingdom's public debt. This payment would decrease the government domestic liability from \$178.6 billion to \$163.7 billion, 66% of GDP down from 119% of GDP in 1999.
- \$10.9 billion to be spent on new development projects. Some of the surplus will go to the Saudi Real Estate fund and Saudi Credit Bank aimed at financing new business ventures.

Economic Reforms

- The combination of paying down the public debt and building up the Kingdom's foreign assets represent the best fiscal and debt portfolio since the early 1980s. This growth was due or coincided with three major shifts:
 - Saudi Arabia enjoyed low interest rates, which increased lending by 26%--increasing liquidity and investment in the Kingdom. The non-oil private sector grew by 5.7% in 2004.
 - major ventures were started in the water, gas, power, and petrochemical sectors. This increased capital inflow, created jobs, and increased liquidity. Projects in the energy sector increased the Kingdom's production, refining, and export capacity.
 - Saudi Arabia witnessed three major IPOs: Saudi Telecoms (STC), Sahara Petrochemicals, and Ettisalat. These IPOS increased the investment inflow to the Saudi capital markets and spurred real economic growth.

Saudi Economy in 2005

- The Saudi American Bank (SAMBA) forecasts that in 2005, real GDP growth rate will be 4.25%.
 - based on a \$35 per barrel price of oil
 - Oil will revenues will grow by 2%
 - non-oil private sector will grow by 2.2%.
 - produce a budget surplus of \$2.0 billion
 - decrease government debt to \$161.06 billion from \$163.73 billion.
- High liquidity and a lack of investment opportunities will saturate the market with investment money. Most of this money is expected to go into the Saudi stock market and real estate.
- Tadawel All-Shares Index started 2004 at 4,500. It almost doubled its value by the end of the year 8,026 points and reached 10,000 point in early 2005.
- Experts believe that this trend will continue.

Saudi Stability To Do List

- ❑ Aramco and others project future oil revenues cannot sustain high per capita income or Saudi economy.
- ❑ Economic and social reforms are at least as important as political reforms. Despite many of the good things the Kingdom has done in the last three years, there is a lot to be done.
- ❑ Demographics, diversification, youth explosion, Saudization, social and political change.
- ❑ The privatization campaign has been slow and at best ineffective to build a private sector robust enough to meet the employment needs of the country and diversify the Saudi economy away from oil.
- ❑ A realistic and concerted effort has to be channeled into dealing with the demographics and unemployment to limit the pool of recruitment by extremists.

The End

