Case Study on Saudi Aramco

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The Changing Role of National Oil Companies in International Energy Markets
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Saudi Aramco’s Role is Different from the Oil Ministry

- Implement investment and production targets set by Ministry of Oil and Saudi government
- Saudi Aramco completes the strategic plan for the investment program needed to accomplish policy directed for capacity targets; projects evaluated on a return to capital basis (15% hurdle rate)
- Allocation of natural gas to local economy now handled by Ministry of Oil
- Surplus refined products under Saudi Aramco’s purview
- Implementation in the most commercially profitable and efficient manner possible
Saudi Aramco Goals

1) To carry out the objective set to it by the shareholder to keep at all times an excess production capacity of 1.5 - 2 MBD realizing that this is a unique role requiring technical capabilities and continued market monitoring and careful planning. The unique position of Saudi Arabia, and consequently its national oil company in the market as the largest producer and supplier of oil to the world necessitates such market balancing role.

2) To develop the hydrocarbon resources of the Kingdom to contribute to the development objectives of diversifying the economy and developing human resources. The efficient extraction, production and marketing of oil provide the needed revenues and foreign exchange for the non-oil sector to grow and the economy to be more diversified. Another source of contribution to the diversification of the economy is through the provision of energy and feedstock to the industry (especially petrochemicals) to utilize the Kingdom’s comparative advantage and increase the contribution of the manufacturing sector in GDP.

3) To enhance the role of oil in global energy mix. …environmental and energy security concerns have been channeling technologies and research towards alternate fuels especially fuel cells…the research and investment in those technologies pose long-term challenges to the oil industry in general and to the NOCs including our own. The challenge for Saudi Aramco here is how to mobilize its own and cross-industry resources to promote the use of oil and gas. Carbon sequestration and capture technologies as well as technologies that ensure a role of these fuels in the hydrogen generation are emphasized in the R&D programs of the company and in its collaborative research with other NOCs, IOCs and research institutions.
Saudi Aramco and Saudi Foreign Policy: Select Examples

- Political decision to remain number 1 oil supplier to US continued until 2003
- Special Case of the Shaybah Field
- Investment program linked to market management goals and geopolitical influences; Production rates follow foreign policy goals
  - Capacity Expansions of 1990
  - Current Capacity Expansion Drive
“Saudi analyst Nawaf Al-Obaid, formerly the Managing Director of the Saudi National Security Assessment Project, published an article “Saudi Arabia’s Strategic Energy Initiative” asserts that Saudi Arabia will be able to replace all of Iran’s exported oil, if necessary. Writes Al-Obaid, “…if Iran responds to UN-imposed sanctions by cutting its oil exports – which its foreign minister implicitly threatened to do this month when he said that the ‘first consequences of these sanctions would be an increase in the price of oil to around $200 per barrel’ – the impact won’t be as severe as many think. In fact, the Kingdom has largely succeeded in achieving this goal (to be able to replace Iranian exports).” [1] He adds, “Saudi Arabia not only has a strategic interest in reigning in Iran, but it is well positioned to do so. With the price of oil at a high, the kingdom’s influence as the world’s central banker of energy is at its apex, making it the economic powerhouse of the Middle East.”

Later, an Al-Obaid Washington Post Op Ed says: (King) Abdullah may decide to strangle Iranian funding of the militias through oil policy. If Saudi Arabia boosted production and cut the price of oil in half, the kingdom could still finance its current spending. But it would be devastating to Iran, which is facing economic difficulties even with today’s high prices. The result would be to limit Tehran’s ability to continue funneling hundreds of millions each year to Shiite militias in Iraq and elsewhere.

2004 Saudi Oil Field Production

Key: Field, million barrels/day, % of total production

Ghawar, 5.50, 53.14%
Zuluf, 0.80, 7.73%
Shaybah, 0.50, 4.83%
Marjan, 0.45, 4.35%
Qatif, 0.50, 4.83%
Koreis, 0.15, 1.45%
Neutral Zone, 0.35, 3.38%
Khurushaniya, 0.10, 0.97%
Munifa, 0.00, 0.00%
Hawtah, 0.20, 1.93%
Abu Safah, 0.30, 2.90%
Safaniyah, 1.20, 11.59%
Saudi Oil Field Depletion Rate

Source: Saudi Aramco
## Saudi Capacity Expansion Program

<table>
<thead>
<tr>
<th>Oil Field</th>
<th>Grade</th>
<th>New Capacity (b/d)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abu Safah &amp; Qatif</td>
<td>Arab Light &amp; Extra Light</td>
<td>500,000-550,000</td>
<td>2004-2005</td>
</tr>
<tr>
<td>Haradh</td>
<td>Arab Light</td>
<td>300,000</td>
<td>2006</td>
</tr>
<tr>
<td>Khursaniyeh</td>
<td>Arab Light &amp; Extra Light</td>
<td>500,000</td>
<td>2007</td>
</tr>
<tr>
<td>Shaybah and Nuayyim</td>
<td>Arab Extra and Super Light</td>
<td>350,000</td>
<td>2009</td>
</tr>
<tr>
<td>Khoreis</td>
<td>Arab Extra Light</td>
<td>1.0-1.2 million</td>
<td>2009</td>
</tr>
</tbody>
</table>

**Total** | **$12-15 billion** in investments  

**10,300,000 b/d** Estimated sustainable capacity in mid-2005  
**+ 3,000,000 b/d** Added by 2009  
**- 2-8%** Natural decline curve 2005-2009  
Estimated sustainable capacity by 2009