

GSMUN XVIII

Specialized Committee: Saudi Aramco Board of Directors

Chairs: Andrew Leffler and Rajiv Tummala

The Committee

This committee is the Board of Directors of the Saudi Arabian Oil Company, better known by its former name, Saudi Aramco (Arabian-American Oil Company). The committee as it exists today is an extension of the Saudi government, an entirely different beast from its original incarnation. It traces its roots back to the early 1930s, from a joint Saudi-American venture to develop the recently discovered oil deposits in the Arabian Peninsula. Initially, the Americans exerted more control over this predecessor (the California Arabian Standard Oil Company). However, as the vast scale of the Gulf states' oil deposits became clear and anti-colonial Arab nationalism swept through the region, the Saudi government began to demand greater control over their national resources. Threats of nationalization to that effect yielded a deal called the Golden Gimmick that funnelled a greater share of Aramco's revenue to the Saudi government in 1950. During this time additional pipelines, export terminals, and associated infrastructure was built to help develop Saudi Arabia's export capacity.

Between the late 1960s and late 1980s the Saudi government pursued an increasingly large stake in control over the company. This culminated in the full government acquisition of the company in 1988. After that point, the company became increasingly politicized and gained even more control over the Kingdom's sovereign reserves. It took control of nearly all aspects of Saudi oil production, marketing, and refining by acquiring stakes in most of the other major companies operating in the country in a prime example of vertical integration. This is when a company acquires the full "supply chain" of materials and processes associated with making a product. Today, the company is a behemoth. It is valued somewhere between 9 to 10 trillion dollars, making it by far the

most valuable company in the world. Not only is it valuable monetarily; the smooth functioning of the world's economy is heavily reliant upon the services that Saudi Aramco renders.

The importance of the Board, by extension, is difficult to overstate. The Board comprises 11 members who set and execute strategy for the company. That somewhat vague description is a result of the fact that, because Saudi Aramco functions as an arm of the government, it has governing it enormous power to set policy. The decisions that it makes, therefore, do not solely consider business interests: they are heavily wrapped up in politics. Those politics are both domestic and international. Members of the Board who also belong to the Saudi Royal Family are likely to use their influence here to attempt to gain power nationally. Furthermore, the purely commercial interests of the Company are sometimes disregarded, as the Company is an instrument of Saudi foreign policy.

Planning for Reserve Depletion

An Introduction to the Issue

Eventually, our vast oil reserves will be depleted. Crucial to this issue are the far-reaching consequences of such depletion, as well as the basic underlying economic dynamics governing the global petroleum industry. Currently, the Board is reluctant to provide precise data on our reserves. They are known to contain about a fifth of the world's totals of crude oil, and we estimate that we have already extracted about 40%. Although difficult to predict, we believe that we will reach the peak of our oil production within a few years, if we haven't already. After this so-called "peak oil," production will slowly begin to decline until effectively non-existent. The bulk of this decline will be in the coming decades, or, with prudent management, the coming century.

Oil depletion will have wide-ranging economic impacts. Most obviously, a shrinking supply of this vital commodity in the face of ever-growing demand will lead to price increases. These increases in the price of energy are likely to impede economic growth and development worldwide.

Domestically, oil depletion can and will have extremely serious sociopolitical repercussions if left unattended. The ability of the Saudi government to pay its bills is highly dependent upon Aramco's revenues. And those bills are substantial. The Royal Family has for years maintained social stability through providing generous safety nets and energy subsidies to the people. This "investment in stability" only increased in scope after the destabilizing effects of the Arab Spring in 2011. Therefore, if we no longer generate even a fraction of the revenue that we do today, the Saudi government will likely have to choose between insolvency and revolution. Neither option is desirable.

Recent Developments

As stated earlier, the high water mark of oil production for Saudi Arabia is generally believed to be the current day, plus or minus five years. Accordingly, the firm has made some initial steps to bolster our company's future. In a 2009 partnership with a Japanese firm, the Sumitomo Chemical Corporation, Saudi Aramco opened its first petrochemical plant. The 2013 Aramco Annual Review is yet another signal from the Board about its commitment to diversification. The review outlined the commercial interest in becoming a world-class industrial chemical producer in addition to our prowess at oil extraction.

The Way Forward

The recent moves towards the chemical industry are sensible for a company with our expertise and worker pool. In addition, moves towards mining and raw commodity processing would be complementary to a petrochemical-heavy approach. Developing power plants to supply unstable and underdeveloped neighbours with reliable energy could be a promising route. Furthermore, boosting Research and Development spending on renewable sources of energy could

allow us to export our technology or products abroad for a hefty fee. With this model, we could become a “green” energy giant, building solar panels at home, wind turbines off the coast of Scotland, and tidal generators in Canada.

Due to decades as an exporting powerhouse, both our company and country boast a strong infrastructure network of pipes, docks, and export terminals. Some of this can be repurposed for new tasks. Shipyards, for instance, could serve as a repair hub for current oceangoing vessels (especially those on the Suez canal trade route) or churn out ships themselves. As there is an anticipated shortage of fresh water on the Arabian peninsula, newly-built desalination plants and the existing pipe network could be used to supply thirsty nations like the UAE, Yemen, and Oman with potable water.

Extending the time before the oil reserves deplete would ease this transition period. We can extract the maximum value from our fields by using our influence in OPEC to restrict global petroleum production. This restriction would artificially raise the price of oil our supplies, bringing in more revenue over a longer period of time. In addition, we can increase production in three ways. First, by scouring every inch of our land for additional reservoirs, even if they are insubstantial. Second, by using “Enhanced Oil Recovery (EOR) techniques” to extract all, not just most, of the oil from the conventional fields that we have. Lastly, we can augment this by seeking out and tapping unconventional sources, which are increasingly becoming accessible due to advances in technology. Deep water wells and deposits below thus-far impenetrable rock domes are some of the sources that we are increasingly able to reach.

Questions to Consider

- 1) Should production be slowed at all, or kept as high as possible?
- 2) How can we gain a corner on the petrochemical market?

- 3) Should we rebrand our company's mission or description to signal this change in policy to markets?
- 4) How can the domestic political concerns of the government be served while still making prudent business decisions?
- 5) What are the foreign policy goals of Saudi Arabia that we help meet?
- 6) Should Saudi Aramco branch out beyond industrial pursuits, such as finance?
- 7) Are there any additional methods of revenue generation to those discussed in this briefing?
- 8) Does our connection to the Saudi government help or harm us?
- 9) How can we influence the global oil and natural gas market to maximize the value of our product?
- 10) What are the downsides to diversification?

Further Reading

<http://www.investopedia.com/articles/economics/08/determining-oil-prices.asp>

A good refresher on basic economics applied to oil prices

http://www.huffingtonpost.com/michael-t-klare/peak-oil-is-dead_b_4567978.html

An excellent examination of the current debate surrounding peak oil theory.

<http://blogs.platts.com/2014/05/19/saudi-aramco/>

A summary of the 2013 Saudi Aramco internal review that is easier to understand than the original and contains context for the key decisions.

<http://oilprice.com/Alternative-Energy/Nuclear-Power/Why-has-Nuclear-Power-become-so-Important-to-Saudi-Arabia.html>

This explores some of Saudi Arabia's current and future plans to venture into renewable energy

<https://www.cia.gov/library/publications/the-world-factbook/geos/sa.html>

The CIA World Factbook gives a great overview of the country as a whole, useful for trying to understand the context in which Aramco operates

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Patterson, Ron. "A Closer Look at Saudi Arabia - Peak Oil Barrel." Peak Oil Barrel.

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[http://www.economist.com/news/finance-and-economics/21602731-kingdom-does-not-splash-cash-other-gulf-states-oil-fuelled-](http://www.economist.com/news/finance-and-economics/21602731-kingdom-does-not-splash-cash-other-gulf-states-oil-fuelled-caution?zid=298&ah=0bc99f9da8f185b2964b6cef412227be)

[caution?zid=298&ah=0bc99f9da8f185b2964b6cef412227be](http://www.economist.com/news/finance-and-economics/21602731-kingdom-does-not-splash-cash-other-gulf-states-oil-fuelled-caution?zid=298&ah=0bc99f9da8f185b2964b6cef412227be) (accessed August 28, 2014).

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<http://online.wsj.com/news/articles/SB10001424053111904060604576572552998674340>

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<http://english.alarabiya.net/en/views/business/economy/2013/09/25/Saudi-Aramco-shaping-the-kingdom-s-future.html> (accessed August 25, 2014).

The Pivot to Asia

Background:

Saudi Aramco

Aramco has a wide span of operations ranging from exploration missions to find new oil fields, refinement oil in one of many refineries located across the Arabian Peninsula, and distribution of the oil across the world through shipping routes. Because of its total control of the entire means of production for its supply of oil, Aramco stretches to a truly global span. While the majority of oil fields under its control are in the Middle East, Aramco ships to the entire world, most notably the US, Europe, and China. The future of Saudi Aramco operations rest with this last country. Most of Aramco's tankers, by number of shipping routes, are destined for European and American cities, which suggest the majority of exports is to these countries. Changing trends however, show that Asia is now the largest consumer of oil worldwide.

The Asian Behemoth

In 2012, Asia as a whole consumed 28 million barrels of oil a day far outstripping that of North America (23 million barrels a day) and Europe (14 million barrels a day). However, just 30 years ago, Asia consumed 10 million barrels which, during that time period, was a small amount.¹

¹ Plumer, Brad. "These Maps Show How Asia Is Taking over the Oil Markets." *Washington Post*, August 26, 2013. Accessed August 20, 2014.
<http://www.washingtonpost.com/blogs/wonkblog/wp/2013/08/26/these-maps-show-how-asia-is-taking-over-the-oil-markets/>.

This is massive increase that can be explained by the rapid development of countries like China and India, two largest consumers of oil in Asia, both dwarfing the oil consumption of other countries that Saudi Aramco exports oil to such as France, Germany, and the UK. This large amount of oil consumption, leading to a massive demand for oil, is even more significant due to the domestic production of oil in Asia.

Asia's oil production is relatively low, excluding the Middle East. Two years ago, the top four producers of oil in Asia were China, Kazakhstan, India, and Indonesia. Altogether these countries produced about 8 million barrels of oil per day while in turn consuming about 16 million barrels per day.² This deficit was and currently is made up by importing from other oil companies, including Saudi Aramco. In fact, many countries in Asia run a deficit in their oil consumption to production ratio. It is in these countries where the most profit can be made selling oil. It should be noted, if one considers Russia as another Asian country, that Russia has a sizable oil surplus which it then sells to European countries. Therefore it would be impractical as an area of profit for an oil company looking to sell.

The reason that Asia is such a large consumer of oil is quite obvious. Since the majority of Asian nations are developing countries, they have critical energy needs, which only increase with time as domestic industries and economies continue to grow. The idea of Asian economic ascendancy is so assured that intellectuals have called the 21st Century the "Asian Century" in the same sense as that of the American Century (1900's) and the British Century (1800's) during which the respective countries were the dominant powers.³ Even with the global recession, Asian countries

² "U.S. Energy Information Administration - EIA - Independent Statistics and Analysis." Countries. January 1, 2012. Accessed August 21, 2014.

<http://www.eia.gov/countries/index.cfm?view=consumption>.

³ "Asia 2050: Realizing the Asian Century." Accessed August 21, 2014.

<http://www.adb.org/sites/default/files/asia2050-executive-summary.pdf>.

still post significant GDP growth rates. In 2013, China had a growth rate of 7.70%, Cambodia 7.00%, Bangladesh 5.80%, Indonesia 5.50%, and India at 3.20%. Even countries considered to be already developed have ideal growth rates. Japan's GDP grew by 2.00%, Taiwan grew by 2.20%, South Korea grew by 2.80%, and Singapore grew by 4.10%. All these figures are set in comparison to Western countries GDP growth such as the US at 1.60% and France at .30%.⁴ Such is the case with most of Asia, especially the Far East and the South, where countries boast large populations of workers.

The South China Sea

However, a common inquiry about Asian oil needs is the South China Sea. Asian countries as a whole run at an oil consumption to production deficit, but studies have shown that the South China Sea has large oil and natural gas fields. The US Energy Information Administration estimates that there are about 11 billion barrels of oil, both proven and possible, in the sea.⁵ Compared to Russia or the Middle East this is a relatively modest amount, but for Asian nations with no oil reserves to speak of, it is invaluable. While there are some companies exploring the reserves of the South China Sea, such as Brunei LNG Ltd. (which will be mentioned later), the main problem with the mass exploitation of resources in the area is due to the complex political situation currently present. China, Taiwan, the Philippines, Vietnam, Malaysia, and Brunei all have overlapping claims in the region, creating a maze of artificial lines on an environment where borders are already hard to enforce. With no future plans of cooperation on the horizon, the use of resources in the South China Sea is extremely low. With that in mind, oil companies, such as Saudi Aramco, can expect as

⁴ "Country Comparison: GDP - Real Growth Rate." Central Intelligence Agency. January 1, 2013. Accessed August 21, 2014. <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2003rank.html>.

⁵ "South China Sea." U.S. Energy Information Administration (EIA). February 7, 2013. Accessed August 22, 2014. <http://www.eia.gov/countries/regions-topics.cfm?fips=scs>.

safe market for oil exportation as demand and consumption of oil will by far outgrow what domestic oil industries can provide.

Recent Events

Now that it has been established that Asia is a large consumer of oil and that it will remain so for the foreseeable future, a brief overview of Saudi Aramco presence in the region is needed. Saudi Aramco currently has nine shipping destinations in Asia one of which is in the Middle East. There are actually only eight shipping routes to Asia, four of which are in China: New Delhi, Seoul, Tokyo, Singapore, Shanghai, Beijing, Xiamen, and Fujian. This constitutes a little less than half of the total number of shipping routes that Saudi Aramco runs.⁶ Saudi Aramco also has joint oil exploration ventures with Indonesia's state oil company, Pertamina, and with Brunei LNG Ltd., of which Aramco also owns an 18% share. These two ventures are also relatively recent, within the past year.

Even more events in the past few years suggest a shift in Aramco's focus from the west to the east, such as Saudi Aramco's 2007 deal when they signed a series of agreements with ExxonMobil and the Fujian Provincial Government of China to form Fujian Refining and Petrochemical Co. Ltd., a refining venture. This is especially significant because Saudi Aramco, prior to this deal, had refineries only in the Middle East, specifically in the Middle Eastern cities of Jeddah, Ras Tanura, Yanbu, and Riyadh. Since then, Saudi Aramco has expanded to ventures with Showa Shell in Japan and S-Oil in South Korea. To further establish this idea of the shift from west to east, the raw data about oil exportation to Asia, from Saudi Aramco's 2013 corporate report, shows that

⁶ Aramco, " *Shaping Tomorrow 2012 Annual Review*"

53.8% of its exported crude oil was shipped to Asia. That is in comparison to the 17.1% shipped to the US, 12.1% shipped to Europe, and 17% shipped to the rest of the world.⁷

Current Analysis:

Asia's huge rise in consumption is indicative of an extremely lucrative market, a market which is not fully tapped into. Saudi Aramco does ship oil to eight locations in Asia, located in five countries: India, South Korea, Japan, Singapore, and China. True, these are the biggest economies in the region, but there is definite room for expansion. Asia consumed 28 million barrels of oil a day in 2012, a vast amount that could be provided by Aramco for a hefty profit.

The individual country figures for the aforementioned countries to correspond as so: India consumed 3.62 million barrels a day, South Korea consumed 2.3 million barrels, Japan consumed 4.73 million barrels, Singapore 1.2, and China a staggering 10.28 million barrels surpassed only by the great American machine itself at 18.49 million barrels. Altogether, the five countries that Saudi Aramco exports oil to consumed 22.13 barrels of oil.⁸

It is important to remember is that not all of the oil consumed was Aramco oil. Thus these countries are open sources of revenue. As evidence shows Asia's rising consumption of oil, it would be greatly beneficial for Saudi Aramco to open more shipping routes to these countries and perhaps in the future divert oil from the west to the east as the developing economies of Asia are guaranteed to consume even more oil in their expansion, especially China and India.

Call to Action

⁷ "Energy Is Opportunity: Facts and Figures 2013." 2013. Accessed August 21, 2014. [http://www.saudiaramco.com/content/dam/Publications/Facts and Figures/Facts and Figures 2013/2013_Facts_and_Figures.pdf](http://www.saudiaramco.com/content/dam/Publications/Facts%20and%20Figures/Facts%20and%20Figures%202013/2013_Facts_and_Figures.pdf).

⁸ "Country Comparison: GDP - Real Growth Rate."

As a member of the Board of Directors for such a prestigious institution, it is up to you to discuss the leading issues for the company and to agree upon solutions for those problems. Essentially acting as the leadership of the company, your decisions will have a profound effect so you must build up support with other board members, as each is powerful in their own right. Compromise will be necessary for the ultimate betterment and profit of the company, and hard choices must be made. You will decide the future of the world as the leaders of the world's richest company. Choose well.

Questions:

1. If Saudi Aramco continues to export oil to Asia, which countries should be prioritized?
2. Taiwan stands out as a relatively modest consumer of oil for a country its size. Though nowhere near that of China, Taiwan could still be a profitable country to export to. Should Saudi Aramco export oil to Taiwan at risk of upsetting China or should it continue exporting to China and potentially miss out on a rich customer?
3. On that same note, Indonesia and Thailand are also modest consumers of oil. Should Aramco open up routes to these countries or focus on the consumers it has shipping routes to? (This would mean India, China, South Korea, Japan, and Singapore)
4. Saudi Aramco has experience with working with other oil companies in joint exploration ventures, such as the previously explained 2013 deal with Pertamina. Should Saudi Aramco seek to make similar deals with other native oil companies, especially with the future potential of the South China Sea's oil resources, or should it focus on solo ventures which would provide increased profits if successful?
5. Should Saudi Aramco continue joint refining ventures or strive to open an independent refining solely owned by Saudi Aramco in the region? If so where? (Opening an independent plant would give Saudi Aramco more control over the oil being refined as well as its

potential destinations. It would also be the first international fully Saudi Aramco owned refining plant.)

For Further Information and Research

The link below is for the US Energy Information Administration. The interactive visuals show the oil production and consumption rates of every country. Clicking on any of the country links gives more in depth information about the energy industry of each country:

<http://www.eia.gov/countries/index.cfm>

The website for Saudi Aramco is a very good introduction to the company. It provides a diverse amount of information about operations and is a good introduction to the company:

<http://www.saudiaramco.com/en/home.html>

Furthermore, in the top bar with tabs, look under publications for in depth info on facts and figures about Saudi Aramco. Each yearly report is downloadable in pdf format. For a quick link, here is one below:

<http://www.saudiaramco.com/en/home/news-media/publications/corporate-reports.html>

This Council on Foreign Relations provides a very thorough look into the South China Sea crisis, which is vital in understanding why the oil production in many Asian countries, which should technically have access to oil reserves, is so low:

<http://www.cfr.org/china/south-china-sea-tensions/p29790>

For an introduction to the oil industry in Asia, the link below is for a journal which looks at the policy behind oil consumption and exportation. It also has a lot of graphs for those who are visually inclined:

<http://www.eastwestcenter.org/fileadmin/stored/pdfs/api085.pdf>

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<http://www.eastwestcenter.org/fileadmin/stored/pdfs/api085.pdf>.