

The Global Causes & Effects Of GME Energy Supplies

The Oil & Gas/LNG Pricing Outlook
And GME Developments

By

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Outline: This presentation reviews the global economic and political causes and effects of the energy supply policies in the Greater Middle East (GME) and examines the crude oil and natural gas/LNG pricing outlook, with their impact on the Asian/Pacific markets and the position of North American shale oil and gas producers. The position of these producers is simple, the big integrated IOCs are resilient enough to make some money even if WTI is below US\$50/barrel.

In the IEEJ seminar held here on May 22, 2014, I focused on the Iran-US relations and their effects on the GME, and on the GME's and Asia/Pacific petroleum business. I believe many of you, distinguished participants, attended it and obtained that presentation which gave ample explanation of a complex situation. I regret to say that, today, I have to present other complex situations. **Therefore, I asked the organisers to give more time for Q&A. So please begin preparing your questions from now.**

This time, I focus on a basic issue in the GME: Islam. In the Q&A section, I will cover the current GME situation, including **the Islamic State of Iraq and al-Sham** (Greater Syria) – known as **ISIS** -- and **Iran's nuclear issue** which I leave for the Q&A section.

There is a huge contradiction between **Islam as a religion**, and **political Islam** that can only carry radical ideologies and which, unfortunately, can only spread by violence. As the Christians did centuries both before and after Islam emerged, **Islam as a faith was abused by the closest and most power-hungry aides and relatives of its Arab founder, the Prophet Muhammad**, shortly after his death in the 7th century AD. The ideologies of the abusers can be sectarian (Shi'ism Vs Sunnism) and/or racial (Arab Vs Persian, Persian Vs Turkic, Arab Vs Turkic, etc).

For example, there is a huge contradiction between sectarian ideologies such as Arab-led Muslim unity which can only be based on Sunni lead, and racial ideology like Persian-based Safawim which calls for Muslim unity under Shi'ite leadership. The Sunnis are said to account for about 94% of the entire Muslim population - said to be 1.6 billion. Each of my words in this and other paragraphs can be loaded with a lot of issues the seriousness of which is beyond the scope of my presentation today. But I shall answer any question you might raise during the Q&A section.

In founding political Islam, these abusers ceased being true Muslim. Deep down, all of them became atheist in theological terms as soon as they established Islamist ideologies or took over power in any part of the Muslim world – which is a far larger than the Arab region. The Arab region is much smaller than the GME. The GME is by far the largest energy reservoir in the world; it is rich in conventional and non-conventional petroleum and will remain so even after the most advanced powers in global politics have reached the phase of post-energy – or at least less-energy intensive - economics.

The GME, including a big part of Russia, is the land of conspiracy theories – one of its most common diseases. Israeli PM Netanyahu says Obama's team is fooled by Iran's new President Rowhani, whose top aides are negotiating with the US for a "grand deal". Rowhani is a moderate Safawi. His main rivals are extremist Safawis in the ruling command of the Islamic Revolutionary Guard Corps (IRGC), which controls Iran's nuclear/missiles development programmes and GME ambitions, as well as among the most power-hungry aides to the Shi'ite theocracy's ailing Supreme Leader Khamenei - including Qom-based ayatullahs who are theologically more senior than Khamenei.

Syria's 'Alawite President Bashar al-Assad, whose enemies call "a tyrant worse than Hitler", is not relevant to what the Safawi/Shi'ite theocracy is negotiating with the US-led 5+1 powers over its nuclear ambitions. Israel and Saudi Arabia, however, are regularly briefed about the progress of these talks by France and the US. Yet both Israel and the Saudis do not trust Obama, whom they regard as being too weak a president and who Riyadh fears is being exploited by Netanyahu and Tehran.

Meanwhile, **Assad's regime is fighting two main wars: (1) against Syria's Sunni-led majority**, in which Iran and its Lebanese unit Hizbullah and fellow Safawi groups from other countries trying all means to protect him against the Sunnis, and (2) **against Iran's theocracy itself in Lebanon**. Those here who are subscribers to the APS Diplomat newsletters are advised to see news21SyrIrnIsrNov18-13 if they need a detailed explanation. **From here on, I may or may not believe what I review is true.**

It is important for you to know that Saudi scholars believe Iran's **Safawism is only a vehicle for the continuation of the Sassanid Persian Empire**, which was defeated by the Arabs who then forefully Islamised Persia. Thus, the Saudi scholars argue, Safawism is a racial ideology to revive **Persian supremacism** over the world and to destroy Islam after the entire Muslim community has been conquered by the "Neo-Persian Empire".

Riyadh leads the Sunni front in the Muslim world via the 57-state Organisation of Islamic Co-operation (OIC), in which Iran is the only Shi'ite member. Riyadh says political Islam is trying to kill the faith which was revealed to an illiterate, **Muhammad**, by God through the angel **Gabriel** appearing to him in a cave near Mecca in **610 AD**. Gabriel then recited the **Qur'an**; and his followers say he miraculously memorised it.

Riyadh stresses that the Qur'an is a divine revelation and cannot be interpreted at will, as those involved in political Islam have been doing since Muhammad's death. But the Saudis, following a modernised and moderated version of **Wahhabism** – a reformist **Sunni movement which emerged in the 18th century** (see background of the underlined words in Google). They say **Sunnis and Shi'ites involved in political Islam are not really Muslim, or atheists**, pointing to Iran's Safawism as being by far the most serious threat to Islam (as explained in the **Diplomat's sbme5SafawismNov25-13**).

In a talk with APS, an ex-agent of the Pentagon's National Security Agency (NSA) whose head controls the US spy networks (see news19US-GlbISayNov4-13) agrees that **Safawism is the most dangerous ideology on the global scale**. Talking on condition that his name is not revealed, he points to the special link between the IRGC and Neo-Salafism, a trans-national Sunni movement born from **Egypt's Muslim Brotherhood**

(MB). The MB has branches in many parts of the Muslim world and has a tactical alliance with Tehran.

The best-known part of the Neo-Salafi movement are **ISIS** and **al-Qaeda Central (AQC)** based on the AfPak border, founded by Usama bin Laden whose mentor was Palestinian MB member Shaikh ‘Abdullah ‘Azzam. ‘Azzam was killed in 1989 by a Peshawar bomb planted by the Soviets whose troops were being readied to evacuate from Afghanistan. Bin Laden was killed in early May 2011 in Pakistan by US commandos. **Half of bin Laden’s clan and many of his commanders, as well as his rival Abu Mus’ab al-Zarqawi, fled to Iran as the US invaded Afghanistan late 2001.** At this point it is important to note that **ISIS is led by the latest of the successors of Zarqawi, an arch-terrorist killed in a June 2006 US air-strike in Iraq.**

The ex-NSA agent gives as an example of **Assad’s war against Tehran’s theocracy the massive Nov. 19, 2013 twin-bombings of the Iranian embassy in Beirut.** Those killed and wounded -- over 175 people -- included a top Iranian diplomat and Hizbullah personnel whose families lived in near-by buildings most affected by the huge damage.

The agent says most of those involved in political Islam are idiots including those who lead them as rulers or group chiefs, “like Assad himself and the IRGC”. He says **the IRGC is “a re-incarnation of the Qizilbash”, a Turkoman force which helped the first Safawi theocracy to emerge in 1501 and destroyed it later.**

He says: “**The arrogant theocracy and the IRGC commanders think the rest of the world is made up of idiots. They seek to out-smart all people or powers, including Obama’s administration. They’re sure they can get away with all they do around the world, in the name of ‘establishing global justice’; stupid people believe them”.**

The Nov. 19, 2013, bombing was claimed by the ‘Abdullah ‘Azzam Brigades’ (AAB) Lebanese unit. The bombers’ command then said its attack was in response to Iran’s involvement in Assad’s war on the Syrian people as well as the imprisonment of its men in Lebanese jails for many years. The ex-NSA agent says **some of these men were part of Fatah al-Islam (FaI), a Neo-Salafi group partly Palestinian and created by Assad’s intelligence.** The others were of a Neo-Salafi group from north Lebanon’s Sir al-Dunniyé hills also **created by Assad’s intelligence in the early 2000s, when Syrian troops were occupying Lebanon since 1976.** Members of both groups were jailed in Lebanon before and after the Lebanese Armed Forces (LAF) defeated FaI in a war during 2007. **Iran accused Israel. Hizbullah also accused the GCC states.**

The ex-agent, well informed about **radical Shi’ite and Sunni groups in the GME** (see the background of the NSA & **the “Five Eyes”** in APS news19US-GlblSayNov4-13), says the **AAB is part of ISIS.** ISIS had grown from an early 2013 merger of a small Iran-based Qaeda unit and the **Islamic State of Iraq (ISI)**; which had been a proxy for Assad’s intelligence. **The ISI was created with IRGC’s help and brought from Iraq to Syria in 2012 for Assad to prove to the world he was fighting terrorism, rather than a Syrian revolution** – which had begun peacefully against his regime in mid-March 2011.

The ex-agent says **the Nov. 19, 2013 operation was organised by Assad’s regime to send three messages: to Tehran that Assad could not be sold out for its proposed Iran-US nuclear deal, to the other anti-Assad fighting groups that ISIS was the only fighter on the Syrian war-front, and to Beirut to free its Sir al-Dunniyé men – just before Lebanon’s Independence Day celebration.**

The ex-agent says the ISI first had another name: an IRGC-guided al-Qaeda in Mesopotamia (AQM) - and was created jointly by Assad’s regime and the IRGC to fight US forces soon after the latter invaded Iraq in 2003. Now Iran’s involvement on Assad’s

side of the Syrian war includes IRGC fighters, their external units like al-Quds Force, Hizbullah and fellow Safawi groups from the GME's other Shi'ite communities.

He says: **"...like Khamenei, IRGC's command and leaders of its various units think most Iranians are stupid"**. He adds: **"The Safawi leaders depend more on their wishful thinking than on most facts in planning and executing their strategies, rather than having properly analysed those facts"**.

The ex-agent notes, however, that the IRGC and its units "are well-trained and armed for asymmetrical warfare", while **Assad's armed forces have been greatly weakened and depleted by the revolution and the savagery of the war. As an example, the ex-agent says, their capture of any town in Syria has become typical: Assad army tanks, air force and artillery level it. The IRGC and its units do the fighting. Assad's ground troops then enter the town and pose for cameras.**

While Tehran thinks the Riyadh-led Sunni states are not truly Muslim, the latter have moved strongly against players in political Islam led by Iran's theocracy. The Sunni states, including those of the GCC, warn against their local opponents using politicised religious platforms -- stressing the need to insulate such venues from any sectarian rhetoric. They insist places of worship must be left to focus on true Islam's values. **The GCC is said to have a cash-pile and assets worth between US\$3.8 and 7 trillion.**

Cairo Rejects MB Deal

With King 'Abdullah (who died at dawn on Jan. 23, 2015) **having steered Egypt's Field Marshal 'Abdul-Fattah al-Sissi against political Islam**, this military chief on July 3, 2013, ousted then Egyptian President Muhammad Mursi (of the MB) and in late May 2014 was elected president. With Mursi and the rest of the MB leadership jailed and tried for high treason, most of them face a death sentence. Repeatedly since then, President Sissi has rejected reconciliation – even peace with moderates in the MB. The MB now is banned in Egypt and some GCC states – mostly the UAE -- as "terrorists".

Yet 'Abdullah's successor, **King Salman, is no longer treating the MB as a terrorist organisation, as the UAE does – though Riyadh keeps its distance from the MB's leadership.** King Salman does not deport MB-affiliated Egyptians from Saudi Arabia.

I have mentioned all these matters because they all have **effects – in some cases major effects - on the current and future petroleum supplies from the GME. This is because there is a Saudi-led oil price war against Iran and Russia**, as well as on those very big US IOCs having wide exposure to North American shale oil and gas and other non-conventional petroleum resources – tight oil, tight gas, ultra-sour oil & gas, etc. – on which I will focus in the Q&A section. Riyadh is forcing the IOCs to be his US lobbyists.

There has been big change in Saudi Arabia since King 'Abndullah died. King Salman on Jan. 23 swiftly concentrated all power in his Sudairy inner circle. This now covers all the sectors, including Saudi Aramco and its leadership and the oil price war with global consequences. But I still have some important geo-strategic points to make. **In the Q&A section I will explain who advises King Salman's inner circle.**

The Russian Church Warning Of Genocide Against Christians

Beginning to pressure Russia's Neo-Soviet President Putin who is backing Iran's theocracy and Assad's regime, the Russian Orthodox Church has since 2013 been warning of "genocide" against Christians and other religious minorities in the GME, joining the Vatican in urging the international community to take action in Iraq, Lebanon and Syria – the three crucial parts of the planned Persian Empire, other than Yemen

which has no Christians but is also crucial to the Persian Empire as it controls a very important part of global trade like the Strait of Hormuz which the IRGC controls – I will explain all these points in the Q&A section.

The call of the Russian church – now quite powerful among the Christians in the former Soviet Union (FSU) -- came in a 2013 forum held in Liechtenstein and dedicated to the war in Syria. The forum was attended by Catholic and Orthodox clergy along with diplomats - including Lakhdar Brahimi, the UN/Arab League envoy for Syrian peace at that time. **Despite Putin’s demand, the US then barred Iran from planned Geneva-II peace talks for Syria.**

Metropolitan Hilarion of Volokolamsk, who heads the Moscow Patriarchate’s Foreign Relations Department, told that forum: “we all should express a strong protest against the current genocide of Christians in the GME which is a purposeful policy pursued by the extremist and terrorist [Muslim] forces aimed at the total elimination of Christianity in this region”. **(UK leaders then were already warning that Christianity in Britain may eventually disappear. The French and other EU states now are saying the same thing – with their religious scholars describing the presence of more than 20 million Muslims in Europe as the biggest Islamic invasion of that continent – and the figures keep rising every year).**

Hilarion said politicians and the media rarely raised the issue of the persecution of Christians, adding: “Every week we receive news that bandits have destroyed a Christian monastery or church, kidnapped or killed a cleric, raped a Christian woman and that Christian families have been ousted from their houses. It is necessary to take steps to protect the Christian population of the GME...”.

The Islamist suicide bomber is the poor man's air force. The rich have Stealth bombers, the poor have Toyota Corollas, both filled with explosives. The human bombers are not as smart as the Western air force pilots but are much more dangerous as they can be anywhere and can kill many more people.

The Saudi Changes

Khaled al-Faleh on Aug. 29, 2015, was made health minister. Until then he was president/CEO of Saudi Aramco, which is intended to become the world’s largest among the integrated IOCs producing and marketing the entire chains of the petroleum, chemical and electric power businesses – in Saudi Arabia and abroad including the Asian/Pacific market. Already Saudi Aramco is the world’s largest energy firm. But Faleh was made chairman of Saudi Aramco’s board of directors, replacing Minister ‘Ali al-Na’imi.

And, in fact, the whole of Saudi Arabia is re-structuring. Being separated from the Ministry of Petroleum & Mineral Resources, Saudi Aramco is destined to operate under a new **Supreme Petroleum Council** under the hands-on chairmanship of King Salman’s youngest and smartest son, **Deputy Crown Prince Muhammad ibn Salman, aged 30, who is also chairman of the kingdom’s all-powerful Economic & Development Commission, as well as being the 2nd Deputy PM and minister of defence.** One of his major tasks was a huge military offensive in Yemen called **Operation Decisive Storm (ODS). He is advised by a large number of experts,** Saudi and foreign.

Involving a Saudi-led coalition of **10 Arab states and Malaysia (from the non-Arab part of the OIC)**, ODS has become the template for all future Saudi-led military offensives in other Arab countries “raped to be controlled by Iran”, though each may have a different name.

In parallel to that, is the same coalition's **Operation Restore Hope** (ORH), which is to re-build Yemen and prepare it to become a member of the Arab Gulf Co-operation Council (GCC). In both cases, the man responsible for ODS is Prince Muhammad ibn Salman – a rarely smart and excessively hard-working as well as the most tiring man in the leadership. The latter description was made to me by one of his closest aides, who says: “**He is so demanding that you can easily risk becoming fed-up with him**”. And the man in charge of Saudi Arabia's national, regional and global security interests behind both ODS and ORG is Crown Prince (CP) and 1st Deputy PM **Prince Muhammad ibn Nayef** (Salman's full-nephew – i.e. a full Sudairy). Aged 55, Muhammad ibn Nayef makes sure that **the decisions or actions of his younger full-cousin and deputy** (Muhammad ibn Salman) **are cleared according to the all the security requirements – national, regional and global. This is in the CP's capacity as Chairman of the all-powerful Political & Security Commission and as Minister of Interior.**

Muhammad ibn Nayef was the man who defeated al-Qaeda in the Arabian Peninsula (AQAP) in the past decade, to the extent that AQAP had to flee the kingdom and establish its base in South-Eastern Yemen with the permission of Yemen's then dictator, from 1978 to early 2012 President 'Ali-'Abdullah Saleh. Muhammad ibn Nayef's Interior Ministry has by far the largest full-time armed force in the Arab region – 500,000 men equipped with the world's most advanced weapons systems required for security including counter-terrorism. This is in addition to the Saudi Interior Ministry's Centre for the Rehabilitation of Saudi terrorists – be they in AQAP, in ISIS or in any other group. This centre is unique, which continues to impress the US and other big powers. **Muhammad ibn Nayef also is advised by a large number of experts, Saudi and foreign.**

With King Salman having served as Emir of the huge Riyadh Province and capital city for 60 years as well as top adviser to all the kings of Saudi Arabia including his father and founder of the current Saudi dynasty, 'Abdul-'Aziz "ibn Saud", sits as the mentor of the two young Muhammads – this being apart from his position as absolute ruler. He had begun work when he was in his teens. He even served in the Egyptian army briefly in one of its wars against Israel. He has always been one of the most informed princes, reading most of the top Arab daily newspapers, listening to radio and TV broadcasts, receiving intelligence reports, etc. One of his aides says he has had one of the most surprising memories of people, leaders, etc.

Who Are The Ruling Sudairys & What Can They Do?

The Sudairys are **the most aristocratic elite of the huge al-Dawaser confederation of tribes in Arabia.** **Wadi al-Dawaser** and its peripheral territories account for the largest part of the Arabian Peninsula. The late 'Abdul-'Aziz ibn Saud's mother was a Sudairy and, for centuries, female members of this clan were married to male members of the Saud family's three dynasties, with the first one founded in the 18th century.

ODS dealt the most severe blow to Iran's Safawi theocracy as it decisively cut and killed its arm that reached Yemen – the most humiliating defeat in the modern history of Safawism. This was demonstrated in the Yemeni "Salvation" [peace] Congress held in Riyadh on May 17-19, 2015. Attended by over 250 Yemeni politicians and tribal leaders including a major part of Saleh's once ruling General People's Congress (GPC) party, this ended with the Riyadh Declaration after having re-elected Yemeni President 'Abd-Rabbu Mansour Hadi to another term. **ORH will demonstrate how, under King Salman's watch, the two co-ruling Muhammads will**

help the Yemeni people re-build their homeland and eventually make it a full GCC member.

Just for comparison, Iran's theocracy has since the 1980s moved to control Yemen – in particular its Gulf of Aden region which controls the southern entrance to the Red Sea – called **Bab al-Mandab** - connecting the Mediterranean to the Indian Ocean – just as Iran believes it already controls the Strait of Hormuz. Through Lebanon and Syria, Iran says it controls the east of the Mediterranean. **It has controlled the Zaidi Shi'ite militants of al-Houthi clan which claims to control Yemen's north-western province of Sa'da – bordering Saudi Arabia. The Iranian plan, according to Riyadh, was to partition Yemen and thus ultimately dis-member Saudi Arabia, destroy the GCC and take full control of the Arabian Peninsula – in partnership with the Sunni MB.**

In his speech closing the Yemeni Congress in Riyadh, **President Hadi said the Houthis only had a following of about 10% of Sa'da's population of less than half a million. He said Iran took control of the Houthis after its theologians told their young chief, 'Abdul-Malek al-Houthi, that he was the divine "Al-Mahdi" -- the 12th and holiest Imam of the Twelver Shi'ites – the sect of Iran's theocracy.**

To control both the southern and northern parts of Yemen, Iran's theocracy engineered an **alliance between the Houthis and Saleh, a man widely described as a "crook" who assembled a personal fortune worth US\$60 billion. Through his long rule, he created the Yemeni Armed Forces (YAF) with the sole purpose of defending his dictatorship and personal interests. Saleh proudly calls himself "the best manipulator of the snakes".**

Many of you probably learned of globally circulated press reports out recently saying that **Iran's senior theocrats and top IRGC commanders are multi-billionaires in US dollar terms.** They are said to each have a private empire. There are said to be about 200 private sea-ports and many airports in Iran belonging to such billionaires, in a country of more than 70 million people, of whom about 30% are said to be below the poverty line.

Each of the senior billionaires is even wealthier than the last Pahlavi king and his family members were before their fall in early 1979. It is claimed that Khamenei sits over an empire worth about US\$95 billion. These are just examples how the foreign media occasionally describe what is really happening inside the Iranian theocracy. I do not know if this is true or not. But I do know that my Iranian friends who served under the theocracy's two former presidents are exceptionally nice – being honest and modest, which means they are really smart, not idiots, but sad.

King Salman, aged almost 80, wants to enjoy seeing the likes of the Saudi-led ODS and ORH models deliver a fatal blow to the Safawi theocracy which, as a result, will only prove to the world that it is not more than a destroyer of countries – rather than an empire builder.

At this point, please bear in mind that **I am too far from being a spokesman for the Saudis or an opponent of the Iranians. I have more friends from among Iranians now suffering from Tehran's out-sized ambitions than from among the Saudis. I am not even a Muslim or an Arab. I am a mere citizen of the world.**

The Oil & Gas/LNG Pricing Outlook

What I have said so far provides the grounds for the causes and effects of the GME's energy supplies. The crude oil and natural gas/LNG pricing outlook is relatively less complicated. **There has been a global oil and gas glut around the world since June**

2014. And this has given the Saudi-led GCC bloc in OPEC the most appropriate opportunity to launch a price war and thus help boost the world's economy until prices recover as a result of a re-bounce in global oil demand. The Saudis call it a market share effort, rather than a price war.

This war will prove that all of OPEC's price hawks are basically failed states too heavily dependent on a high oil price for their easier way to towards controlling their people. In short, they depend too heavily on the oil curse, or the Dutch Disease – just to explain to you how smart they have been for the past decades. The same goes for the price hawks among the non-OPEC oil exporters led by Russia.

Of course, I shall explain in detail any point you will raise during the Q&A section of this meeting.

The oil and gas glut was the result of demand destruction, which itself resulted from high oil and gas/LNG prices in the past decade. The Saudis in charge say a US\$100/barrel crude oil is a thing of the past. Frankly I don't know. There are mixed thoughts about this matter.

Low oil prices are causing LNG prices to fall. However, there is a difference in LNG pricing in the Asian/Pacific market simply because the buyers who need the LNG pay a premium if they lack the leverage to compel the sellers to lower their prices or cancel their premium. **The latter point relates to a proper management, or the lack of it, of the bargaining position required of the buyers.**

The Asian/Pacific buyers much build up a proper management of their position – a collective bargaining position can be obtained from the creation of an LNG futures market, or at least a futures market for natural gas – including re-gasified LNG.

For the time being, the most proper management of the bargaining position from the side of the buyers – if there is no such management, be that for crude oil or for LNG – is hedging in futures markets. These markets are the ones setting the price trends, up or down. But, of course, there are no strong LNG or pipeline gas futures markets in Asia/Pacific.

The value of the US dollar and the level of commercial inventories together play the most important role in setting prices, up or down. When the dollar is high, the oil price is low, and vice-versa. When the inventories are high, the oil price is low, and vice-versa.

There are, naturally, other factors such as geo-politics which I believe was a subject explained around what I said before.

Saudi Aramco, meanwhile, plans to set up a **drilling academy to produce the world's best drillers**. Saudi Aramco's largely young work-force seeking new oil and gas sources around the country have been excelling in tough environments.

In the desert of Khurais at 11:30 pm recently, Saudi Aramco's work teams drilled to depths of between 7,000 and 13,000 feet. It was a major challenge which they completed successfully.

Safety and efficiency are critical elements of every project under-taken by Saudi Aramco. There is also an **emphasis on managing its equipment, which has been a key part of the company's success for almost eight decades.**

'Abdul Hamid al-Rashid, the chief driller at Saudi Aramco, recently said: "The biggest challenge starts with drilling. We dig every-where in the kingdom, on land and in the sea, in the toughest fields".

The company's drilling teams have to deal with high temperatures, and pressurised gases. It has lately been hiring many Saudi citizens. Rashid said: "The drilling and maintenance of the wells have seen a successful **move towards complete Saudisation**.

Saudi Aramco rigs have 95% Saudis, while it is 65% for the rigs belonging to mostly foreign contractors. Speaking about the offshore Manifa field in the Gulf, Rashid said it was a "unique and extremely complex field" that required close co-operation between various project teams including environmental protection, to ensure successful extraction of the resources. He training was a priority for Saudi Aramco. He noted: "There is a committee authorised to review policies, procedures and practices to ensure compliance with the highest standards in the industry. We place great importance on this. There is also a special team for wells ready to deal with emergencies".

With most operations being in remote areas, rig operators live away from their families for long periods. It is also difficult finding experienced rig operators. Young recruits have to be in the drilling area all the time to co-ordinate in accordance with the plan with service firms, engineers and other logistics services for the delivery of required material.

Thank you.