The Geopolitics Of Energy

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Overview

Ever since the Fossil Fuel revolution continuous efforts have been made to find and control energy resources.

The energy sector has a chequered and murky history - it has been often been blamed as a cause of conflict, corruption and pollution.

Current and future issues – changing demographics, shifting power, mismatch, market distortions and the urgent need to reduce greenhouse gas emissions.

But first a quick look at the background of the energy sector with a few examples

Then a look at the current situation

Then thoughts on the future!
Access to energy services defines our Standard of Living!

In rural sub-Saharan Africa many women carry 20Kgs of fuel-wood up to 5 Km per day. The health impacts of cooking with this in a confined area are clear.

We just flick a switch or turn a knob!

Or have a Take-Away delivered!
The Energy Problem – mismatch between producer and consumer. Largest Oil and Gas holders Saudi Arabia, Iran, Qatar and Iraq. US, China and EU largest consumers.
Future Problems – our increased use of energy

Figure 5. OECD and Non-OECD petroleum and other liquid fuels consumption, Reference case, 1990-2040 (million barrels per day)

Source: World Energy Outlook 2013
Fossil Fuels will continue to dominate

Figure 2. World marketed energy use by fuel type, 1990-2035 (quadrillion Btu)

- Liquids
- Coal
- Natural gas
- Renewables
- Nuclear

Source: IEA Energy Outlook 2010
The Problem – our dependence of fossil fuels

Figure 1. Estimated Renewable Energy Share of Global Final Energy Consumption, 2012

- Fossil fuels: 78.4%
- All Renewables: 19%
  - Modern Renewables: 10%
  - Traditional Biomass: 9%
  - Biomass/geothermal/solar heat: 4.2%
  - Hydropower: 3.8%
  - Wind/solar/biomass/geothermal power: 1.2%
  - Biofuels: 0.8%

Source: REN 21 – Renewables Global Status Report 2014
About 20% of global oil production is shipped through the Straits of Hormuz and increasing quantities of gas from Qatar travels through the Straits! Up to 2012 USA had spent US$8bn on defence of the Gulf. It only receives 10% from the Gulf – so why the big spend?
OPEC – Market Manipulation

OPEC is a cartel of oil-producing nations set up in 1960 to counter the dominance of the Seven Sisters oil companies – as they are sovereign nations they are not subject to competition law!

The 1973 OPEC imposed Oil Embargo on US and Europe because of support for Israel. Prices quadrupled!
OPEC realised that control of oil is an effective political weapon.

Since then has adjusted production to manipulate the market – oil consumption during 70s slumped as western economies became more efficient.

To counter this SA wanted production limited and cut production. When other OPEC members failed to comply SA flooded market and oil price collapsed. Non-compliers started to comply!

How will OPEC respond to the current price falls?
Market Distortions

Global fuel subsidies, 2012

- Oil: $135bn
- Electricity*: $7bn
- Natural Gas: $124bn
- Coal: $277bn

Global renewable subsidies: $101bn
Global fossil fuel subsidies: $544bn

*Fossil fuels used to generate electricity

Source: IEA

Fossil fuel subsidies in developed economies

- United States: 3.2%
- Canada: 1.7%
- Japan: 1.5%
- Germany: 1.2%
- United Kingdom: 1.0%
- Spain: 0.8%
- Italy: 0.6%
- France: 0.5%

Source: IMF
Next few slides will look at:

Iran
Iraq
Aramco / Osama Bin Laden
The Iraq invasion
UK and Iran and Iraq

1901 British negotiated 60 year deal to explore Iran – almost all of the country.

Oil discovered in 1908 and Anglo-Persian Oil Company (forerunner to BP) formed.

Unhappy relationship as Iranians felt they had a bad deal! Renegotiated in 1933 but still Iran unhappy. Attempt to nationalise in 1951 - UK persuaded US that this was a communist plot. Government deposed and Shah installed. 1979 the Shah deposed and the era of the Ayatollahs began.

Mesopotamia (Iraq) mandated to UK after break-up of Ottoman Empire post WW I. UK used airpower (bombing) to subdue restless natives (Bomber Harris served in Iraq).

Oil found in 1927 - Iraqi Petroleum Company (IPC) formed in 1929 - (previously the Turkey Petroleum Company) – HQ London and owned by largest oil companies and had exclusive rights to explore 1925 to 1961. Again Iraq got the rough end of the bargain. Again unrest.

Aramco – Arabian American Oil Company
Interesting bed-fellows

Standard Oil of California (Socal) granted exploration rights in Saudi Arabia (SA) in 1933. California Arabian Standard oil company set up - oil found in 1938 - name changed to Aramco in 1944 – other oil companies bought into Aramco.


SA has led embargos against US (Yom Kippur War) but allowed US to base military forces in Saudi Arabia. When Iraq invaded Kuwait in 1990 SA invited US forces into the country – Osama bin Laden (hero of Afghanistan) pleaded that Muslim countries, especially SA – Mecca and Medina – should be defended by Muslims. This led to the bin Laden condemning SA and in 1992 he was exiled to Sudan and citizenship stripped in 1994. Various deals meant he was offered a choice of exile – he chose Afghanistan – the rest is history!

We in the West make a big noise about human rights and dignity. To date in 2014 34 people have been beheaded in Saudi Arabia, 19 of those in August were for crimes of drug smuggling and sorcery (HRW)
The Iraq Invasion

Did the US and its allies invade Iraq in order to capture its oil resources or could there have been another agenda?

Oil is priced internationally in dollars. The Petro Dollar market is vital to the USA (keeps dollar up and exports inflation).

In 1971 Nixon took US off gold standard – the dollar fell. He negotiated a deal with Saudi Arabia for them to denominate oil in dollars in exchange for arms. Other OPEC members followed suit.

In November 2000 Iraq announced that it would accept Euros not dollars for its oil. Iran, Venezuela and Russia announced they were contemplating the same.

If all of OPEC had done the same the US economy would have been seriously damaged - perhaps fatally!
History of Manipulation

Energy interests have campaigned against climate change.

Why? If the international community accepted that fossil fuels were to toxic to use, then the assets of producing countries and energy companies would be worthless!

Michael Mann – Hockey Stick – vilified by Fox news

US parties subsidised by energy companies with $39.5m in 2012
Koch Brothers fund climate sceptics.

Climategate!!

This has worked well up to last IPCC report but most now accept the link between fossil fuel use and climate change!
The current energy crisis

Oil prices have fallen from $100+ to around $80 – glut of supplies and lack of demand!

OPEC 12 members which holds 60% of the world’s reserves and 30% of supplies will they cut production to force up price or drive down price to force US wells to shut?

OPEC is concerned over increasing US fracked oil and gas (up by 15% in 2013 alone) and Canadian output – unconventional’s are on the rise! Mexico has opened up!

US considering lifting restriction on crude exports imposed in 1970s, put further pressure on OPEC producers because of lower prices and also turn the screw on Russia – punishment for Ukraine. Price important for Russia as it supplies half of its revenue.

Conspiracy theorists say US and SA acting together to punish Russia and Iran!

World demand has not recovered from 2008 crash and places like EU and Japan working hard to improve efficiency. EU desperate to reduce dependency on Russian gas!

How far will prices fall? Forecast of around $80 in 2016!
The current energy crisis – winners and losers, but who?

If prices remain the same or fall then:-

Energy producers and energy states will lose

The UK Fracking industry will lose - licences to explore are due for sale on October 28 – low oil price means that Fracking is not economical!

Research shows that a price < $80 will mean that 40% of US Fracking is uneconomic!

The renewable sector will also lose – this could be bad news for a climate change agreement in 2020!

Governments will lose tax revenue!

But consumers will benefit as the price of energy affects every aspect of our lives! Essentially we will have a huge quantitative easing programme as money saved on energy goes elsewhere!
Future Energy Crises?

What is the likely impact of the Islamic State on Iraq and Syria?

If the US does increase its energy independence, what will be the impact on the Middle East and on Israel?
Concluding Thoughts

Energy is absolutely central to our lifestyles but the use of fossil fuel resources could lead to dangerous climate conditions!

We are addicted to fossil fuels and there seems little hope of an early cure!

Perhaps we will need a punctuated event – something catastrophic?

But there are some interesting signs – renewables are driving down electricity prices in Germany, Denmark, Spain and California and conventional energy is unhappy!

In the meantime OPEC will need to decide energy price:-

Go high then alternatives get a boost!

Go low then a climate agreement looks doubtful!

I am not a Doomsdayer and I do hope that the cooperative part of our nature will pull us back from the brink!!
Thank You

Any Questions?