



Energy Markets in Transition

(Business Potentials and Challenges in West Asia)

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Content

- **Largest Hydrocarbon Resources in the World**
- **West Asia's Hydrocarbon Importance in supplying future world demand and Iran's position.**
- **Political Uncertainty in this Region.**
- **Vision of Iran's oil & gas Industry and US sanctions**
- **Potential Profitable Energy Business of the European SME's, in view of European position with regards to unilateral sanctions, with the Private Sector in Iran's Energy Industry**

Countries with more than 300 billion barrels of Hydrocarbon Reserves (**CLUB of 300**)

FOUR countries are in this CLUB

Oil and Gas Reserves in Billion barrels of oil equivalent

- **Iran** 371
- Venezuela 344
- Russian Federation 332
- Saudi Arabia 318
- **Two of the above four countries are situated in West Asia**
- **(155 Cubic Meters of Natural Gas equals one Barrel of Oil)**

Source: British Petroleum Review of World Energy Statistics June 2018

West Asia's Share in the World's Oil and Gas Reserves

million barrels of oil equivalent

World Total	2,945
West Asia	1,327 (45%)
Iran & Saudi Arabia	689 (24%)

A big portion of the additional oil and gas needed in the next thirty years will have to come from West Asia and specifically from five countries surrounding the Persian Gulf

West Asia which is the potential supplier of Future Oil and Gas is facing high Political Uncertainty

- Azerbaijan & Armenia are still in state of war.
- Palestinian/ Israel Conflict for the past 70 years
- Syria: War involving, Russia, US and all Regional Actors
- Turkey: War with PKK and engagement in Syria & Iraq
- Iraq : Sunni and Kurd extremists after fight with ISIS.
- S.A & UAE: War in Yemen & involvement in Syria, Lebanon
- S.A & UAE: Blockade of Qatar,
- Iran: potential conflict with Israel and/or US. Involvement in Syria, Iraq and Lebanon.
- Iran and SA rivalry in the region may end in direct conflict

Saudi Arabia and Iran

- Saudi Arabia is producing oil at nearly full capacity of its oil Production around 12 mb/d of which over 8mb/d are exported. Not much can be added.
- Iran after recent unilateral US sanctions, produces around 3.5mb/d of oil and condensate of which 1.8mb/d is used for domestic purposes. Potential to double export with settlement of dispute with US.
- **These two countries with 24% of world oil & gas reserves are on a collision course that could have devastating result for future world energy supply.**

Iran's Position in the World Oil Reserves, Production and Consumption

	Percent Of the World
Reserves	9.3 (The fourth largest oil reserves)
Production	5.4 (the fourth largest oil producer)

US with 2.9% of the world oil reserves Produces 14.1% of the world oil and condensate production.

Iran with 9.3% of the world reserves (3.2 times US reserves) produces 5.4% of the world oil and condensate (nearly one third of US production)

Source: British Petroleum Review of World Energy Statistics June 2018

Iran's Position in the World Natural Gas Reserves, Production and Consumption

Percent of the World

Reserves	17.2 (The second largest gas reserves)
Production	6.1 (The Third largest gas Producer)
Consumption	5.8 (The Fourth largest gas Consumer)

US with 4.5% of the world gas reserves Produces 20% of the world gas production.

Iran with 17.2% of the world Gas reserves (3.8 times US reserves) produces 6.1% of the world gas (less than one third of US production)

Source: British Petroleum Review of World Energy Statistics June 2018

FIVE YEAR VISION FOR IRAN'S OIL INDUSTRY

- Increase oil production capacity to around 5mb/d from 4mb/d today and increase the Condensate Production to over 1mb/d.
- To enter into oil and gas agreement with International Oil Companies to produce from new oil fields and increasing production (Enhanced Oil Recovery) by utilizing advanced technology
- Iran is self sufficient in production of petroleum Products. It's aim is to increase trade of crude oil and petroleum products in future.
- This vision requires around \$150 billion investment

FIVE YEAR VISION FOR GAS INDUSTRY

- Increase gas production from 225 to 350 billion cubic meters per year. Iran is already the third largest gas producer in the World.
- Replace demand for petroleum products with natural gas. The share of gas in Iran's energy basket will be around 75 percent.
- Use gas to supply growing needs of the Power Sector, Gas Based Industries, Petrochemicals and Enhanced Oil Recovery.
- Natural Gas Export to Turkey, Armenia and Iraq and possibly to Indian Subcontinent and South Europe via pipeline and LNG.
- This vision will requires capital investment of over \$100 billion

How Does Sanctions Impact Oil & Gas Vision

- **US sanctions do not have international backing and are against UN resolution but still can impact Iran's vision of Oil and Gas Development.**
- **The major international energy companies will not risk losing US markets. Russians and Chinese companies will benefit.**
- **Small European Companies can make big profit if they engage with Europe political support.**
- **Europe is hoping to set up a special vehicle to ease oil and trade transactions.**

Potential Energy/Environmental Business for European Companies

- **Projects to Save and Utilize Energy more Efficiently.**
Iran can save equivalent of 1.3 mb/d of Oil by Saving and Using Energy more Efficiently.
Energy Companies can make profitable business in energy saving and efficiency in less than two year
- **Joint venture Integrated gas projects**
Gas Export to South East Europe via pipeline through Turkey has been considered for a long time. Direct route from Syria to Greece was considered but shelved due to Syrian crisis.
Petrochemical ventures: Iran can supply gas via Turkey and share the profits out of sales of petrochemical projects.
- **Electricity: Swap of electricity taking advantage of peak consumption differences is another option.**

How Iran and Greece can Engage in win-win projects

- **Greece have a large refining capacity.**
- **Iran can supply crude oil to be refined in Greece.**
- **Products will be marketed by the Greek refiners.**
- **Iran's share to be credited in Greece Central Bank.**
- **Iran buys goods and services from Euro zone.**
- **European Central Banks will manage credit issues and also pay for companies engaged in Iran.**
- **No money transfers with Iran and all of these barter transaction will be in Euro.**

Energy Companies Joint Venture with Iran's Private Sector is a Win-Win Scenario

- Iran's Private Sector is not sanctioned and has gained valuable experience in Hydrocarbon Business due to four decades of various sanctions.
- It has executed projects facing hostility in the world business and banking community.
- Today many Bulky fixed equipment and Machineries could be supplied from Iran at a much lower prices.
- As international energy companies have left Iran, Joint Ventures between smaller European firms and Iranian private companies will ensure profitable growth for all.

To Sum Up

- **West Asia is the main source of future supply of oil & gas but the region is engulfed in political and military conflicts which is a challenge for future world supply.**
- **Iran and Saudi Arabia, two out of four largest oil & gas countries in the world are on the collision course.**
- **Iran's resources has not been developed in the past decades and if the current political tension is removed it will be a major source of future oil and gas production to satisfy world demand.**

To Sum Up

- **The vision for oil and gas industry in Iran can materialize only if a political solution is found.**
- **At present European SME's could join Iranian private sector to do profitable energy business. Greek refiners could make a good profit to refine and market Iranian supplied crude.**
- **Gas trade via Turkey and petrochemical projects is another win-win scenario as well as Electricity swaps.**

Thank You

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