Regional Impact of Gas Business for Iran After the Sanctions

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Content

- Conflicts in West Asia and Uncertainty in Europe
- The Position and Vision of Iran Oil and Gas Industry
- Removal of Sanctions and the Emerging Role of Iran Private Sector in the Oil and Gas Industry
- Why the cooperation with the Iranian Private Sector could benefit the entry of the SE Europe Energy Companies to Iran .

Direct and Proxy Wars and Conflicts in West Asia



- Azerbaijan / Armenia
- Turkey / ISIS & PKK
- Syria / ISIS & Others
- Iraq / ISIS & Others
- o Jordon / ISIS
- Iran / ISIS & Others in Syria, Iraq & Lebanon
- GCC/ Yemen, Syria, Iraq
 Lebanon and Bahrain
- Arab/ Israel Conflict

European Union's Problems and Potential Challenges

- The Economy of some member states that has instigated Economic problems in the EU
- The Immigration Dilemma particularly after the Conflicts in West Asia
- Now, The Exit of the UK from EU and the Future of United Kingdom
- Potential pressure in some EU member
 Countries for similar Referendums and Political
 Future of EU

Countries with the largest Combined Oil and Gas Reserves in the World

 The figures are based on British Petroleum Review of World Energy Statistics June 2016 (oil and gas reserves) assuming that the heat content of one barrel of oil is equivalent to 155 Cubic Meters of Natural Gas.

Oil and Gas Reserves in Billion barrels of oil equivalent

o Iran	377
Venezuela	337
Saudi Arabia	320
 Russia 	311

Two of four are situated in West Asia

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

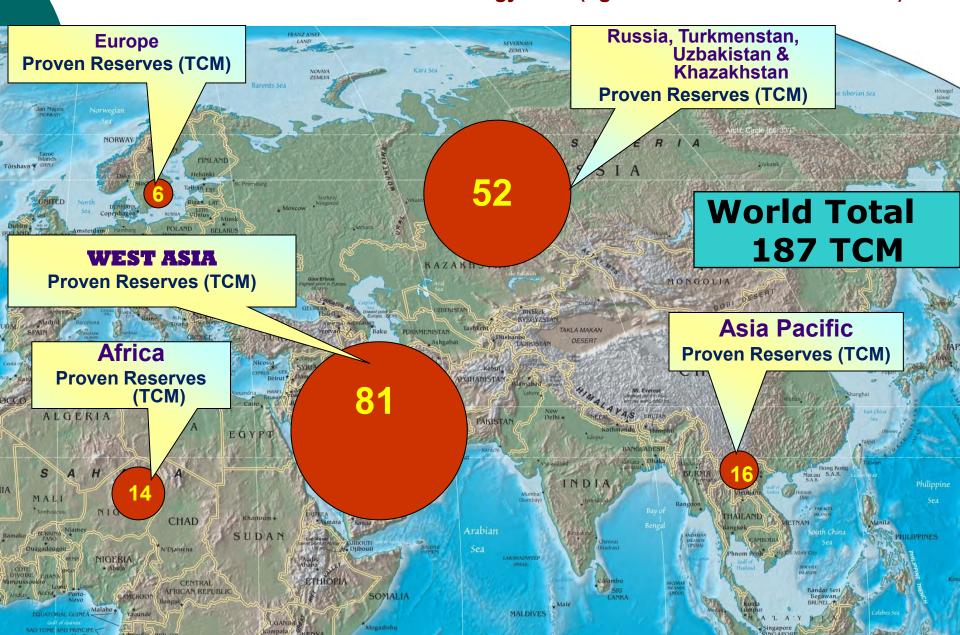
	Percent	Percent
	West Asia	World
Reserves	19.3	9.3
Production	12.6	3.6
Consumption	21.2	2.2

US with 3.2% of the world oil reserves Produces 13.0% of the world oil

Iran with <u>9.3%</u> of the world resaves (nearly 3 times US reserves) produces <u>4.2%</u> of the world oil (less than a third of US production)

Natural Gas Reserves

Source: BP Statistical review of World Energy 2016 (figures in Trillion Cubic Meters)



West Asian Region Gas Reserves Source: BP Review of world Energy Statistics June 2016)

0	Ga	s Reserves	Per cent	Per cent
	(Trillion	Cubic Meters)	of the World	of West Asia
0	Azerbaijan	1.1	0.6	1.4
	Iran	34.0	18.2	41.9
	Iraq	3.7	2.0	4.5
	Kuwait	1.8	1.0	2.2
	Oman	0.7	0.4	0.9
	Qatar	24.5	13.1	30.2
	Saudi Arabia	8.3	4.5	10.2
	Syria	0.3	0.2	0.4
	UAE	6.1	3.3	7.5
	Yemen	0.3	0.2	0.4
	Others	0.3	0.1	0.4
	West Asia Total	81.1	43.6	
	World Total	186.9		

West Asian Region Gas Production (2015)

(Source: BP Review of world Energy Statistics June 2016)

0		as Production illion Cubic Meters	Per cent of the World	Per cent of West Asia
0	Azerbaijan	15.5	0.5	2.4
	Bahrain	16.9	0.4	2.7
	Iran	192.5	5.4	30.3
	Iraq	1.0	-	0.2
	Kuwait	15.0	0.4	2.4
	Oman	34.9	0.9	5.5
	Qatar	181.4	5.1	28.6
	Saudi Arabia	106.4	3.1	16.7
	Syria	4.3	0.1	0.6
	UAE	55.8	1.7	8.8
	Yemen	2.7	0.3	0.4
	Others	8.4	0.2	1.3
	West Asia	634.8	18.3	
	World Total	3460.6		

West Asian Region Gas consumption (2015) (Source: BP Review of world Energy Statistics June 2016)

0		onsumption Cubic meters	Per cent of the World	Per cent of West Asia
0	Azerbaijan	8.3	0.3	1.8
0	Iran	191.2	5.5	32.5
0	Kuwait	19.4	0.6	3.8
	Qatar	44.2	1.3	8.6
	Saudi Arabia	106.4	3.1	20.7
	Turkey	43.6	1.3	9.3
	UAE	69.1	2.0	13.3
	Others	58.9	1.6	10.0
0	West Asia Total	542.1	15.7	
0	World Total	3468.6		

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

	Percent	Percent
,	West Asia	World
GAS		
Reserves	41.9	18.2
Production	30.3	5.4
Consumption	32.5	5.5

US with <u>5.6%</u> of the world gas reserves Produces <u>22.8%</u> of the world gas

Iran with <u>18.2%</u> of the world resaves (3.25 times US reserves) produces <u>5.4%</u> of the world gas (less than a quarter of US production)

VISION OF IRAN OIL INDUSTRY IN 2025

- To increase oil production capacity in line with the country's oil reserves: Oil Production capacity of over 5mb/d in the first phase.
- Adopting advance technology for Enhanced Oil Recovery (EOR) from old oil fields.
- Self sufficiency in Petroleum Products and increasing petroleum product export.
- Utilizing Iran's unique geographical advantage in the region for crude oil and petroleum products trade

VISION OF IRAN GAS INDUSTRY IN 2025

- To Maintain its position as the third largest gas producer in the world with gas production of around 400 billion cubic meters per year.
- To Replace domestic demand for petroleum products with gas and maintain the share of gas in Iran's energy basket above 80 percent.
- To Inject gas into the oil fields (EOR) in order to maintain and increase oil production.
- To Supply adequate Gas to domestic Power Stations,
 Gas Based Industries and Petrochemicals.
- To Export Gas to the regional states, India and Europe and become Regional Gas Hub.
- This vision requires capital investment of over \$100 bn in the next decade from local and international sources

Iran's Main Energy Challenges in the next Decade

- Iran is gradually finding its true place amongst the World Energy Producers & Consumers after the sanctions. Major issues are;
- 1- Utilize Energy more Efficiently Iran can save over 1 mb/d of energy (oil equivalent) if appropriate energy saving and efficiency measures are used. Gas flaring and losses are around 14 bcm/year. Iran needs Investment and up to date Technology from the international Firms.
- This is the area that many European companies can enter to help and make profit in the coming years.

Iran's Main Energy Challenges in the next Decade (Cont.)

- 2- Remove Energy Subsidies. This needs Political will and appropriate Planning.
- 3- Set attractive Long-Term Gas Price for Domestic Market to encourage Investment in Gas Based Industries
- 4- Allow investment in Upstream Oil and Gas by Private Energy Companies (Domestic and Foreign). This will require giving appropriate incentives to International Energy Companies

Iran Petroleum Contract (IPC) is the New Format for oil and gas Contracts. It has removed shortcomings of Buy- Back Contracts.

Sanctions has helped Iran's Private Sector to Gain Experience in Oil & Gas Business

- NIOC, NIGC and NPC were forced to relay on domestic potentials in the last fifteen years.
- Private Sector gained experience and self reliance to engage in the projects based on domestic expertise and limited cash.
- 3. Private Sector had to operate facing hostility in the world business community in obtaining licence and basic design for hydrocarbon projects.
- 4. In the past ten years Private Sector had to engage in elaborate ways to avoid financial sanctions.

Why Joint Venture with Iran's private sector can reduce the costs of Projects in Iran's Hydrocarbon Business

- 1. Lowering the lead time in negotiations and winning the projects.
- Supply of Bulky and fixed equipment and over 50% of Machineries.
- 3. Execution of the projects by qualified and experienced, engineers and technicians.
- 4. Providing maintenance and up-grading after the completion of the project.

Why Joint Venture with Iranian Private Sector is a win-win for all Parties Involved

- Iranian partner can handle complex internal political and social issues
- Iranian private sector is now experienced in negotiations with government and other local supply chains in the region
- Experienced local partner can be utilized in other regional Projects by the International company
- Joint Venture with Iranian companies will ensure profitable growth in the region for all parties involved.

Conclusion Implications for South East Europe

- Political Upheavals in West Asia and Europe has changed many established business patterns.
- Iran needs capital and technology to catch up with the lost opportunities
- SE Europe companies are in good position to engage with Iran before big international companies get most of the projects.
- Cooperation with Iran's Private Sector in gas development and export can be a win-win scenario for SE Europe Energy companies and Iran

Thank You