The Challenges and Opportunities in West Asian Energy

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8th South East Europe Energy Dialogue

June 11th and 12th, 2014 Thessaloniki, Greece

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WEST ASIA



West Asian Region Oil Reserves (2012)

(Source: BP Review of world Energy Statistics June 2013)

0	Oil Reserves	Per cent	Per cent
	(billion barrels)	of the World	of West Asia
Azerbaijan	7.0	0.4	0.9
Iran	157.0	9.4	19.2
Iraq	150.0	9.0	18.4
Kuwait	101.5	6.1	12.4
Oman	5.5	0.3	0.7
Qatar	23.9	1.4	2.9
Saudi Arabia	265.9	15.9	32.6
Syria	2.5	0.1	0.3
UAE	97.8	5.9	12.0
Yemen	3.0	0.2	3.7
Others	0.6	-	0.1
West Asia	814.7	48.4	
World Total	1668.9		

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West Asian Region Oil Production (2012)

(Source: BP Review of world Energy Statistics June 2013)

Oil Production (million barrels per day)		Per cent	Per cent of West Asia
		of the World	
Azerbaijan	0.87	1.1	3.0
Iran	3.69	4.2	12.6
Iraq	3.12	3.7	10.7
Kuwait	3.13	3.7	10.7
Oman	0.92	0.1	3.2
Qatar	1.97	2.0	6.7
Saudi Arabia	11.53	13.3	39.6
Syria	0.16	0.2	0.5
UAE	3.38	3.7	11.6
Yemen	0.18	0.2	0.6
Others	0.21	0.2	0.7
West Asia	29.16	33.8	100
World Total	86.15		

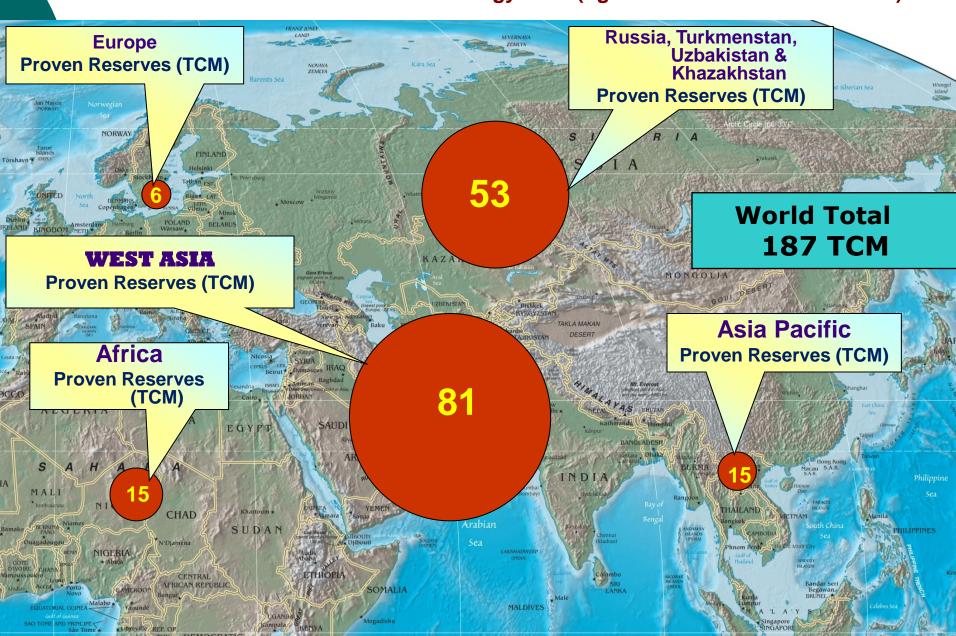
West Asian Region Oil consumption (2012)

(Source: BP Review of world Energy Statistics June 2013)

0	Oil consumption million barrels per day		Per cent	Per cent of West Asia
			of the World	
	Azerbaijan	0.09	0.1	1.0
	Iran	1.97	2.2	21.6
	Kuwait	0.47	0.5	5.2
	Qatar	0.25	0.2	2.7
	Saudi Arabia	2.93	3.1	32.2
	Turkey	0.69	8.0	7.5
	UAE	0.72	8.0	7.9
	Others	2.00	2.3	21.9
	West Asia	9.12	10.2	100
	World Total	89.77		

Natural Gas Reserves

Source: BP Statistical review of World Energy 2013 (figures in Trillion Cubic Meters)



West Asian Region Gas Reserves (2012)

Source: BP Review of world Energy Statistics June 2013)

G	as Reserves	Per cent	Per cent
(Trillio	n Cubic Meters)	of the World	of West Asia
Azerbaijan	0.9	0.5	1.1
Iran	33.6	18.0	41.3
Iraq	3.6	1.9	4.4
Kuwait	1.8	1.0	2.2
Oman	0.9	0.5	1.1
Qatar	25.1	13.4	30.8
Saudi Arabia	8.2	4.4	10.1
Syria	0.3	0.2	0.4
UAE	6.1	5.9	7.5
Yemen	0.5	0.3	0.6
Others	0.4	0.2	0.5
West Asia	81.4	43.5	
World Total	187.3		

West Asian Region Gas Production (2012)

(Source: BP Review of world Energy Statistics June 2013)

0	Gas	Gas Production		Per cent	
	Bil	lion Cubic Meters	of the World	of West Asia	
	Azerbaijan	15.6	0.5	2.7	
	Bahrain	14.2	0.4	2.5	
	Iran	160.5	4.8	28.5	
	Iraq	0.8	-		
	Kuwait	14.5	0.4	2.6	
	Oman	29.0	0.9	5.1	
	Qatar	157.0	4.7	27.8	
	Saudi Arabia	102.8	3.0	18.2	
	Syria	7.6	0.2	1.4	
	UAE	51.7	1.5	9.2	
	Yemen	7.6	0.2	1.4	
	Others	2.7	0.1	0.5	
	West Asia	564.1	16.7	100	
	World Total	3363.9			

West Asian Region Gas consumption (2012)

(Source: BP Review of world Energy Statistics June 2013)

0		onsumption Cubic meters	Per cent of the World	Per cent of West Asia
0	Azerbaijan	8.5	0.3	1.8
	Iran	156.1	4.7	33.5
	Kuwait	17.2	0.9	3.7
	Qatar	26.2	8.0	5.6
	Saudi Arabia	102.8	3.1	22.0
	Turkey	46.3	1.4	9.9
	UAE	62.9	1.9	13.5
	Others	46.6	1.3	10.0
	West Asia Total	466.6	14.1	100
	World Total	3314.4		

West Asia's Energy Resources Compare to its Population

West Asia

Percent of the World

Population

<u>4.33</u>

Oil Reserves

48.4 (11.1 times)

Oil Production

33.8 (7.8 times)

Oil Consumption

10.2 (2.4 times)

Gas reserve

43.5 (10.1 times)

Gas Production

16.7 (3.9 times)

Gas Consumption

14.1 (3.3 times)

New Uncertainties

- Political development after the Arab Spring.
 The worst Scenarios are; Disintegration of States in West Asia and Widespread Sectarian conflict and Terrorism in the Region
- Impact of Shale Oil and Gas and the disappearance of West Asia's Oil importance in the US Energy Balance
- Security of the Energy Routes

The Security of Energy Transportation from the Persian Gulf

- Oil Transportation is Secure as long as this security is for all the countries of the Persian Gulf.
 The threat of terrorism is not serious as long as there is a cooperation amongst states. Regional political conflict would increase transportation risk
- US may wish to reduce its military presence in the region due to the fact that it is no longer dependent on the Persian Gulf oil

New Opportunities in West Asia

- Young and Educated Human Resources
- Emergence of Strong Private Sector in the Region which will change the pace and form of economic development in future and may enhance democratic values
- The Potential re-emergence of Iran as a strong and Moderate Political Force in West Asia which will also have its Positive Economic consequence

Iran's Energy Position in West Asia and the World compare to its Population

	Percentage West Asia	Percentage World	
Iran's population	23	1	
Oil Reserves	19.2	9.4	
Oil Production	12.6	4.2	
Oil Consumption	21.6	2.2	
Gas Reserves	41.3	18.0	
Gas Production	28.5	4.8	
Gas Consumption	34.7	4.7	

Iran's Potential Energy Future

- Iran can find its true place amongst the World Energy Producers & Consumers and have a Robust Economy if it can find solution to the following Five major issues;
- 1- Resolving the nuclear dispute with 5+1 to ensure that sanctions are removed.
 The current negotiations is very important for all parties as it will somehow determine the future Political and Economic developments in West Asia

Iran's Potential Energy Future (Cont.)

 2- Utilize Energy more Efficiently and stop Wasting Energy Iran's gas flaring in 2012 (14 billion Cubic meters) was more than the combined gas consumption of four European countries

Greece, Denmark, Sweden and Norway

- 3- Find a solution for the removal of Energy Subsidies.
 - Energy Efficiency will be the key factor in Iran's future energy export potential

Iran's Potential Energy Future (Cont.)

- 4- Find a right Formula for the Long-Term Price of Gas to enable Gas Based Industries to take shape
- 5- Allow investment in Upstream Oil and Gas by Private Energy Companies (Domestic and Foreign) to ensure speedy and efficient **Resource Development**
- Iran Petroleum Contract (IPC) is the New Format of Contract for future. It has removed all shortcomings of Buy- Back Contracts.

West Asia's Potential Gas Export to Europe

- Infrastructure is partly in existence.
- Via Turkey
 1-The important point is the fact that existing infrastructure can be easily expanded
 2- Some producers may prefer direct route to Europe
- Via Mediterranean Sea
 1-linking with new resources in Mediterranean
 2- political Obstacles of Iraq and Syria and costs
- Multilateral gas deal with Europe and Indian Subcontinent is possible with the Development of Asian Gas Network.

Asian Gas Grid is a Logical and Economic Option for Export

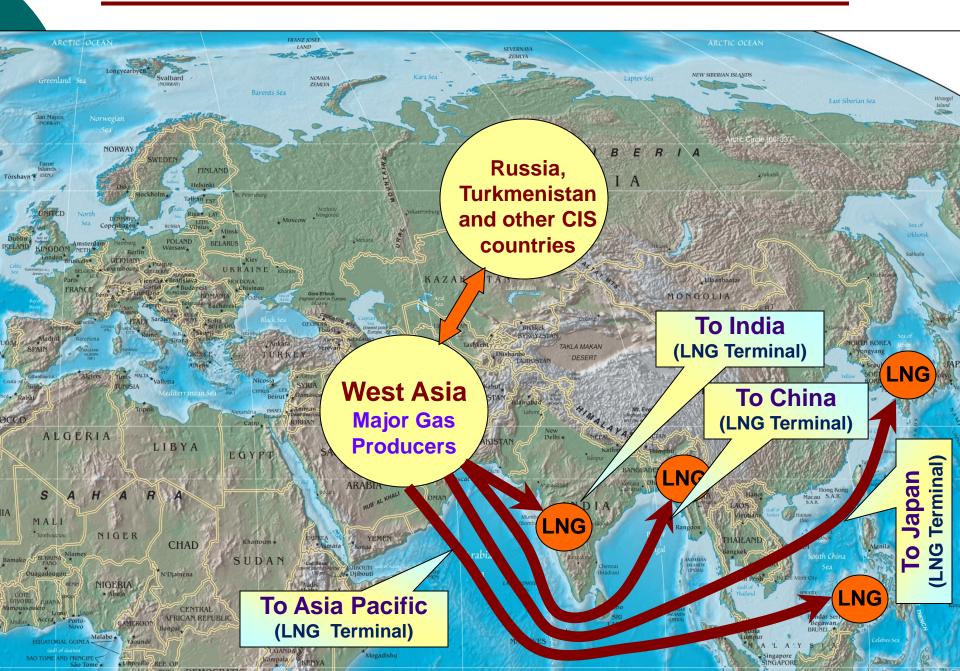
- It Solves the seasonal gas demand fluctuations in the gas exporting and importing Asian Countries
- It solves the security of Supply, Demand and Investment in an agreement similar to Energy Charter addressing the rights of the gas producers, consumers and investors.
- It helps to reduce Price Dispute between the Producers and consumers in the long run.
- It reduces Costs of implementing Projects Considerably compared to existing plans.
- It helps promote industrial development and creation of jobs in many parts of Asia.

Potential extension of Asian Gas Network

Existing Gas Pipelines to Europe Russia, **Turkmenistan** and other CIS **Gas Pipelines to** countries Turkey, and South East **Europe** Possible swap and/or **Gas Pipelines Interlink** between the two area **Gas Pipelines to West Asia's** Oman, UAE, Saudi Gas Pipeline to **Major Gas** Arabia, Kuwait, Pakistan & India **Producers** Iraq, Saudi Arabia, **Jordon and Syria** Iran & Qatar LNG Link to Indian **Subcontinent, East** Asia & Europe



Potential LNG Links in Asian Gas Network



Thank You