In The Name of God

Eghtessad-e-Energy
Energy Economics

Jan-Feb 2011 / No.135

Published by:
IRANIAN ASSO - CIATION FOR ENERGY ECO-NOMICS
(IRAEE)
ISSN 15631133-

Director and Editor-in - Chief:
Seyed Gholamhossein Hassantash
Editorial Manager:
Saed Dabestani

Translators: Mahyar Emami, Hamid Barimani

Subscription: Hamideh Noori

IRANIAN ASSOCIATION FOR ENERGY ECONOMICS
Unit 13, Fourth flour, No.177, Vahid Dastgerdi (Zafar) Ave., Tehran, Iran
Tel: (9821) 222620613-
Fax: (9821) 22262064
Web: www.IRAEE.org
E-mail: Publication@iraee.org

Articles on Oil & Gas in the English section,
in cooperation with IranOilGas.com

Eghtessad Energy
Jan-Feb 2011 - 135

A New World Order in the Global Natural Gas Market

Extraction of natural gas from clay layers containing natural gas known as Gas Shale is rapidly increasing in the United States as a source of natural gas due to the rewarding nature of shale gas. Some view this new source of energy as a revolution in the production of natural gas. Shale gas constituted about 1% of the US's total natural gas production in 2000, a figure which came to a record high of 20% in 2009 led by new applications of hydraulic fracturing technology and horizontal drilling. Huge reserves of shale gas are believed to reside in Europe, Russia, China and elsewhere.

Back in 2004 and 2005, the Americans had admitted they would soon turn into the world's leading importer of LNG. The Americans predicted that local production of natural gas and imports of this product from Canada and Mexico would soon decrease and the US would have no alternative but to switch to LNG imports. To this end, the Americans designed several projects for the construction of imported LNG terminals. Some of these projects have already gone into operation. And now after passage of several years, the United States is expected to turn into a LNG exporting state soon.

The question is whether the Americans were wrong concerning natural gas supplies? Did the American specialists and policy makers not have sufficient knowledge and information about the growing trend of extraction of natural gas from shale gas resources and reserves? Have other factors been involved as well?

One fact is that, in their strategic policies, the Americans consider expansion of LNG trade preferable to pipeline transfer of natural gas. LNG is supplied to world markets similar to crude oil via international water ways which are mainly under domination of the US. However, Americans have no complete control over transfer of gas and oil via pipelines particularly those stretching across the Russian territory.

Expansion of production and trade of LNG makes global natural gas market more flexible and prevents any monopoly in this sphere.

Many of the world's new LNG projects were developed in the recent years based on the Americans forecasts (more demand for LNG in the US market) and now that those forecasts have proved to be wrong, many producers of LNG such as Qatar are now switching to invest in the setting up of LNG terminals in Europe. Expansion of such terminals is in fact in compliance with the strategic principle of diversifying energy supply terminals for Europe and downplays the power and influence of the Russian natural gas supplies to that continent. Saturation of the world's natural gas market is likely to trigger revision of certain natural gas and LNG production projects worldwide. Another fact however, is that supply of natural gas worldwide is surpassing demand, hence causing price cuts that fall way below crude oil prices. The reason is clear. Natural gas is not a complete alternative for crude oil yet. Over 70% of oil products in the world are used in the transportation sector, where natural gas is still not an alternative. The likelihood exists that lower natural gas prices worldwide prepare the bedrock for the application of technologies that facilitate and encourage expanded use of natural gas for a more economical and energy efficient transportation sector. Evidently, the daily increasing use of CNG for vehicles and a new approach to the technologies available for the conversion of natural gas into GTL products is expectable. GTL is a kind of technology, expansion of which can introduce natural gas as a complete alternative to crude oil. GTL units are currently being fed by reasonably low price natural gas, whereas, their final products i.e. gasoline and gas oil (and other oil products) are priced way higher and that will assist the GTL economy.

Directer

Iraq's Hydrocarbon Resources The Third Call for Bid

(Award of Gas Field Contracts)

Ali Khajavi - Oil Ministry's Planning Department

Introduction:

Iraq called for two oil bids in January and December of 2009 and signed contracts with the international companies for the development of eleven oil fields out of sixteen oil fields. In case international companies succeed to secure the objectives stipulated in the said contracts, Iraq will be able to boost its current production rate by 10 million barrels per day and register a record high of 12.4 million barrels per day by 2017.

Iraqi oil ministry is planning to call for the third international bid for the development of its oil industry and transfer of its gas fields.

Specifications of the Fields Offered for Tender

Iraq invited international natural gas bidders on 20th October 2010. The bid included a contract for the development of three natural gas fields i.e. Ukaz, Mansourieh and Ciba containing a total of 11.2 trillion cubic feet of natural gas reserves. Ukaz gas field with a reserve of 5.6 trillion cubic feet is located in Iraq's Sunni inhabited western Al Anbar region in the neighborhood of the Syrian border. This field alone contains 50% of the total reserves of the tendered gas fields.

Eleven companies participated in a workshop which had been arranged in Turkey's Istanbul on 1st of August 2010 for two days and intended to provide briefing about the above mentioned gas fields and the contracts for their development. The most reputable of these companies included the French Total, Italy's Edison and Norway's Stat Oil.

Tenders were first called for the development of Iraq's Ukaz and Mansourieh gas fields but only one consortium led by Edison Company and with participation of Petronas, CNPC, TPAO and Kogas companies presented a proposal for the development of Ukaz gas field, a proposal which was rejected. Meantime, no proposal was submitted in that tender for the development of Mansourieh gas field. The contract for the development of Ciba gas field which had been proposed in the second round of Iraqi oil tenders was deleted from the list after some time.

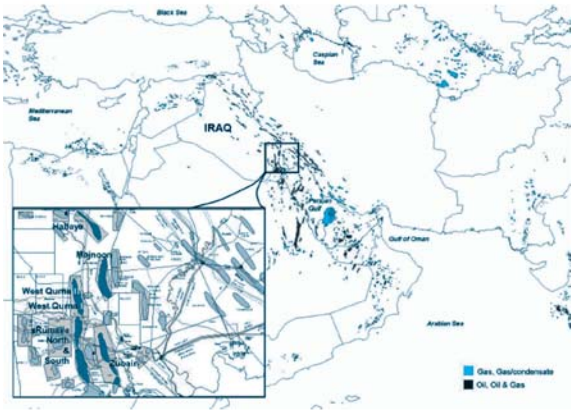
International Companies and Iraqi Oil Tenders

Forty five international companies which had been qualified in the previous two oil tenders were invited to take part in this gas tender. However, only thirteen companies took part in the gas tender including; TNK-BP (Russia and Britain), JOGMEC&Itochu (Japan), Kuwait Energy (Kuwait), Eni and Edison (Italy), Total (France), TPAO (Turkey), ONGC (India), Kogas (South Korea), Stat Oil (Norway), KazMunaiGaz (KMG of Kazakhstan).

What is evident in this tender is the cold welcome given by the international companies compared with the welcome they rendered to the previous two oil tenders. This was under circumstances when the number of international companies participating in this tender showed a significant growth.

Unlike the previous two tenders, no American and Chinese companies had participated in this recent tender. In previous tenders, however, in the first round, four Chinese and three American companies were present and in the second round eight American and three Chinese companies had participated. International experts believe that the relatively small sizes of these reserves are the reasons underlying reluctance of oil companies to take part in the development tenders. The total production ceiling of the three gas fields based on the awarded contracts is 24 million cubic meters (less than production capacity of one single field in Iran's South Pars field). This is when, according to the Iraqi oil ministry, 310 million cubic meters of oil gas is expected to be extracted from the oil fields awarded in the course of the previous two tenders.

Illustration 1: Location of target fields for the extraction and collection of oil gases in Basra



Iraq's total natural gas reserves are estimated at 112 trillion cubic meters of which 70% appear in the form of oil gas, 20% in independent fields and 10% in the form of cap gas and for that matter collection and optimal use of oil gases is top on the agenda of the Iraqi oil officials.

Currently, Iraq flares a daily of 20 million cubic meters of oil gas. According to the Iraqi government's national five year plan 2010-1014, this figure should drop to 4 million

cubic meters per day by 2014. And for this purpose, the Iraqi government has signed a contract with Shell Company. According to this US$ 12.5 billion contract, Shell and Japan's Mitsubishi companies shall extract Basra oil fields' oil gases which are currently flared and instead burn them in power plants or export them. Share of the Iraqi government in this project is 51% and the share of Shell-Mitsubishi companies is 49% (44% Shell and 5% Mitsubishi). The target fields in this plan include; Romaileh, Zobair, western Gharneh and Majnoon. With the commissioning of this 25 year long project, a daily 17 million cubic meters of oil gases will be saved in these fields. Iraq's major crude oil fields are located in Basra. The total volume of crude production in four target fields in Basra region of Iraq is 10 million barrels per day- according to awarded contracts.

Conclusion and Tender Achievements

Table 1: results of Iraqi gas fields tenders

No. of drilling wells	Max. production period (years)	Max. production ceiling (mn cfd)	Production award ($/boe)	Final winners	Proposing companies	Field (Ukaz, Mansourieh, Ciba)
6	13	375-400	5/5	Kogas/KMG	(50/50) Kogas/KMG (50/50) Total/TPAO	AKaz
4	13	320	7	TPAO/KE/ Kogas	TPAO/KE/Kogas (20/30/50)	Mnsvryh
3	9	65-100	7/5	KE/TPAO	(40/60) KE/TPAO (100) KMG	SIBA

In all the tendered gas fields, international companies initiated to compete with one another through setting up consortiums and the contracts for the development of these fields were ultimately awarded.

In the Ukaz field tender, a consortium comprising Kogas and KMC companies of Kazakhstan competed with a consortium comprising Total and Turkey's TPAO. And finally the contract was awarded to Kogas and KMC of Kazakhstan with equal shares of 50%.

Residents of Al Anbar region where Ukaz gas field is located, frequently and on many occasions have expressed their protest to the export of natural gas from this field as long as they themselves have no access to the natural gas extracted here.

In the case of Mansourieh field, only a consortium comprising TPAO (50%), Kuwait Energy (30%) and Kogas (20%) submitted their proposal for the development plan. The contract was awarded to this consortium under conditions that were set by the Iraqi oil ministry. The ceiling of production from this field has been estimated at 9 million cubic meters per day for a period of 13 years.

In the Ciba gas field which is shared by Iran and Iraq, a consortium comprising Kuwait Energy Company and TPAO competed with Kazakhstan's KMG Company. And ultimately, the contract was awarded to the consortium. The ceiling of production of this field is 1.8 to 2.8 million cubic meters per day for a period of nine years.

Turkey's TPAO Company has managed to participate in the plan for the development of Mansourieh and Ciba fields with 50% and 40% shares respectively. This company is estimated to invest US$ 2.5 billion in Mansourieh field and US$ 1 billion in Ciba field. The same Company is expected to have a share of the development of Maysan and Badra oil fields. Active presence of National Kuwaiti Energy Company (KE) in the gas tender and winning the contract for the development of Mansourieh field can serve to be an incentive for Iraq to resume natural gas supplies to Kuwait. South Korea's Kogas Company has been awarded a share in Ukaz and Mansourieh fields. The same company operates in Zobair and Badra oil fields as well.

The significant point in this round of tenders, is absence of reputable international companies and major players of the gas field development operations. No other reputable international company except for Total participated in this tender and instead KE, KMG and TPAO's presence was significant. Enthusiastic participation by the national oil companies of Iraq's neighboring states will consolidate economic and political ties between Iraq and those states. Reference can relevantly be made to strategic security-economic cooperation between Turkey and central government of Iraq particularly in the case of the Iraqi Kurdistan.

A fundamental question recently raised by the Iraqi specialists and activists is as to why the central government of Iraq refuses to rely on the potentials that reside within the Iraqi oil ministry's subsidiaries now that Iraq is awarding oil and gas contracts to poorly experienced Turkish, Kazakh and Kuwaiti companies.

Peculiarities Attached to the Awarded Contracts

The period of the awarded contracts is 20 years which is extendable for an additional five years and their conditions are similar to the oil contracts concluded in the previous two tenders. The production award shall be payable as soon as 25% of the already planned production rate has been materialized and that should not take longer than three years since the date of the signing of the contract. The rate of production in these fields should reach the scheduled ceiling six years following verification of the contract. This rate should remain stable for 13 and 9 years for Ukaz/Mansourieh and Ciba fields respectively. Based on the contracts awarded, the government shall take the risk of marketing and sales of gases extracted from these fields and the contractors will bear no responsibilities in this regard. Therefore, the government of Iraq is obligated to initiate to erect and commission the installations required for the transfer and supply of extracted gases to the local and overseas markets within 36 months from the date of verification of the contracts.

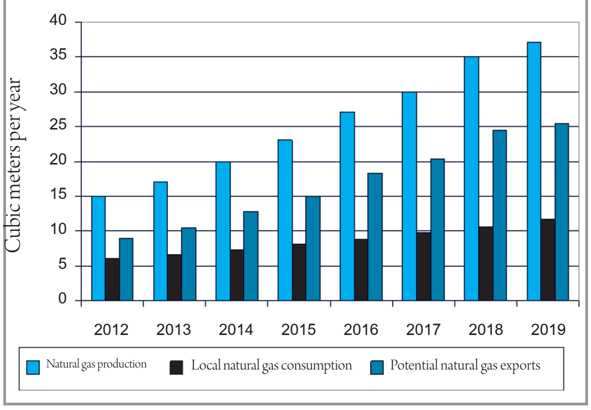
In this round of tenders, the "contract signature bonus" has been omitted and the cost of education and training of domestic Iraqi manpower has been reduced from US$ 5 million in the oil contracts to US$ 1 million in the gas contracts.

In the oil bids that were called in 2009 by the government of Iraq, the latter received over US$2.3 billion in signature bonus from the oil companies that served to be parties to the contracts.

Prospect of Iraq's Gas Exports in 2020

Estimates of BMI institute reveal that local demand for natural gas in Iraq will increase from 4 billion cubic meters in 2007 to 7.3 billion cubic meters in 2014. During the same period of time of course, the nation's natural gas production is expected to increase from 4 billion cubic meters to 20 billion cubic meters which is illustrative of Iraq's likely ability to export 12.7 billion cubic meters of natural gas in 2014. BMI also foresees that Iraq's natural gas production

Chart1: Forecast of Iraq's natural gas production, consumption and exports in 2019



in 2019 will reach the margin of 37 billion cubic meters and considering a local consumption rate of 11.7 billion cubic meters in 2019, Iraq will be able to export 25.3 billion cubic meters of natural gas per annum.

Conclusion

As was stated earlier, gases contained in oil constitute 70% of Iraq's natural gas reserves, hence, the nation's first priority with regard to gas reserves is appropriate extraction and utilization of these reserves. The contract for the extraction of oil gases in Basra region oil fields and award of three independent gas field development contracts to foreign companies is indicative of the significance which the Iraqi government attaches to the production of natural gas in the years to come. The Iraqi oil ministry has recently announced that it plans to call for tenders for the award of contracts for gas exploration in that country's twelve gas blocks.

Escalated production of natural gas and Iraq's access to the European market via Nabucco pipeline (Turkey) and the Arab Pipeline (Syria) is expected to elevate the status of Iraq in the global natural gas markets and consolidation of regional and global cooperation.

In fact, Iraq plans to make optimum use of its oil and natural gas reserves in order to optimize its revenues and lay the foundations of a blooming economy and improve ties with the regional and other world countries.

PetroVietnam likely to partake in Darkhovin-3

There is a possibility that the contract to develop phase 3 of Darkhovin oilfield to be assigned to a consortium of domestic companies and PetroVietnam Co.

Stating the above, managing director of Petroleum Engineering and Development Company (PEDEC) Naji Sa'douni said: "It is foreseen that phase 3 of Darkhovin oilfield will be signed by the next two months," reported the ISNA. He added: "About $1.2 Bln is foreseen to be required to be invested in this project."

Announcing that the crude oil production capacity of this phase would be 80,000 bpd, Sa'douni explained: "Once phase 3 of Darkhovin oilfield is commissioned, the production capacity of this field will be raised from the current 160,000 to 240,000 bpd."

In the first half of 2010, PEDEC started talks with 5 groups of Iranian and Asian companies which were supposed to draw up the relevant master development plan (MDP) of this phase and present it to PEDEC by November 2010.

Apparently only two of the groups have submitted their draft MDP to PEDEC and the other three have withdrawn from taking part in the project.

The financial resources of this project are supposed to be secured by local banks and investment companies.

Darkhovin Oilfield presently produces 160,000 bpd of crude oil. Phase 2 of this project was officially inaugurated on 8th of Feb. '11. Its 2nd phase was supposed to become operational in March 2010.

NISOC to build new crude oil export pipeline

Javad Zarrati-director of engineering and construction at National Iranian South Oil Co. (NISOC)- talked of the construction of a new 260 km crude oil export pipeline from Ahvaz to Genaveh.

According to the PR office of NISOC, Zarrati added: "Basic and detailed engineering studies of the project to construct this pipeline have been already carried out and the project is undergoing its normal tender procedure and will be operational once the required pipes are supplied."

Iran to export 1.5 Mln lpd of fuel to Armenia

Managing director of National Iranian Oil Refining & Distribution Company (NIORDC) AliReza Zeighami revealed that Iran and Armenia came to a general agreement to pipe 1.5 Mln lpd of Iranian gasoline and gasoil to that country.

According to the news agency of Iran oil ministry, Zeighami said: "Based on the general agreement, through an 8" pipeline with the length of 365 km, 750,000 liters of gasoline and 750,000 liters of gasoil are expected to transfer from Tabriz to Irvan."

Zeighami added: "Armenian deputy minister of energy will be visiting Iran soon to finalize the agreements signed between the two ministers."

Iran, Indonesia's joint refinery plan in doubt

The fate of Indonesia's plan to build a 300,000 b/d of refinery in Banten province, jointly with Iran's National Iranian Oil Refining and Distribution Company and Malaysia's Petrofield, hangs in the balance as rising crude prices and the government's tax incentives to make the project viable are seen to be insufficient, an official from the state-owned oil company Pertamina said Friday.

"The economics of the project cannot be achieved, either with regard to tax incentives, which are not enough, and also with increasing crude oil prices, which are higher now than when we carried out the feasibility study [in 2009]. So the incentive package and crude prices are the main issues. The project depends on these issues," Pertamina's processing director Edi Setianto told Platts Friday.

Separately, the industries minister MS Hidayat said the project would fail. "Crude oil is very expensive now [compared with when the feasibility study was done]. So the project will fail," he said.

Pertamina had in September 2010 considered building a petrochemical complex integrated with the proposed 300,000 b/d refinery for the project to be economically viable, as even the Indonesian government's promise to provide incentives, including a tax holiday, for new refinery construction was not considered enough to help the project be economically viable.

But potential investors had then said that the rate of return on the refinery and petrochemical complex in Indonesia was only 8% and they wanted at least 14%.

India shipping JV with Iran may sink

The ambitious and oldest joint venture of the Shipping Corporation of India (SCI) is caught in a diplomatic whirlpool over Iran, forcing the company to consider severing its ties with Tehran's national maritime carrier.

As the issue is ridden with political sensitivity, the SCI has sought the ministry of external affairs' opinion as international sanctions can make the profit-making unit incur huge losses.

The JV, which began in 1974, with the Irano Hind Shipping Company has a book value of $179 million where SCI holds 49% while the remaining is with the Islamic Republic of Iran Shipping Lines (IRISL).

The JV has UN sanction (UNSCR 1929), which India is duty-bound to adhere to but what also makes the partnership tougher is the consistent ire of the US against IRISL.

"How long can we keep the vessels idle, incurring huge losses in their upkeep," an official said.

The immediate trouble that the joint-venture faces is that India is unable to do anything with the seven vessels it has besides it is also facing a huge financial loss in the form of a deal worth $84 million with Korean company Huyndai for a new vessel.

For a new vessel, Taj Mahal, the JV has already paid $60 million. The Korean firm, is not accepting the remaining money due to fear of sanction violation.

Baghdad split over Kurdish oil deals

Confusion continues to surround the terms on which Baghdad will allow international oil firms to work in the Kurdish region of northern Iraq.

Prime Minister Nouri al-Maliki was quoted last weekend as saying the federal government would honor the production-sharing contracts (PSC) the companies had signed with the Kurdistan Regional Government (KRG) -- but he was swiftly contradicted by his second-in-command, who said the Iraqi premier had been misquoted.

Agence France-Presse reported al-Maliki as saying on Saturday that the oil ministry had accepted the contracts because of differences between extracting oil in the northern Kurdish region and in Basrah, Iraq's major producing area in the south. "There is a need for bigger efforts there, while in Basrah [oil] is closer to the surface. It's difficult to have service contracts in Kurdistan but it's normal to have them in southern Iraq," al-Maliki was quoted as saying.

But Hussein al-Shahristani, Iraq's deputy prime minister for energy, insisted the PSCs still need to be converted into service contracts.

Mahshahr Port renovation plan at 90% headway

Referring to the satisfactory progress the project to improve Mahshahr crude oil and petroleum products export/import terminal has already made, managing director of National Iranian Oil Refining & Distribution Company (NIORDC) AliReza Zeighami said: "In accord with the set plan, this project will get on stream by next Iranian year (starting Mar.2011)."

According to the MANA news agency, the project has made about 90% progress and the revamp of 5 jetties has been already finished.

The project's offshore sector is being done by Khatam-ul-Anbia HQ and its onshore operations which include construction, renovation and mechanization of storage tanks over a 32-Hectare piece of land is being carried out by Machine Sazi Arak (MSA).

NIOEC had assigned the project to MSA and Khatam HQ in mid 2007. The project is aimed at creating a port capacity capable of berthing vessels of up to 80,000 tons.

Iran, Azerbaijan gas deal to be signed in Tehran: NIGC MD

Javad Owji - managing director of National Iranian Gas Co. (NIGC) - revealed that the final draft of the contract to import natural gas from Azerbaijan is ready and said: "This contract is foreseen to be signed in Tehran soon," reported the Mehr news agency.

Once the new Tehran-Baku gas agreement is approved, Iran will import 2 mcm/d-750 mcm/year - from Azerbaijan. This amount will be gradually raised over the years to come, the report added.

Referring to Iran gas trade positive balance, Owji explained: "While a total of over 7 bcm of gas was exported to Turkey in the first 10 months of current Iranian year (started Mar. 2010), about 6.3 bcm of gas were imported from Turkmenistan."

Tehran to host 'Islamic Gas Pipeline' meeting

Javad Owji, managing director of National Iranian Gas Co. (NIGC), talked of holding a new round of trilateral talks on 'Islamic Gas Pipeline' in Tehran and said: "Once the meeting is held by Iranian, Iraqi and Syrian officials in mid Feb. 2011, more details of this project would become finalized," reported the Mehr news agency.

This trilateral meeting aims to make economic estimates and decide on the exact gas transfer pipeline route. After technical talks, an international consultant is foreseen to be soon selected to implement this international project.

This 56" pipeline which - with the length of 1,500 km - which will be stretched between Assalouyeh and Damascus is to carry 110 mcm/d of natural gas. This pipeline is foreseen to supply 10-15 mcm/d of gas to Iraq, 15-20 mcm/d of gas to Syria and 5-7 mcm/d of gas to the south of Lebanon.

SP new phases to come on stream on time: POGC MD

Talking of the latest progress development projects of South Pars new phases has made, Mousa Souri - managing director of Pars Oil & Gas Co. (POGC) said: "Making 14% headway, the development project of SP phases 22, 23 & 24 is underway ahead of the schedule- which was estimated to have made 11.2% progress; SP phase 14 is being progressed in accord with the plan (8.5%) and phase 19 is also underway, making 5.5% headway," the Mehr news agency reported.

Emphasizing on timely completion of South Pars new phases, Souri added: "SP phases 11 and 12 have made 7.5% and 43% headway respectively, and phases 15 &16 have also made an average progress of 59%."

MP criticizes negligent gas flares

Hamid Reza Katouzian, head of Iran's Parliament Energy Commission, criticized the huge volume of associated gas burning in Iran and said: "It would be yet beneficial to us if gas was sold ¢ 1 per cubic meter than being flared in vain and inefficiently every year."

According to the Mehr news agency, Katouzian added: "Unfortunately, the volume of gas being presently flared is 50 mcm/d, while this amount came to 45 mcm/d last year." The volume of associated gas burned in Iran (16 bcm) in past Iranian year (Ended mar 2010) was equal to 80% of the capacity of Baku- Tbilisi- Erzurum natural gas pipeline.

In accordance with Iran's Oil Industry Fifth Five-Year Development Plan, the amount of the flared gas is expected to shrink to 2.3 mcm/d which entails huge investment and fulfillment of associated gas gathering projects.

Cooperation with international firms and organizations which access the required funds and technology is only one of the means to this end. Joining the World Bank's Global Gas Flaring Reduction (GGFR) partnership and utilizing the financial and technological potentials of its members, can help Iran reach the goals set in its fifth development plan.

Oil Bourse' and its Imminent Hurdles

It was in spring 2005 that commissioning 'Oil Bourse' was first raised in Iran and Mohammad Javad AsemiPour – then 'Oil Bourse' project manager- talked of preparation and presentation of a 500-page plan to Tehran Stock Exchange (TSE) board in early summer same year.

Last week, Iran president Mahmoud AhmadiNejad called for immediate commissioning of 'Oil Bourse' and asked the ministers of petroleum and economics and financial affairs to take measures to spur 'Oil Bourse' immediate commissioning. Mohsen Khojasteh Mehr- deputy oil minister in planning & supervision over hydrocarbon resources- talked of oil ministry's readiness to offer fuel oil at bourse and said: "Estimates show fuel oil can be offered at bourse latest by 21st. Mar. 2011."

In October 2010, vacuum bottom and fuel oil could earn a permission to be offered at bourse. Later, National Iranian Oil Refining & Distribution Company (NIORDC) announced that due to the implementation of 'Subsidy Reform' plan, fuel oil sale permission at bourse should stay untouched.

Presently, 76 Mln liters/d of fuel oil is produced in the country, a major portion of which is used domestically and a part of it is exported. As raw material of bitumen, Iran produces 4 Mln tons/d of vacuum bottom all of which is consumed domestically.

NIORDC's lack of interest in offering fuel oil at bourse is rooted in production and trade policies of this product. In fact- according to the rules approved in past years -refineries are authorized to sell their produced fuel oil and spend the relevant income on everyday affairs. Hence, while refineries are allowed to sell their fuel oil products directly and entitled to what they earn this way, it is no wonder that fuel oil sale at bourse has been confronting such a long delay.

Though, there are still serious problems at Bourse Kala for fuel oil to get into that, which is referred to as a prelude to commission 'Oil Bourse'. This problem- offering fuel oil at bourse- can be regarded only as a small portion of the problems commissioning 'Oil Bourse' is facing.

Commissioning 'Oil Bourse' at an international level needs a variety of prerequisites as follows:

- Support of a part of the countries in the world- like several OPEC member countries- which seems more serious considerations should be given to the direction of Iran oil diplomacy,

- Preparing infrastructures for 'Oil Bourse' commissioning such as Stock exchange organization, technical equipments, benchmarking of Iranian crude oil, human resources, rules and regulations, loading ports etc.,

- Learning from experiences of world's thriving stock exchange markets,

- Presence of international banks and insurance companies as well as foreign companies as institutions which insure pay-off, support and guarantee,

Considering all above, it seems that commissioning 'Oil Bourse' will have a long way to go and we should wait it to take more effective and targeted monitoring directions.

Freedom of Economy in Iran 2010

Being put out at 42.1 out of 100 by the 2011 edition of the annual report released by The Wall Street Journal and The Heritage Foundation of the U.S, Iran has been ranked 171st out of 183 countries assessed in the world in terms of economic freedom.

The index ranks nations based on 10 measures evaluating the economic openness, rule of law and competitiveness. They include Business Freedom (69.4% in Iran), Trade Freedom (44.8%), Fiscal Freedom (81.1%), Freedom from Government (76.0%), Monetary Freedom (60.7%), Investment Freedom (10%), Financial Freedom (10%), Property Rights (10%), Freedom from Corruption (18%) and Labor Freedom (50.7%).

All regions, except the EU and North America achieved increased level of freedom. All Balkan countries are ranked slightly below the regional European average. The global average economic freedom score increased 0.3% to 59.7 with the biggest improvement in the developing and emerging economies. In the Asia Pacific region 2/3 of the countries improved this year.

The top ten scored countries are Hong Kong, with an index of 89.7 out of 100, as the freest economy of the world for the 17th year in a row, followed by Singapore, Australia, New Zealand, Switzerland, Canada, Ireland, Denmark, United States and Bahrain. Only the first 6 economies received overall marks of more than 80 points to be designated as 'free'.

Iran is ranked 16th out of 17 countries in the Middle East/North Africa region (MENA), and its overall score is below the world average.

In MENA region, Bahrain comes first ranked 77.7 followed by Qatar-70.5, Oman 69.8, Jordan 68.9, Israel 68.5, United Arab Emirates 67.8, Saudi Arabia 66.2, Kuwait 64.9, Lebanon 60.1 and Morocco ranked 59.6.

Iran had a rank of 95 in freedom of economy in the year 2000, which rose to 82 in 2005. The improvement in the index in 2005 was because in that year the policies of Article 44 of Iran's Constitution (calling for privatization of state-run companies) were officially sanctioned to the government. Iran's freedom of economy indexes were 44 and 44.6 in 2008 and 2009 respectively.

According to the report, with a population make up of 74.1 Mln, Iran's unemployment rate is set at 11.8%, its inflation rate (CPI) at 10.3% and its Foreign Direct Investment (FDI) equity inflow is set at $ 3.0 Bln in 2010.

Table below compares Iran's economic freedom indexes in 2010 and 2009 with the world's averages.

Title	World Avg.	Index (2010)	Index (2009)
Business Freedom	64.3	69.4	60.6
Trade Freedom	74.8	44.8	57.4
Fiscal Freedom	76.3	81.1	81.0
Government Spending	63.9	76.0	79.9
Monetary Freedom	73.4	60.7	60.1
Investment Freedom	50.2	0.0	10.0
Financial Freedom	48.5	10.0	10.0
Property Rights	43.6	10.0	10.0
Fdm. From Corruption	40.5	18.0	25.0
Labor Freedom	61.5	50.7	52.4