

# IRAN IN THE ENERGY GAME WHILE PASSING THROUGH THE ENERGY DOOR

by Necdet Karakurt, Oğuzhan Akyener, Serhat Çubukçuoğlu, Mehmet Apaydın and Ali Maraşlı



"While Iran's ambitious plans to reach pre-sanctions oil output is welcome by keen observes in western energy circles, the truth is that Iran will need years to repair the damage on its existing infrastructure to reach that capacity amid sharp increase in domestic consumption."

"Iran is expected to gradually lift trade barriers and receive an influx of western technology to help modernize its aging infrastructure."

#### INTRODUCTION

The Middle East is often referred to as a perennial geopolitical hotspot, the bedrock of shifting power play of partnerships, and constant shift of alliances - all in the midst of emerging and demising local powers. Iran sits at the epicenter of this political, economic and social development in the neighborhood. On one hand, as a prominent OPEC member, Iran quietly aims to exert influence through energy diplomacy in its relentless pursuit to elevate its rank from a regional to global power status. On the other hand, resting on a young, educated population with rich energy reserves and vast terminal capacity on the Gulf, Iran's engagement in bold expansion policies has an underlying intention to boost its hegemony in the region and to play the role of a great power in world political affairs.

Iran is the second largest economy in the Middle East and North Africa (MENA) after Saudi Arabia – its main regional rival, whose economic activity and government revenues still depend largely on oil revenues and therefore remain volatile.1 While the western sanctions have reduced Iranian oil exports by about two thirds, causing Iranian currency "Rial" constantly to depreciate its value, the World Bank estimates that Iran will grow by 1.9% in 2015.2 Iran's current oil production is just over 3 million b/d3 and while this is expected to increase after the lifting of all sanctions, in reality, it can add no more than 300,000 - 500,000 b/d barrels to its actual oil production due to fast depleting oil fields and underinvested infrastructure.4 Before the Islamic Revolution, in 1974, Iran was a regional ally of Israel and had received close support of the U.S. administration to start its controversial nuclear program for peaceful purposes, due to fast maturing oil fields and excessive production under the Shah regime. The situation met with bitter sanctions in the wake of post-revolution Iran-Iraq War, when Iran tried to achieve military self-sufficiency and re-initiated the program, casting serious concerns in the west towards Iran's hidden agenda.

While Iran's ambitious plans to reach pre-sanctions oil output is welcome by keen observes in western energy circles, the truth is that Iran will need years to repair the damage on its existing infrastructure to reach that capacity amid sharp increase in domestic consumption. With oil production is at its highest levels since 1960s and a world-wide excess output of 2m b/d, the profitability of such an investment on the scale of \$200 billion<sup>5</sup> is questionable as oil markets already face a persistent glut that has more than halved prices in the past 16 months. 6 OPEC's published official statistical data that puts Iran's proven oil reserves at 157 bb has been falsified by various researches, the average of whose estimates is between 30-35 bb.7 In fact, perhaps ironically, Iraq, OPEC's second largest oil producer has almost the double of this amount at 77 bb, proven but undeveloped reserves, with production cost of \$1 per barrel in contrast to \$3-\$4 in Iran.8

With the nuclear accord signed between P5+1 and Iran in Vienna on 14th of July 2015, Iran is expected to gradually lift trade barriers and receive an influx of western technology to help modernize its aging infrastructure. This will increase capital investment; enable development projects, and increase spending. As oil prices begin to surge towards \$60-\$70 mark by 2017, Iran will expand trade with its partners, although it is still far over the horizon to see its production capacity to jump to 5.7m b/d level, or even the 4.8m b/d, as targeted by Iran's Ministry of Energy.9

## **OIL & GAS MARKET OVERVIEW**

Based on the IHS and USGS databases, with



reserves, Iran has a bright future in global oil and gas industry. However, exploration and production activities (E&P) has been considerably constrained for more than 3 decades related to Arab-Israeli War, Iraq-Iran war, sanctions, and so on. Vast majority of the development wells in Iran were drilled before the 1980s; that is why, Iranian fields can be described as undeveloped resources in oil and gas sector.

INSTITUTIONAL FRAMEWORK

Ministry of Petroleum is fully responsible for E&P policy in Iran's oil and gas sector. The National Iranian Oil Company (NIOC) plays a key role as a subsidiary of the Ministry of Petroleum. NIOC has the option of signing contracts with the IOCs under the authorization of the Higher Council of the Economy.

# **LEGAL FRAMEWORK and FISCAL TERMS**

Iran's contract system can be divided into two different categories; both of which can be named as buy-back contracts and the new IPC (Iran Petroleum Contract) respectively. Iran's legal framework initially was constructed with the 1987 Petroleum Act. The 1987 Petroleum Act was accepted as the initial governing law but it is not considered as sophisticated frame for petroleum operations. 1988 Direct Taxation Act later brought buy-back contracts into the system.

In buy-back contracts, the contractor shoulders all risky investments. Return of the investment is agreed on a remuneration fee (an allocation of production remaining after royalty -officially called Priority Percentage Right- and cost recovery based on a fixed fee) with a fixed rate of return negotiated at the beginning of the contract. Buy-back contract forbids the foreign private ownership depending upon the Sharia Law. Due to lack of investment, partially modifications happened in buy-back contracts in 2003 (associated with 2002 Law on Attraction and Protection Nevertheless, Iran was able to add new discov-

more than 400 billion boe of 2P oil and gas of Foreign Investment), especially in cost recovery system, income tax system (reduced to 25%), and remuneration fees.

> The new IPC term effectively entered into force on November 14, 2015. As a result of the sanctions' expansion, political change and financial conditions pushed Iranian government to establish a new contract type to attract foreign investors. After the implementation day of JCPOA (Joint Comprehensive Plan of Action, also known as the "Nuclear Agreement"), Iran anticipates to flow 300,000 to 500,000 bbl. oil per day in a year period. When compared to buy-back contracts, IPC includes incentives and investment options that will attract foreign investors (extension of E&P periods, payments based on re-scale etc.). IPC also gives an option to enter into JVs (joint ventures) with NIOC. Since it is a new contract type, availability of all fiscal materials is not online yet.

#### **UPSTREAM MARKET**

Glorious days of Iran as an oil producer and exporter date back to 1979 before the Islamic Revolution to throw the Shah. During the shah regime, Iran produced nearly 6 MMbo/d oil. The new republic could never manage to surpass the 6 MMbo/d production rate due to some complications in the oil field management. These complications might be exampled as establishment of National Iranian Oil Company (NIOC) to oversee all the exploration and production activities in the country, all the staff working in the oil industry being foreign, sanctions applied against Iran, and low oil prices up to 2000s. Iran tried to compensate high costs of Iraq war by its oil revenues and kept the production rates as high as possible. Being dependent on oil revenues resulted in early maturation of the producing fields since Iran was not able to gain access to necessary technical equipment due to sanctions. Rise in oil prices after 2000 notes the increase in exploration activities since Iran again became an attractive oil rich country to invest for International Oil Companies (IOC).

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also increased Iran's potential for reestablishing its reputable power in the energy game by the help of IOCs. However, new sanctions by US and reinforced by EU troubled IOCs' flexibility and caused them to leave Iran. Map 1 shows the operating IOCs before the latest sanctions. These days, none of those companies is active in Iran. Sinopec and CNPC of China are the only companies that operate in the country as it can be seen from Figure 1, in which the displayed production amounts by IOCs are limited to CNPC in 2015.

Iran's current petroleum contracts are based upon buyback contracts (for the last 20 years), under which the government, upon discovery, buys the extracted oil in the producing fields. This type of contracts limits

eries to its oil reserves. Natural gas discoveries by newly proposed Iran Petroleum Contracts (IPC) to favor foreign investments. After the ease of sanctions related to Iranian nuclear program by an agreement on April 2, 2015, Iran introduced its new IPC at Tehran Summit in November 2015. However, Iran's new IPC did not get enough attention by IOCs as Iran is expected to revise the proposed IPC to replace the current buyback contracts.

> Iran's oil and gas reserves are validated as one of the world's largest reserves - second in gas and fourth in oil (See Figure 2). Map 2 illustrates the distribution of oil and gas fields across Iran's basins. According to IHS Energy's Iranian market briefing: The majority of Iran's remaining oil resource resides in the predominantly onshore Zagros Fold Belt, which remains Iran's key oil producing prov-

Pre-Sanctions International Oil China National Petroleum Co Company Operations in Iran FUSE Sinopec ABAT **TotalFinalElf** Petronas **K** LUKoil MPEX Inpex JGC Corporation Repsol Royal Dutch Shell Statoil Gazprom Neft Oilfield Gasfield Gas-processing plan Tanker term ental shell Oman

"Iran's oil and gas reserves are validated as one of the world's largest reserves - second in gas and fourth in oil."

Map 1: IOCs that were operating in Iran before the sanctions. 10

the profit of foreign investors, as they prefer ince. Gas resource is centered largely in the finding better deals to market oil elsewhere. offshore South Pars Field in the central Ara-Buyback contact mechanism coupled with bian Province. The Zagros Fold Belt also has the latest bans on investments made IOCs sizable remaining gas resources. leave the Iranian E&P sector but Iran premises to change its current petroleum contracts Over the past decade, new oil production



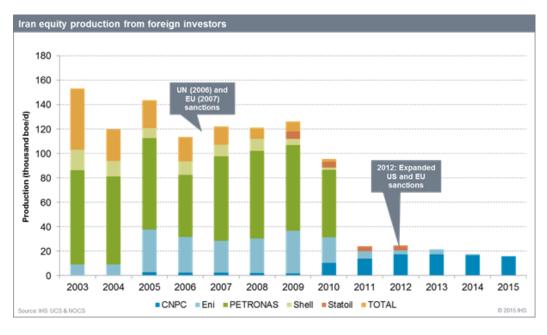
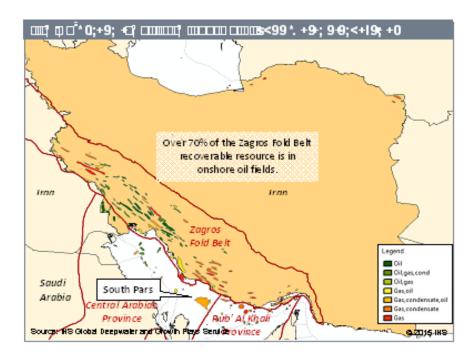


Figure 1: A graphic display of Iran's oil equity production from foreign investors. 11

from the Central Arabian Province has par- Drilling activity in Iran has been muted since tially compensated for a sharp decrease in around 1980, implying that the Iranian reproduction from the core Zagros Fold Belt source base has not had the benefit of the conoil-producing province. New volumes during siderable advances in reservoir imaging, drillthis period are largely tied to increased pro- ing, and completion technologies over the duction from the Persian Gulf and onshore past 35 years. Again, this suggests substantial oil fields bordering southern Iraq (both areas scope for production increases through apwhich received foreign investment through plication of modern technologies, while also the Iranian buyback contract structure), pointing to the relatively unexplored nature as well as condensate production from the of the Iranian resource base.<sup>11</sup> South Pars gas field.



Map 2: A map display of Iran's onshore and offshore oil and gas fields.<sup>12</sup>

"Gas resource is centered largely in the offshore South Pars Field in the central Arabian Province. The Zagros Fold Belt also has sizable remaining gas resources."

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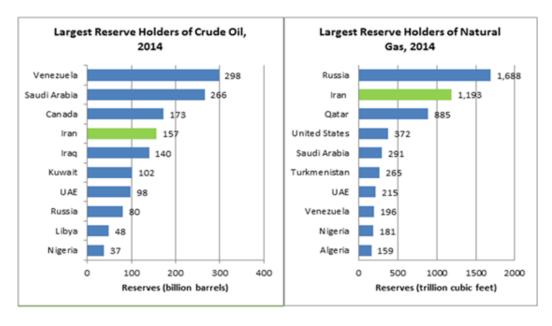


Figure 2: A graphic display of the countries with world's largest oil (left) and gas (right) reserves (Source: EIA).

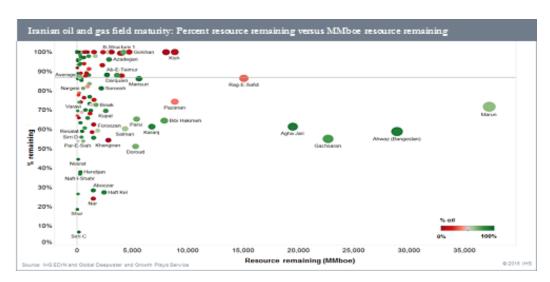


Figure 3: A display of Iran's onshore and offshore oil and gas fields. 13 Red color means the field requires development and green means remaining resources.

"Iran's large discoveries since 2000 have been concentrated on gas reserves and oil production has declined sharply because of the aging oil reservoirs."

Iranian oil and gas fields' examination states that years of isolation and sanctions have resulted in an underdeveloped resource base as it can be seen from Figure 3. It is obvious that many of the gas fields (red colored circles in Figure 3) require development as of those with green colored circles mean remaining oil resources are currently immature.

Iran's large discoveries since 2000 have been concentrated on gas reserves and oil production has declined sharply. See Figure 4 for the increase in Iranian gas production profile throughout the years. As it is clearly visible,

much of gas production added comes from the Central Arabian Province, where South Pars Gas Field is located. Much of the gas production covers the domestic market as the demand has grown significantly over the past decade, which is why Iran is focusing on development of gas fields. On the other hand, because of the aging oil reservoirs, Iran has to use much of the produced gas for reinjection to maintain its oil production levels. As a result, Iran finds itself as having to import gas from its neighbor Turkmenistan to compensate the Northern parts of the country's energy requirements. Thus, Iran needs to attract



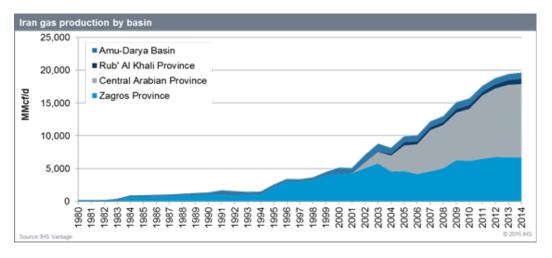


Figure 4: A chart display of Iran's onshore and offshore gas production through the years from 1980 to 2014.14

fields.

MIDSTREAM and UPSTREAM MAR-**KET** 

In the concept of midstream and downstream markets of Iran, main oil terminals, refineries, oil and gas pipelines will be perused.

### **CRUDE OIL & CONDENSATE TERMI-NALS**

The list is given in Table 1. Moreover, Cyrus, Bahregensar, Bandar Mahshahr, Abadan, and Bandar Abbas are the main terminals of Iran to sell its refined products.

#### **REFINERIES & PIPELINES**

foreign investors with enhanced technology Iran does not have an international oil export and equipment to develop its large oil and gas pipeline. All oil pipelines were constructed to transport in-country production to the due ports, terminals and refineries.

> However, from the gas pipelines side, although there are in-country gas transportation and distribution lines, as seen from Map 3, there are two gas import pipelines from Turkmenistan to Iran with capacities 13 and 6 bcma. In addition, there are two gas export pipelines from Iran to Turkey and Iraq with capacities of 14 bcma (to Turkey) and 8 bcma (to Iraq). As the future pipelines:

- There is not an important planned oil pipeline for the future
- For gas:
  - Iran to Iraq pipeline capacity is planned to be upgraded up to 12 bcma.
  - Iran to Pakistan (then with a possible

Terminal Name	Storage Capacity (mmbbl)	Location	İnfo
Kharg Island	28	Persian Gulf	Main crude export terminal
Lavan Island	5,5	Persian Gulf	Crude export terminal
Siri Island	4,5	Persian Gulf	Crude export terminal
Neka	1	Caspian Sea	Crude swap terminal
Assaluyeh	On upgrading process, currently more than 4 mmbbl	Persian Gulf	Gas / Condensate Terminal for South Pars Field

Table 1: The list of oil terminals in Iran.

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"Iran does not have an international oil export pipeline. All oil pipelines were constructed to transport in-country production to the due ports, terminals and refineries."

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Refinery	Capacity (crude mbbld)	
Abadan	400	
Isfahan	375	
Bandar Abbas	330	
Tehran	250	
Arak	250	
Borzuyeh	120	
Tabriz	110	
Shiraz	60	
Lavan Island	60	
BooAli Sina	34	
Kermanshah	22	
Aras 2	10	
Booshehr	10	
Aras1	5	
Yazd	3	
TOTAL	2039	

Table 2: Refineries of Iran (Source: EIA 2015 Iran report).

root to India) pipeline with a capacity of 28 bcma.

 Iran to Oman and UAE pipelines are currently on hold due to price disputes.

Iran currently has no LNG terminals to export natural gas. However, Iran is planning to build new LNG facilities as an alternative to

boost its gas export volumes that will be the economic option for Iran.

# THE NEW IRANIAN ERA: WITH-DRAWAL OF SANCTIONS

Iran, having the world's fourth and second largest oil and gas reserves respectively, requires paying a great attention to its international energy politics since from the early 19th century; its economy has been extremely built on oil sector. The sanctions -applied since the 1979 revolution-limited Iran's export capability and isolated it from the west that led Iran apart from the technology, which Iran definitely desires to preserve oil production from its aging fields. Steady growth in population has become a burden on the export numbers since domestic needs increased rapidly that significantly reduced the amount of oil exports. Another negative aspect of Iranian oil industry is that Iran uses natural gas (from the production of its huge gas reserves) to preserve the declining oil production rates. Thus, Iran's current situation from the point of energy window can be described as "The Exhaustion" due to growth in domestic consumption rates, using most of its extracted gas to recover oil production instead of exporting, losing its power in OPEC and not being able to maneuver freely under heavy

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Map 3: Gas infrastructure of Iran (source EIA).



Iranian Petroleum Contract

	Buyback contracts	(proposed terms)
Contract type	Hybrid service contract with some elements of PSC	JVs with NIOC
Approach to development phases	Separate contracts for exploration and production	Integrated contract
Contract length	Typically 3–8 years for exploration and 3–12 years for production, with exceptions	20–25 years (7–9 for exploration and 15–20 for production)
Calculation of contractor fees	Guaranteed internal rate of return agreed up front, based on: approved project capital costs; production forecast; crude market price with 2% annual escalation or agreed gas sales price; assumed operating expenses of 3% or 5% of annual development costs for onshore and offshore fields, respectively; and financing costs	Terms to be adjusted over the course of the contract according to the progress made and can be paid in oil; fees linked to oil prices
Compensation for risk	Contractor fee calculated based on a range of factors	Payments to IOCs on a sliding scale, with riskier developments paying more
NOC/state equity	Post-2003 buyback contracts give NIOC the right to a minimum 10% equity stake in any project of its choosing	n/a
Remuneration schedule	Payment commences following the completion of development operations and handover to NIOC (after a production threshold is reached); payments are made over several years	IOCs to be paid in installments once production begins, with full payments only after the plateau target is reached; payments are made over several years

Table 3: Outline of Iranian contract types (Source IHS).

economic and political sanctions.

Current conditions push Iran to increase its exports that will help ease the economic burden the country faces these days. Iran has been trying its best to market its gas reserves as Iran succeeded a few gas agreements with Turkey, Iraq, Oman, UAE and some Far East countries including Pakistan. However, Iran, at first, has to provide the gas and then deliver it in accordance with the agreements. There are some troubles to overcome this issue as Iran definitely is in need of reviving its technology, infrastructure and political ties with the west. Lift of sanctions is the first step to take forward; however, complying with the international agreements is going to renounce Iranian nuclear ambitions, which, in the end, happens to be Iran's grand plan to reign over the Islamic World.

point of views to answer whether or not Iran might be able to meet its goals after the withdrawal of sanctions. Some thoughts are too optimistic because Iran will open the door for IOCs; however, majority thinks negatively because Iran's aging fields lack of investment and technology. This oil and gas reach country keeps its attractiveness to the big investors as they crave for developing large reserves with cheaper production costs. Iran is able to offer large reserves but the fact that many oil fields have been producing since the early 1900s, there awaits huge investment ground to revive these aging fields.

According to Iranian oil minister, Zanganeh; Iran needs roughly \$50 billion USD to reach its upstream production goals by 2018. Tehran's target for oil production, condensate and natural gas are 4.7 million bod, 1 mbd and 35,000 mcf/day respectively.<sup>15</sup> IOCs have the Many experts analyzed Iranian resources, necessary budget to meet the demand. The technology and infrastructure from their large companies will definitely provide Iran

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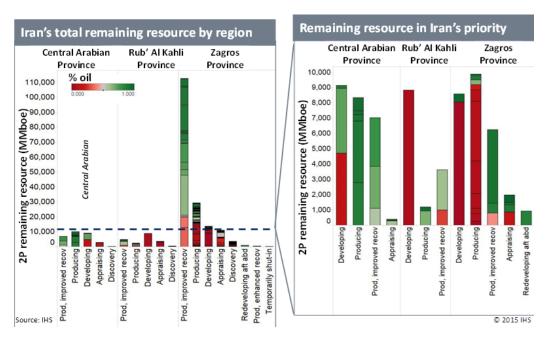


Figure 5: Iran's remaining oil resources categorized by oil regions (Source IHS).

"It is certain that it all depends on what Iran has to offer to foreign investors or how much Iran will be bent on its current energy policies to be an attractive investment ground for IOCs."

with the technology they have been using in and around the world but they will also consider the profit gain. Iran's current petroleum contracts are based on "Buy-back Contracts", which seem to be the most important and • also challenging item for Iran's energy agenda. Current and proposed contract types Iran offers is given in Table 3 as it would be detailed in at a conference in London in December but the conference is delayed to be held in the midst of 2016. Iran is trying to encourage IOCs to invest in the country but it shies away from offering international investors its large oil and gas fields (See Figure 5). Iran's aim is to get more from the west as far as technology and investment goes but to give less in return. It is certain that it all depends on what Iran has to offer to foreign investors or how much Iran will be bent on its current energy policies to be an attractive investment ground for IOCs.

Iran plans to hit 4 million bod oil and 35 Bcf/d gas production in a year or two. Even though Iran has the world's largest oil and gas reserves, this unrealistic target (especially for gas) is subject to consideration of Iranian gas production growth that has only increased by an average of 10% for the last two decades. However, Iran has only depleted 5% of its gas reserves. <sup>16</sup> Iran's major problem can be noted as lagging behind its domestic needs. The

reasons for domestic rush can be exampled as follows:

- Economic and population growth
- Gas being liquefied and used as a substitute for gasoline and other transport fuels
- Use of gas for reinjection into maturing oil fields in order to maintain oil production

Current natural gas situation in Iran suggests that Iran must develop its giant reserves at a rapid rate to meet its domestic demands and to be able to export the extra gas to lower the economic burden caused by consumption of refined products in the country. If Iran cannot manage meeting its gas production targets, Turkmen gas will continue to cover the gap for the domestic needs.

South Pars gas field, which is the largest gas field in the world, is evidently Iran's main gas asset. Qatar's share of the field is under development that provides stability as a reliable gas export source. Iran's share of the South Pars field, on the other hand, requires more work for development and investment. A few phases have been progressed in recent years but completion of the whole phases requires technology and financial investment that Iran lacks. Additionally, even if Iran achieves developing all the phases, it has to build nec-



essary infrastructure to market the produced soil has nourished its political affairs to reign on Iran's economy.

Iran is currently trying its best to build LNG plants and new pipelines to Iraq, Oman, Pakistan and UAE to increase its export potential. However, Iran lacks technology to build LNG terminals and requires foreign investors to succeed such giant projects. As far as the pipelines go, Iran only seems to succeed Iraqi pipeline, which will supply the Mansuriyah power plant. The pipelines to Oman and UAE are subject to price and volume disputes that will eventually result in cancellation of the signed contracts. Pakistani pipeline project is the only viable solution for future gas exports as both countries insist on completing the pipeline even though they experience considerable financing difficulties.<sup>17</sup>

# TURKEY'S AIM: THE WITHDRAW-AL OF SANCTIONS

Throughout the history, Turkey and Iran have struggled with each other over disputed areas along their borders whereas they both have supported each other to a degree due to being long lasting neighbors. Nowadays, there seems to be struggle times for both countries, where both countries have ambitious plans over the conflicts in the Middle East, each trying to take advantage of the current situation. A misfortune; Iranian economy is worsening day by day due to heavy sanctions from the west. At this point, Turkey, economically outscoring Iran, must commit to being the big brother and extend its "helping hand" to Iran to be able to take the full-advantage of the current situation.

It is evident that Iranian energy sector is vulnerable because Iran extremely is in need of financial support and technology transfer as they are a key necessity to develop the hydrocarbon resources. Additionally, safer pipeline routes to different world markets are necessary to complete the supply and demand chain as far as the oil exports are concerned. Iran's ambition to reach out Mediterranean Sea by uniting Shiites in the region lacks credibility even though Iran's notable influence in Iraqi in his office. Hence, Turkey's efforts to be-

gas, which also loads extra financial burden in Iraq. Unfortunately, Iran's political power demonstration halted in Syria as US and EU released a prescription of stronger sanctions on Iran's nuclear deal in 2012 that ended the rise of the Islamic State as a political dominator in the region. On another count, Russia, misguided by Assad, intended to adjust a new balance in the Middle East by enforcing its military power. Russian involvement of anti-terrorist propaganda in Syria complicated the disputes over long-awaited equilibrium in the region.

> The first step, Turkey has to achieve, would be thoroughly digesting the geopolitics of the region. Being a bridge or located between importers and exporters have been emphasized for decades but this has not placed Turkey in the spotlight at all. Therefore, new relevant approaches are a necessity to counterbalance the export-import markets in and around its borders. Turkey may not be the ultimate power to resolve/settle all the conflicts in the region but it has a potential to start the fire since it has allied with the west, been brothers with the Arab world and had close ties with Russia. This fact states that Turkey has the advantage of being not only a geographical bridge in the middle but also a cultural, political and influential bridge at the epicenter of all these countries. Hence, Turkey can be an "Energy Center" but it has to realize that its importance is not based on its location. As a result, Turkey's priority has to be building a "Think Factory", which will carefully outline significant factors that raise its geopolitical importance.

> The crisis in Ukraine has been exposed Europe's ambitions to secure its gas supplies and routes. Europe's intentions to find other alternatives to Russian gas have ignited the unrest in Syria and Iraq, in which Turkey had to position itself among the coalition forces. The scenario was simple as toppling Assad and securing Syria for transiting gas through a democratic country, where there would be no security threats to the planned pipelines. Assad disobeyed the west and sought support from Iran, Russia and China. It is obvious that he obtained such privilege as he still sits

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come an energy center countered some delays gas reserves. This will also strengthen ties with in the progress, as the peace in Syria has yet Iran and positively influence its international to be settled.

Iran's negative contribution in the Iraqi and Syrian conflicts can be overcome if Turkey can manage to present itself as the long-awaited moderator for Iranian nuclear deal negotiations with the west. This might help Iran to fasten the removal of sanctions so that Iran can obtain technology transfer and foreign investment sooner. At this point, a joint venture between both countries national oil companies might come in handy. And perhaps, Assad's fall should near if he loses Iran's support.

In compliance with being the energy center, Turkey has to make arrangements to find the seller and the buyer. The aim must be to create the market, where Turkey acts as a both buyer and seller. Iran and Qatar provide a good opportunity since both countries share the world's largest gas field, South Pars. The best approach would be to convince these countries to market South Pars gas through Qatar-Iran-Turkey pipeline. This will give an edge to Turkey to be the main gas provider for the biggest consumer, Europe. Turkey should make it clear to and manipulate Europe that it will have an alternative to Russian gas and it will not have to deal with security problems for its energy needs. Having a pipeline crossing Turkish border will also help Iran feed its domestic needs in the Northern provinces. It should be noted that Iranian and Qatari gas through Turkey to Europe has to be analyzed and evaluated from the economic sights of such project since high tariffs, unit production costs and EU gas prices may not be beneficial for the countries involved in this option. However, such projects will provide Turkey with the flexibility to have more control over trafficking diversified gas supplies on the way to become an energy center.

Another important step might be initiating a consortium to settle Caspian Sea's economic borders and make agreements to purchase all the gas in the conflicted areas. Friendly Turkish approach/influence might produce flexibility for all the countries bordering Caspian Sea and resolve their disputes over the oil and affairs with the west and Turkish states.

# **RESULTS & ANALYSIS (ALL TO-GETHER)**

Most of Iran's revenues come from oil and gas reserves. Even though it is included among countries with the largest oil and gas reserves in the world, it goes through economical and technical hardship. Iran's hydrocarbon resources (mainly oil) have been the dynamo for the country since the start of oil production in 1920s. Oil exports was even able to finance long-lasting Iran-Iraq war but the fact that most of the fields have been producing for about a century, the production rates are on a steady fall. Iran has added new oil and especially gas fields to its bulk reserves after the revolution in 1979. Natural gas reserves have been widely used for reinjection purposes to increase productivity of aging oil fields. Since the revolution population growth gained importance as this caused exaggerated domestic usage of refined products including heating and electricity production.

The effects of the sanctions implemented on Iran over its nuclear deal not only troubled its economy but also separated Iran from the technology and foreign investment as far as developing the aging oil fields and exporting the excess amount of oil and gas. The situation worsened after 2012 that is when the major oil companies left and Iranian oil exports fall below 2 million bopd. Iran can still be categorized as successful since its oil production is still around 3 million bopd but rising domestic consumption pressures Iran to find alternative solutions to increase its export rates. Being vulnerable, at this current situation, Iran has to agree on the nuclear terms to get a relief from the sanctions. However, Iran wants to step forward on its nuclear practices and it will probably try its best to outmaneuver the west.

Syria is another troublesome fact that complicates Iran's economic and political outlook. Iran, desperately in search of new markets to import its huge gas reserves, felt the need to

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ally with Syrian dictator Assad. A Shiite con- 3t3eZdt5d trolled pipeline to the Mediterranean (Iran-Iraq-Syria-Cyprus pipeline) would emphasize Iran's power in the region and that Iran could also interfere Turkey's ambitions to become the "Energy center". Perhaps, Iran's main goal is to isolate Turkey from Sunni world and prevent its rise as the dominator in Arabic Peninsula. Of course, Turkey will never allow a Shiite corridor below its Southern border and will continue to step forward on being an energy center. However, Turkey definitely needs to suppress Iran's behind-the-door-political-counterattacks so that Iran will never interfere with its political actions in the region. The best strategy to follow should be to isolate Russia from the region and most importantly to be Iran's voice against the west. Eliminating Russia can be as simple as convincing Iran and the west to build Iran's nuclear power stations by EU and US. Turkey can moderate the talks, the west can have a chance to control Iran's nuclear activities and Iran, on the other hand, can finally have the nuclear technology for peaceful purposes as they have long been claiming.

Cooperation with the west and Turkey will ease Iran's ambitions to adjust the Middle East on its own since Iran desperately needs the technology and investment from the west. Turkey should not stay behind because EU & US will eventually lift the sanctions and their companies (possibly US companies by joint ventures) will make huge investments in Iran. And why not, Turkey shares the goods?

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