

Analysis & Commentary

[Iraq] : Trends and Future of Upstream Development

Based on the Fifth (+) and Sixth Licensing Rounds

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Iraq has held multiple international licensing rounds for oil and natural gas blocks over the years. Most recently, in May of this year, the fifth (+) and sixth licensing rounds were conducted. The fifth (+) round was held in addition to the initial fifth licensing round from 2018. The outcomes of these rounds yielded some unexpected results, which will be examined in this report, along with an analysis of the context behind the licensing rounds.

1. Results of the Fifth (+) and Sixth Licensing Rounds (May 11–13, 2024)

The results of the fifth (+) and sixth licensing rounds, conducted in May of this year, are presented in Figure 1. The shaded areas on the map represent the blocks offered during these rounds, and Table 1 details the blocks awarded. In total, 13 blocks were offered. As shown in Table 1, the first 10 blocks were part of the fifth (+) round, while the remaining 3 were part of the sixth round. With the exception of the large East Baghdad



Fig.1. Fifth(+) and Sixth Licensing Rounds Successful Bidding Blocks
(Modify to the map of Ministry of Oil)

oil field, the majority of blocks offered are smaller in scale, focusing on both oil field development and exploration.

In terms of the companies acquiring these blocks, Kurdish-based KAR Group secured three blocks, while the rest were obtained by various Chinese firms. Notably, major Chinese companies such as Sinopec and CNOOC only obtained one block each. Instead, lesser-known entities like ZhenHua, ZPEC, Anton Oil, UEG, and Geo-Jade dominated the acquisitions. The implications of these results will be discussed in the following section.

Round	Block	Type	Company	Origin	Remuneration %
5+	Abu Khama	Oil field	ZhenHua	China	9.10
5+	East Baghdad (N)	Oil field	ZPEC	China	6.67
5+	Middle Euphrates	Oil field	ZPEC	China	9.35
5+	Dhafriyah	Oil field	Anton Oil	China	29.16
5+	Alan & Sasan	Oil field	KAR	Kurdish	19.25
5+	Daimah	Oil field	KAR	Kurdish	6.29
5+	Block 7	Oil Expl.	CNOOC	China	25.88
5+	Fao	Oil Expl.	UEG	China	25.16
5+	Jebal Sanam	Oil Expl.	Geo-Jade	China	30.90
5+	Zurbatiya	Oil Expl.	Geo-Jade	China	7.65
6	East Somer	Oil Expl.	Sinopec	China	17.85
6	Qurmain	Gas Expl.	ZhenHua	China	17.30
6	Khileslea	Gas Expl.	KAR	Kurdish	32.00

2. Overview of Iraq's Oil Industry

Iraq plays a significant role in global upstream oil development, with substantial reserves and production capacity. As outlined in Table 2, Iraq ranks among the top five or six countries globally in terms of oil reserves, production, and export potential. In 2023, Iraq's oil production stood at 4.355 million barrels per day (b/d). However, due to voluntary production cuts agreed upon with OPEC+, Iraq's production is currently capped at 4 million b/d, though actual output is slightly above this limit, reaching 4.17 to 4.18 million b/d, exceeding the cap by approximately 180,000 b/d.

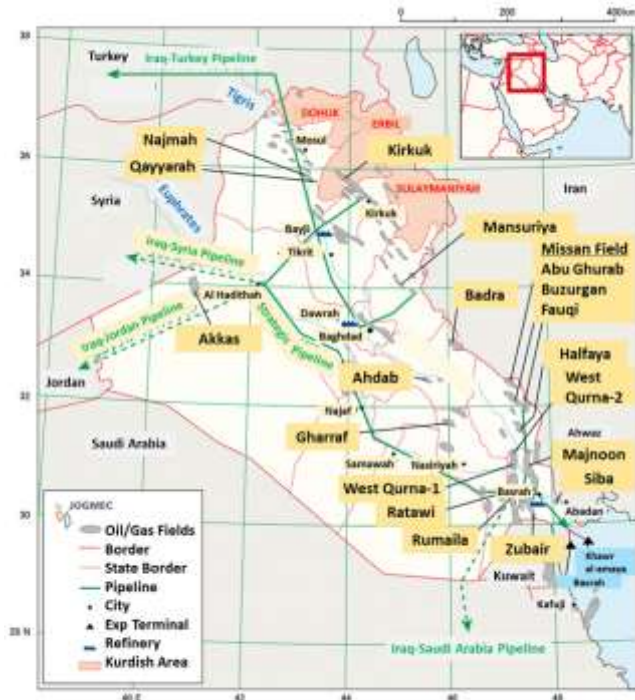
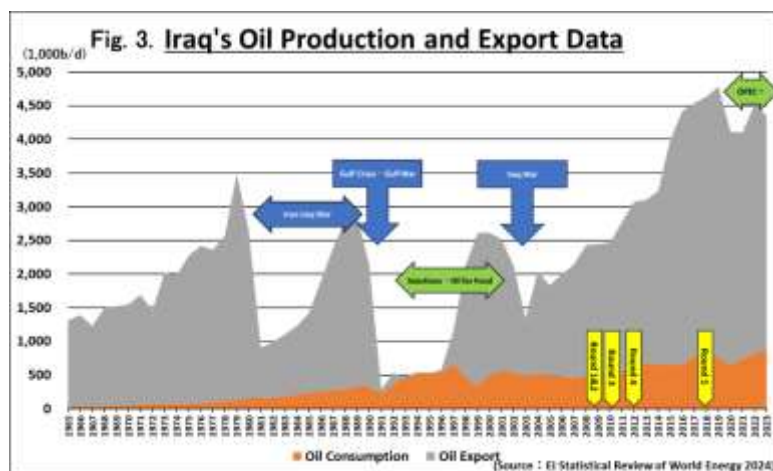


Fig. 2. Map of Oil and Gas Fields and Infrastructures in Iraq (Modify to the map from JOGMEC Overseas Oil and Gas Briefing)

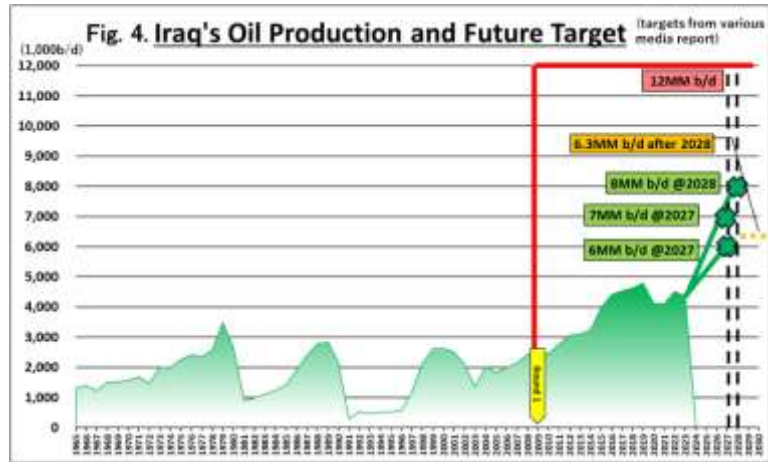
Table 2. Iraq's Oil and Natural Gas Potential	
Oil reserves:	145 billion bbls (@2020), 8.4%, 5th in the world
Oil production:	4,355,000 b/d (@2023), 4.5%, 6th in the world
Oil exports:	3,699,000 b/d (@2023), 8.7%, 5th in the world
Natural gas reserves:	124.6 trillion cf (@2020), 1.9%
Natural gas production:	960 mmcf/d (@2023), 0.2%
(Source: EI Statistical Review of World Energy 2024)	
Iraq's OPEC+ coordinated production cut is 4.431 million b/d. Voluntary cut of 4 million b/d until September 2024. Gradual easing thereafter.	

Historically, Iraq's oil production has fluctuated significantly, especially during periods of conflict. As shown in Figure 3, production dropped notably during the Iran-Iraq War (1980), the Gulf Crisis and Gulf War (1990-1991), and the Iraq War (2003). After the Gulf War,



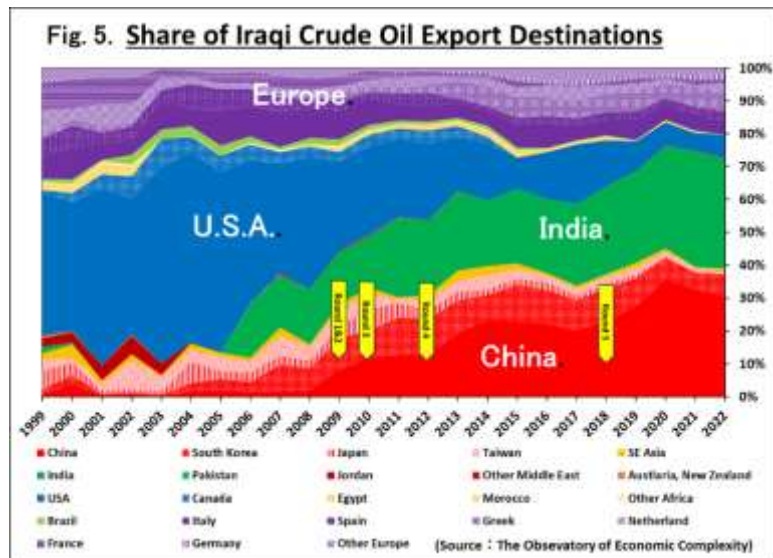
production plummeted to below 500,000 b/d, with exports coming to a near halt. Following the Iraq War, production gradually recovered, peaking at 4.78 million b/d in 2019. Although output temporarily declined during the COVID-19 pandemic and as a result of OPEC+ production cuts, it has since stabilized at over 4 million b/d.

Looking ahead, Iraq has set ambitious targets for future oil production, as depicted in Figure 4. Official plans aim for production levels between 6 and 8 million b/d by 2027–2028. However, experts remain skeptical, predicting that production is more likely to plateau around 6.3 million b/d.

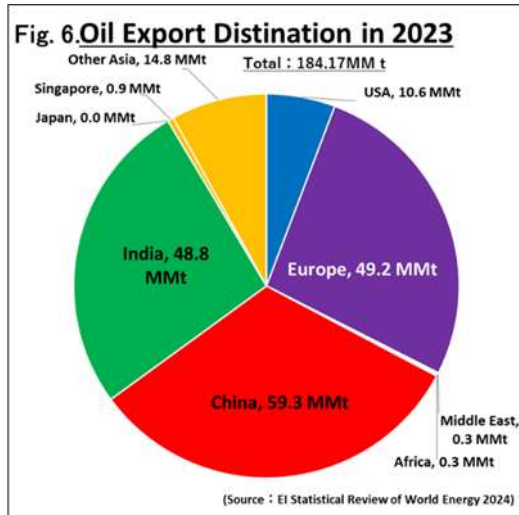


b/d. It is worth noting that the initial target set during the first licensing round in 2009 was 12 million b/d, comparable to Saudi Arabia. However, achieving this target now seems unlikely, particularly given uncertainties regarding future global demand.

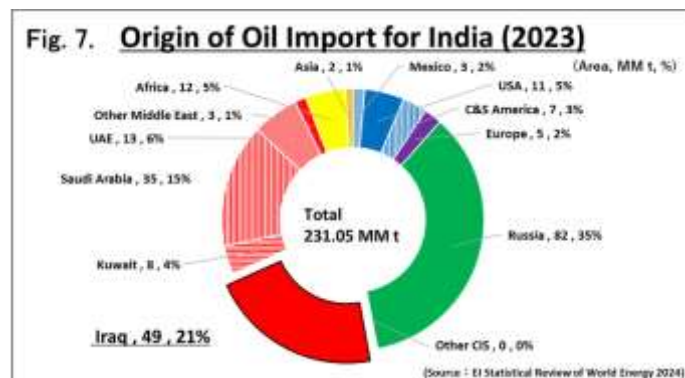
Figure 5 tracks changes in Iraq's oil export destinations over time. The graph illustrates the percentage, rather than the volume, of exports, with key markets highlighted: China in red, South Korea in a hatched red, Japan in an another hatched red, India in green, the U.S. in blue, and Europe countries in series of purple.



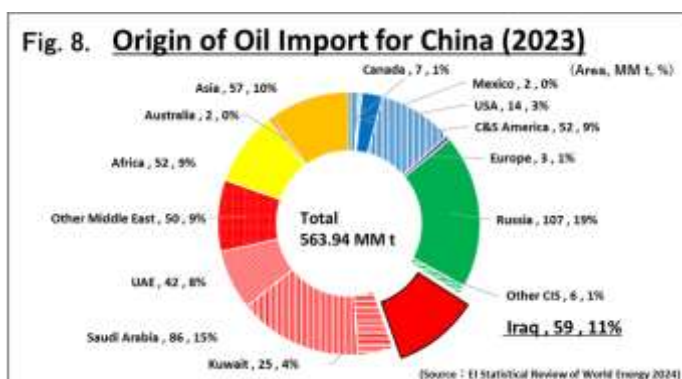
Prior to the Iraq War in 2003, Iraq exported very little oil to China and India, with most exports going to the U.S. and Europe. However, as shown in Figure 6, China now accounts for 30% of Iraq's oil exports, India just under 30%, and Europe over 20%, while exports to the U.S. have declined to roughly 6%. Notably, Japan's imports from Iraq dropped to zero in 2023.



Turning to specific market dynamics, India imported 21% of its oil from Iraq in 2023, as shown in Figure 7, while China imported 11%, as illustrated in Figure 8. India's growing imports of Russian crude, which reached 35% of its total imports in 2023, have impacted its

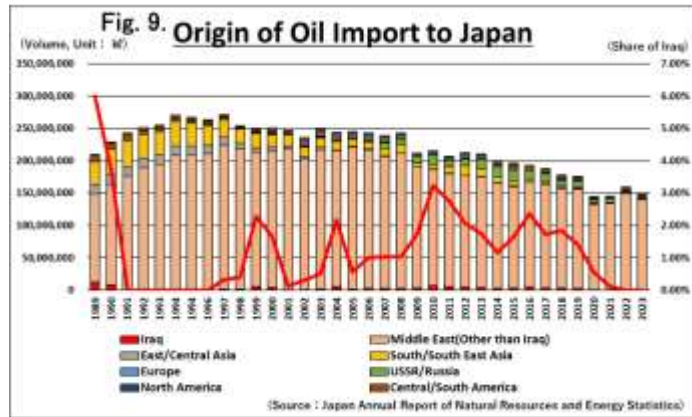


demand for Iraqi oil. This shift is largely due to the Ukraine War, as Western sanctions against Russia have led to discounted Russian crude being sold to non-European



markets. Despite this, India's demand for Iraqi crude remains strong, though its share has slightly declined. A similar trend can be observed in China, where Iraqi oil currently represents 11% of total imports.

Figure 9 outlines changes in Japan’s sources of crude oil imports. Before the Gulf Crisis, Iraq supplied around 6% of Japan's oil imports. While imports temporarily decreased during the Gulf Crisis and Gulf War, they later stabilized at around 3% during the Oil-for-Food Programme. However, by 2023, Japan’s imports from Iraq had fallen to zero. It is unclear why this drop occurred, though it is possible that trading companies ceased handling Iraqi crude. No imports were recorded from January to May 2024.



3. Upstream Development in Mainland Iraq Post-Iraq War

In the aftermath of the Iraq War, Iraq undertook significant efforts to revive its oil industry by attracting foreign investment to rehabilitate and develop oil fields, aiming to boost production. As part of these efforts, Iraq held six licensing rounds, beginning with the first round in June 2009. The competition in the first to fourth rounds was based on a Remuneration Fee, while the fifth and sixth rounds shifted to a Remuneration Percentage

Fig. 10. Iraq, Oil/Gas Fields and Blocks Operated by IOC (from various media reports)



model. Additionally, some blocks were awarded through direct negotiations, bypassing the licensing rounds. Examples include the Abdah oil fields, awarded to CNPC in 2008,

the East Baghdad oil field to ZhenHua, and the Ratawi oil field to TotalEnergies (Table 3).

Table 3. Iraq Upstream Licensing Rounds

- 1st Round June 2009
- 2nd Round Feb. 2009
- 3rd Round May 2010
- 4th Round June 2012
- 5th Round Apr. 2018

(conclude contracts in 2024)

- 5th Round(+) and 6th Round May 2024

1st ~ 4th Rounds : Remuneration Fee.
5th ~ 6th Rounds : Remuneration Percentage

Most of Iraq's upstream oil contracts signed after the Iraq War were concluded through international licensing rounds.

Examples of contracts that have not gone through a licensing rounds are the Ahbab field in 2008, the East Baghdad (South) field in 2017, the and the Ratawi field in 2021, the Akkas field and the Tuba field in 2024,

Table 4 outlines the blocks awarded to foreign investors, with Remuneration Fee rounds shown in the upper half and Remuneration Percentage rounds in the lower half. The table highlights the notable differences between the two remuneration models.

Table 4. Iraq Oil/Gas Fields and Blocks Operated by IOC, and Remuneration (from various media reports)

Round	Block	Type	Companies	Remuneration
1	Rumaila	Oil Field-B	BP, CNPC	USD 2/bbl
1	Zubair	Oil Field-B	Eni, Occidental, KIGAS	USD 2/bbl
1	West Qurna-1	Oil Field-B	ExxonMobil, Shell	USD 1.9/bbl
1	Missan	Oil Field-B	CNOOC, TPAO	USD 2.3/bbl
2	Majnoon	Oil Field-D	Shell, Petronas	USD 1.39/bbl
2	Halfaya	Oil Field-G	CNPC, Petronas, Total	USD 1.4/bbl
2	Qajarah	Oil Field-D	Sonangol	USD 5/bbl
2	Najmah	Oil Field-G	Sonangol	USD 6/bbl
2	West Qurna-2	Oil Field-G	Lukoil, Statoil	USD 1.15/bbl
2	Gharraf	Oil Field-G	Petronas, JAPLEX	USD 1.49/bbl
2	Badra	Oil Field-D	Gazprom, KOGAS, Petronas, TPAO	USD 5.5/bbl
3	Akkas	Gas Field	KOGAS, KazMunGas	USD 5.5/boe
3	Siba	Gas Field	Kuwait Energy, TPAO	USD 7.5/boe
3	Mansuriyah	Gas Field	TPAO, Kuwait Energy, KOGAS	USD 7/boe
4	Block 8	Exploration	Pakistan Petroleum	USD 5.38/bbl
4	Block 9	Exploration	Kuwait Energy, TPAO, Dragon Oil	USD 6.24/bbl
4	Block 10	Exploration	Lukoil, INPEX	USD 5.99/bbl
4	Block 12	Exploration	Bashrafi, Premier Oil	USD 5.00/bbl
5	Gilbat & Qumar	Oil Field	Crescent Petroleum	9.21%
5	Huwaiza	Oil Field	Geo-Jade Petroleum	7.15%
5	Khashim Al Ahmar & Injana	Oil Field	Crescent Petroleum	19.93%
5	Khidr Al Mai	Oil Field	Crescent Petroleum	13.73%
5	Naft Khana	Oil Field	Geo-Jade Petroleum	14.47%
5	Sindbad	Oil Field	United Energy Group	4.53%
5+	Abu Khana	Oil Field	ZhenHua Oil	9.10%
5+	East Baghdad (N)	Oil Field	ZPEC	6.67%
5+	Middle Euphrates	Oil Field	ZPEC	9.33%
5+	Dhafriyah	Oil Field	Anton Oil	29.16%
5+	Alen & Sasan	Oil Field	KAR Group	19.23%
5+	Dalmah	Oil Field	KAR Group	6.29%
5+	Block 7	Exploration	CNOOC	25.88%
5+	Fao	Exploration	United Energy Group	25.18%
5+	Jabal Saman	Exploration	Geo-Jade Petroleum	30.90%
5+	Zubaiya	Exploration	Geo-Jade Petroleum	7.60%
6	East Sumar	Exploration	Sinocpec	17.85%
6	Qurmain	Exploration	ZhenHua Oil	17.10%
6	Khuziaa	Exploration	KAR Group	32%
Nego	Abdah	Oil Field	CNPC	N.A.
Nego	East Baghdad (S)	Oil Field	ZhenHua Oil	N.A.
Nego	Ratawi	Oil Field	TotalEnergies	N.A.
Nego	Tuba	Oil Field	Geo-Jade Petroleum, Hifal al-Basra	N.A.
Nego	Akkas	Gas Field	Ukrzenerours	N.A.

Figure 11 presents the distribution of upstream development projects by countries. The lower section of the bar graph, marked in red, represents Chinese companies, while shades of blue to purple represent major U.S. and European firms. The Asian NOC segment includes companies such as Malaysia's Petronas. In 2009, major European and U.S. companies acquired a substantial number of projects, accounting for about 30-40% of the total. Since then, the participation of Asian NOCs has increased, and Chinese

companies now dominate, holding over half of the projects. Most major Western companies have exited, leaving only Eni and TotalEnergies among European firms. The entry of companies from the Middle East has also increased, reflecting a significant shift in the composition of upstream players in Iraq.

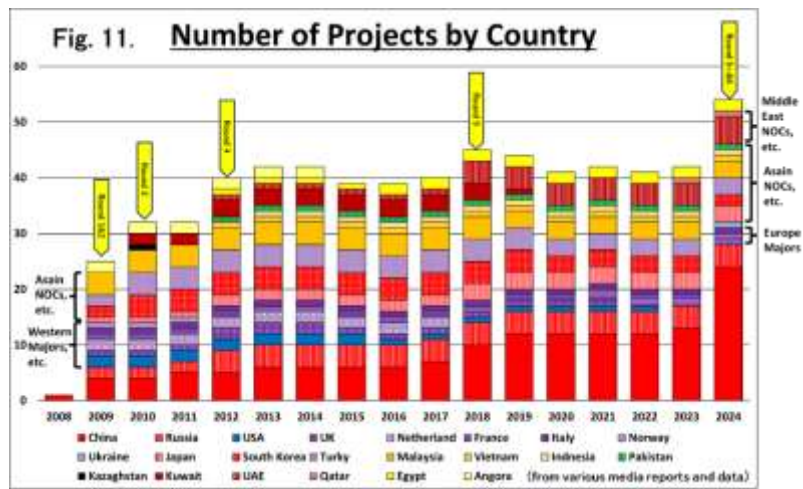
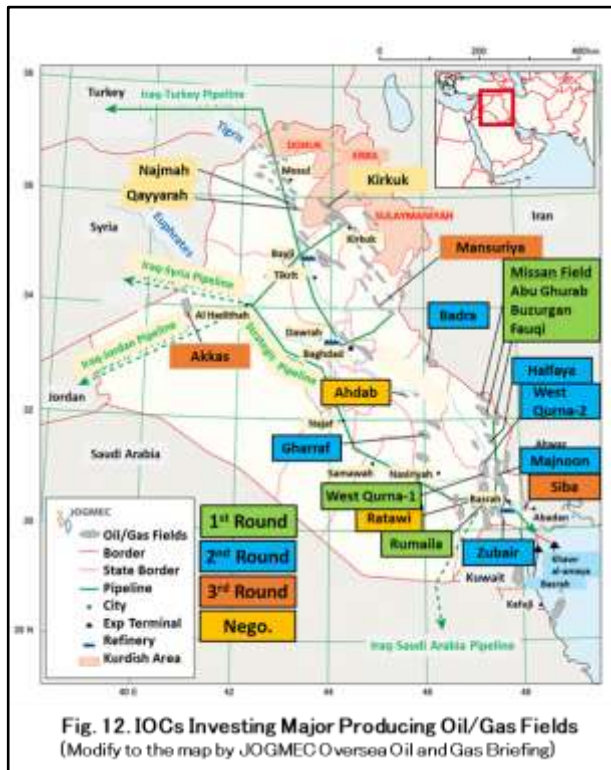


Figure 12 illustrates the approximate locations of Iraq's oil fields, color-coded by licensing round or negotiation, and Table 5 provides details on the current status of these fields. The Abdah oil field, developed by CNPC and ZhenHua, reached peak production of 140,000 b/d in 2015 but has since dropped to 43,000 b/d. The Rumaila oil field, Iraq's largest, is operated by Basra Energy Company (a joint venture between BP and CNPC) and is expected to produce 1.33 million b/d, reaching peak production in 2026. West



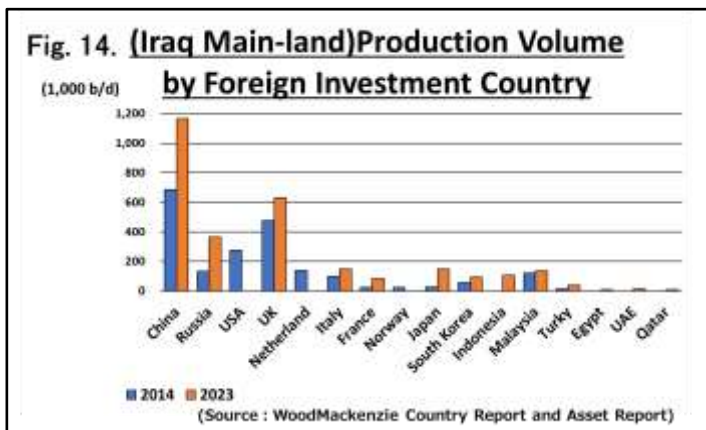
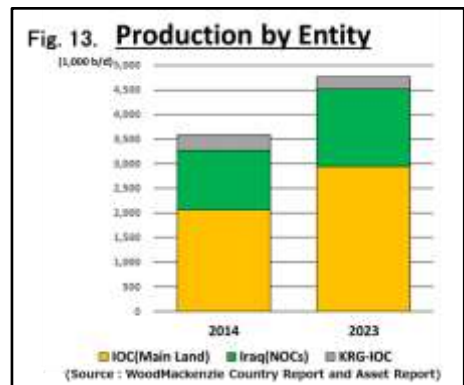
Qurna oil field 1, originally operated by Shell and ExxonMobil, is now run by CNPC with ITOCHU's participation, and production is projected to rise from 530,000 b/d to 640,000 b/d by 2030. Other major fields include Zubair oil field(Eni), Missan oil fields(CNOC), and Majnoon oil field, which was taken over by BOC after Shell's withdrawal in 2018.

Table 5. Current Status of IOCs Investing Major Iraqi Oil/Gas Fields

- **Abdah (CNPC 37.5%, ZhenHua 37.5%, MOC 25%)**
Start Production 2011, Peak 140,000 b/d @2015, 43,000 b/d @2023
- **Rumaila (BEC 94%/BP 50.6%, CNPC 49.6%, SOMO 6%)**
Start Production 1954, Peak to 1.389MM b/d @2026, 1.329MM b/d @2023
- **Zubair (Eni 41.56%, KOGAS 23.75%, BOC 29.65%, MOC 5%)**
Start Production 1950, Peak to 644,000 b/d @2028, 461,000 b/d @2023
- **West Qurna-1 (CNPC 32.7%, Pertamina 20%, Itochu 19.6%, BOC 22.7%, OEC 5%)**
Start Production 1976, Peak to 639,000 b/d @2030, 528,000 b/d @2023
- **Missan (CNOOC 63.75%, TPAO 11.25%, IDC 25%)**
Start Production 1976, Peak to 318,000 b/d @2026, 281,000 b/d @2023
- **Majnoon (Shell and Petronas withdrawal in 2018, BOC 100%)**
Start Production 2002, Peak to 450,000 b/d @2033, 80,000 b/d @2023
- **Halfaya (CNPC 45%, Petronas 22.5%, TotalEnergies 22.5%, BOC 25%)**
Start Production 2006, Peak to 396,000 b/d @2026, 354,000 b/d @2023
- **West Qurna-2 (Lukoil 75%, NOC 25%)**
Start Production 2014, Peak to 730,000 b/d @2033, 471,000 b/d @2023
- **Gharraf (Petronas 45%, JAPEX 30%, NOC 25%)**
Start Production 2013, Peak to 180,000 b/d @2025, 146,000 b/d @2023
- **Badra (Gazprom 30%, KOGAS 22.5%, Petromas 15%, TPAO 7.5%, OEC 25%)**
Start Production 2014, Peak 85,700 b/d @2018, 31,000 b/d @2023
- **Siba (TPAO 30%, UEG 30%, EGPC 15%, MOC 25%)**
Start Production 2018, Peak to 18,000 b/d+45.7MM cf/d @2026, 16,000 b/d+41.8MM cf/d @2023
- **Ratawi (TotalEnergies 45%, QatarEnergy 25%, BOC 30%)**
Start Production 2007, Peak to 200,000 b/d @2030, 36,000 b/d @2023

(Source: WoodMackenzie Asset Report)

Figure 13 highlights the share of oil production from foreign companies (ocher), Iraqi NOCs (green), and Kurdistan (gray). Mainland Iraq produced over 3.26 million b/d in 2014, with foreign companies contributing significantly. By 2023, production capacity had increased to 4.51 million b/d, with 2.94 million b/d attributed to foreign firms. Figure 14 illustrates the shift in production by countries, showing substantial



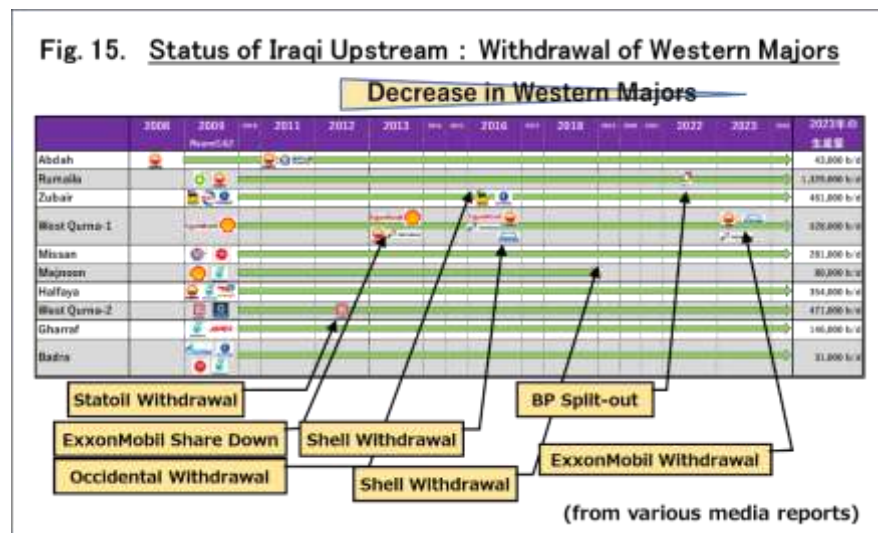
increases in output from China and Russia in 2023. U.S. companies have largely exited, while BP (UK) remains in a joint venture with China. Shell (Netherlands) has withdrawn, but Eni (Italy) and TotalEnergies (France) continue their involvement.

4. Current Status of Upstream Development in Iraq (Mainland)

There are six key aspects to consider regarding the current state of upstream development in Iraq:

- The withdrawal of major companies
- Changes in the fiscal terms of the Technical Services Contract (TSC)
- Entry of NOCs and private firms from Asia and the Middle East
- Launch of TotalEnergies' "Mega Deal"
- Expansion of Chinese companies
- Increased investment from Gulf Arab countries

Firstly, the withdrawal of major companies has been notable (Figure 15). In 2022, BP formed a joint venture with CNPC and Basra Energy Company, spinning off its operations in the



Rumaila oil field. ExxonMobil, which once held stakes in West Qurna oil field 1, sold its remaining interests by 2023, while its partner Shell withdrew in 2016, selling its shares to ITOCHU. Similar trends are observed in other fields, with Occidental withdrawing from Zubair oil field in 2016, and Shell and Petronas leaving Majnoon oil field in 2018. Western firms cited low remuneration fees, security concerns, and inefficiencies on the Iraqi side as reasons for their exit. Additionally, major oil companies were shifting strategies in response to the energy transition toward decarbonization.

In response, Iraq modified its fiscal terms after the fifth licensing round, transitioning from a fixed Remuneration Fee model to a Remuneration Percentage-based model, resulting in the adoption of a Hybrid Services Contract (Table 6). While Iraq retained 25% of profits as royalty, foreign companies now receive remuneration as a share of profits, akin to a Production Sharing Contract (PSC). The shift aimed to improve the economic viability of contracts, though it remains less favorable than those in Abu Dhabi or Kurdistan. According to Qamar Energy's estimates, the initial rate of return (IRR) for

Iraq's fifth-round contracts is 15.1%, while the older second-round contracts offered a much lower IRR of -3.5%.

The entry of NOCs and private firms from Asia and the Middle East has also been significant (Figure 16). Notable players include ITOCHU from Japan. In 2021, TotalEnergies secured a "Mega Deal" with Iraq, marking a major milestone (Table 7). The deal, delayed by internal political strife in Iraq, was finalized in 2023 and includes multiple projects. These include the Gas Growth Integrated Project (GGIP),

which will collect and process associated gas from several fields, the Common Seawater Supply Project (CSSP), and the installation of a 1 GW solar power plant. The GGIP project

alone is expected to process 600 million cubic feet of gas per day (cf/d), with TotalEnergies holding a 45% stake, QatarEnergy 25%, and BOC 30%.

Table 6. Status of Iraqi Upstream : Improved terms and condition of TSC

- ▶ Round 1 ~4 Technical Services Contract
 - Applying 'Remuneration Fee' per barrels (bid)
 - Paying cost recovery and remuneration after achieving production target
 - Factoring performance factors into production plateau target (bid)
 - Iraq's stake is 6~25% and Carry
 - 25% Income tax on remuneration
- ▶ Round 5 Hybrid Services Contract
 - Royalty 25%
 - Cost recovery with upper limit (30~70%) after commercial production
 - Distributing net revenue after cost recovery by 'Remuneration Rate' (bid)
 - Factoring performance factor based on Development Plan
 - 35% Income tax on net revenue

	Iraq Round 5	Iraq Round 2	Abu-Dhabi UZ	KRG PSC
Comp. NPV	177	-560	243	489
Gov. NPV	7638	8375	7571	7326
Comp. IRR	15.1%	-3.5%	16.2%	17.7%

(Source : Excerpt from Qamar Energy's calculation)

(Source : WoodMackenzie, Iraq Upstream Summary 2024 and Iraq Energy Institute, Iraq 5th Bid Round : Analysis)

Fig. 16. Status of Iraqi Upstream : Entry of Middle East and Asian Companies

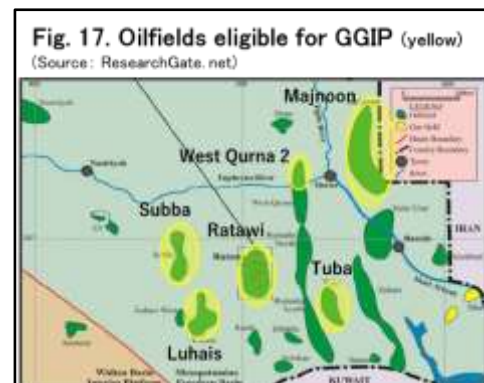


- ▶ There were few cases of Western, China and Russian majors winning the blocks after Round 3
 - ▶ There are increase of Middle East, Asian NOCs and independents acquiring the blocs
 - South Korea : KOGAS
 - Vietnam : PetroVietnam
 - Indonesia : Pertamina
 - Turkey : TPAO
 - Kazakhstan : KMG
 - Pakistan : PPL
 - Egypt : EGPC
 - カタール : QatarEnergy
 - UAE : Dragon Oil, Crescent
 - Kuwait : Kuwait Energy
 - KRG : KAR
 - China : UEG, ZhenHua Oil, Geo-Jade Petroleum, ZPEC, ANTON Oilfield, Jereh
 - Japan : INPEX, ITOCHU
- (from various media reports)

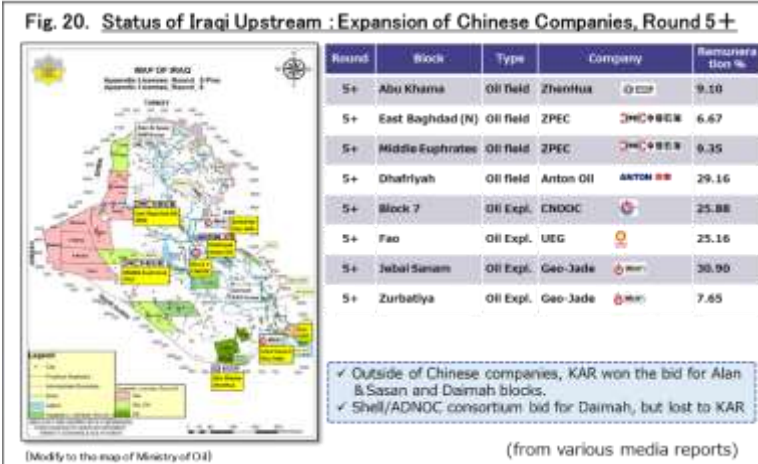
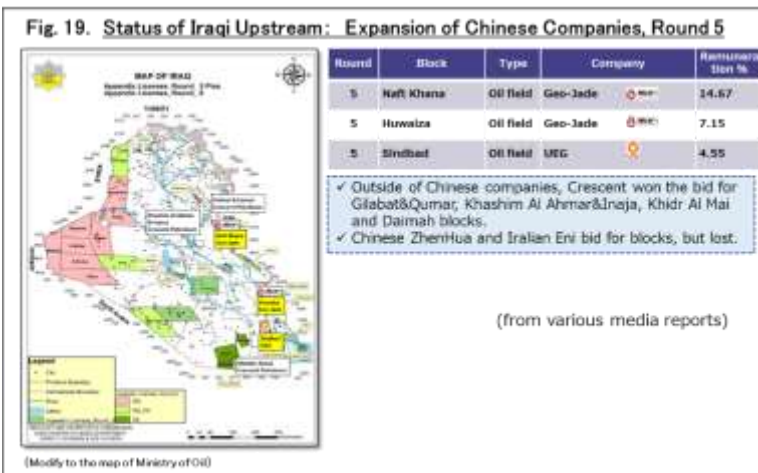
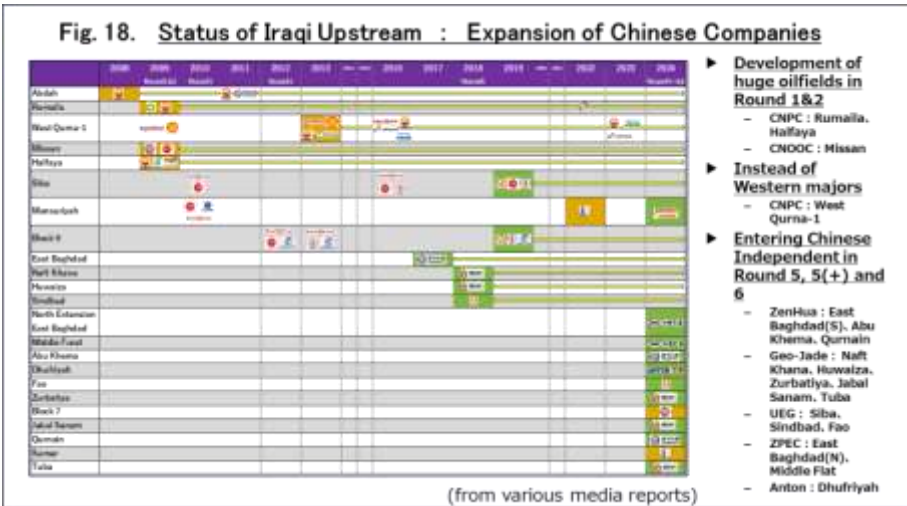
Table 7. Status of Iraqi Upstream : TotalEnergies' "Mega Deal"

- ▶ In July 2023, TotalEnergies and the Iraqi Ministry of Oil signed the final documents for the Gas Growth Integrated Project (GGIP). The "Mega Deal," which includes GGIP, had been agreed in September 2021, but the final agreement was delayed due to Iraq's internal turmoil.
- ▶ TotalEnergies has 45% share of GGIP, a new entrant QatarEnergy has 25%, and BOC has 30% share.
- ▶ Mega Deal includes the following projects: The total investment is worth US\$ 27billion.
 - GGIP-Ratawi Gas Hub : Installation of infrastructure to recover and treat flared associated gas from the Ratawi, West Qurna-2, Majnoon, Luhais, Tuba and Subba fields. It processes 600 million cf/d associated gas and produces 500 million cf/d dry gas (for power generation), 12,000 b/d condensate, and 3,000 t/d LPG.
 - CSSP : Construction of a seawater treatment plant to be used for water injection to maintain reservoir pressure in oil fields in the southern region. 5MM b/d capacity
 - Renewable Energy : Development of 1 GW capacity solar power plant in Basra region.
 - Ratawi Oilfield Development : Ratawi oilfield to increase production to 210,000 b/d
- With the Mega Deal, TotalEnergies has gained a major share of the oil field development in the Ratawi oil field with "Mega Deal". After the Iraq War, TotalEnergies had minor share in Iraq, but Mega Deal makes a leap forward for TotalEnergies in Iraq
- Iraq emits 2.62 billion cf/d of associated gas, of which 1.32 billion cf/d is flared. This is the second worst in the world after Russia.
- This project incorporates initiatives to promote gas recovery, water resource conservation, and renewable energy amid the withdrawal of European and American majors from Iraq, climate change response, and energy transition.
- CEO Pouyanne "This will be a strong signal to other investors to come to Iraq."

(Source : WoodMackenzie. TotalEnergies bets big on Iraq, various media reports)



The presence of Chinese companies has expanded significantly (Figure 18). CNPC entered the Rumaila oil field early on and later increased its share in West Qurna oil field 1 after replacing ExxonMobil. In the fifth and sixth licensing rounds, Chinese firms such as ZhenHua, ZPEC, and Geo-Jade acquired multiple blocks. Figure 19 and Figure 20 show the blocks awarded to Chinese companies in these rounds. Previously lesser-known companies like ZPEC and ZhenHua have evolved from service contractors to exploration and production (E&P) companies, acquiring fields in Iraq (Table 8).



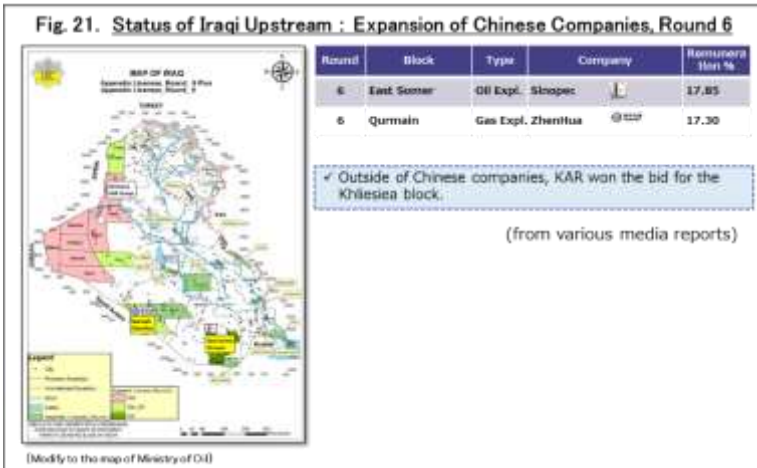


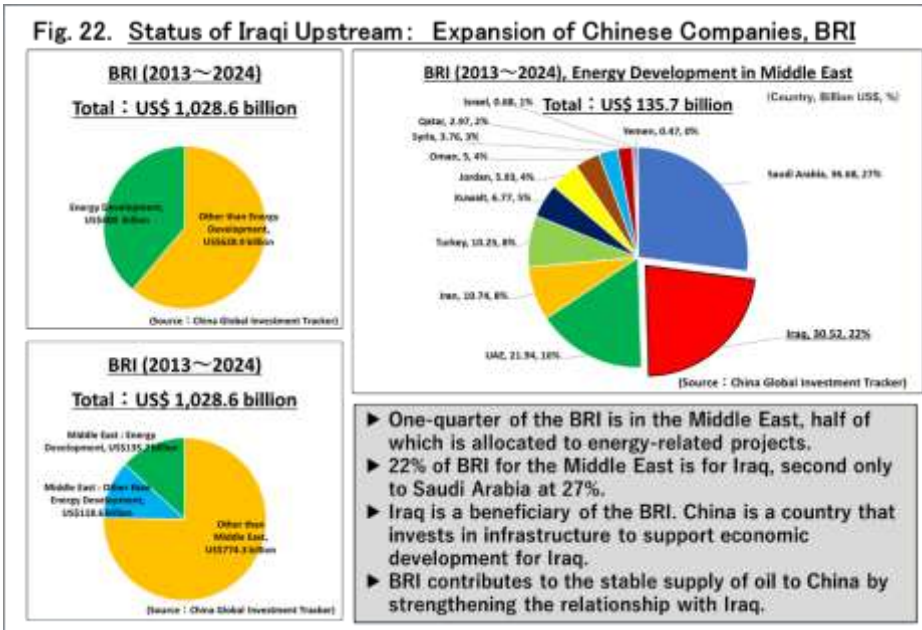
Table 8. Status of Iraqi Upstream : Expansion of Chinese Companies -Other than Big-3

Zhongman Petroleum and Natural Gas Group (ZPEC)	ZPEC is a Chinese oilfield service company founded in 2003. In addition to its activities in China's oil fields, the company was awarded a contract to drill 66 wells at West Qurna-2 in 2015. ZPEC also participated in the development of the Chondak oil field in Eastern Siberia. It is also active in Kazakhstan in the Tenge and Coastal oil fields. It is funded by Sequola Capital, a U.S.-based venture capital firm whose Chinese operations are under the brand name of HongShan.
United Energy Group Ltd. (UEG)	UEG is an oil and gas E&P company in China. Although it is a Hong Kong-listed company, 70% of its capital is owned by China-mainland businessmen. UEG is working in Pakistan and Indonesia. In Iraq, the company acquired an interest in the Sindbad oil field in the fifth licensing round in 2018 and became an interest holder in Block-9 and the Siba gas field with the acquisition of Kuwait Energy in 2019. The net production of Iraqi assets totals 40,000 b/d of crude oil equivalent. UEG also has assets in Egypt and produce more than 12,000 b/d net.
ZhenHua Oil	ZhenHua was founded in 2003, it is a subsidiary of the Chinese defense company Norinco. ZhenHua is developing Oil and Gas E&P business in 11 countries, including Egypt, Myanmar, Kazakhstan, Iraq, and the UAE. In Iraq, ZhenHua made upstream investments in the East Baghdad oil field and other fields, as well as a marketing joint venture with SOMO. ZhenHua is also engaged in the import of oil from Iran. ZhenHua's upstream entry in Iraq began with CNPC's participation in the Abdah oil field development in 2011 and became the operator of the East Baghdad oil field development in 2017. In Abu Dhabi, in 2018, ZhenHua acquired a 4% interest in the Abu Dhabi Onshore Block.
Anton Oilfield Services	Anton was established in 1999, it is an investment holding company that provides technical services for the development of oil and gas fields. Anton operates through four segments: Drilling, Well Finishing, Chemical Technology and Tubular Services. Since 2011 Anton has expanded overseas services to 30 countries. In Iraq, Anton has been awarded to Turnkey contract for the development of the Majnoon oil field after Shell's withdrawal in 2018.
Geo-Jade Petroleum	Geo-Jade's predecessor, Hainan Zhenghe Group Co.ltd, was a Chinese real estate development and petroleum E&P company founded in 1984 and listed on the Shanghai Stock Exchange in 1996. Geo-Jade Petroleum entered the E&P industry by acquiring foreign oil and gas assets. Geo-Jade has oil fields in Kazakhstan (Kara-Arma, Kolkama East, Matin, etc.) and conducts exploration activities in Kazakhstan and Russia. In Iraq, Geo-Jade acquired interests in Naft Khana and Huwaiza in the fifth licensing round in 2018.

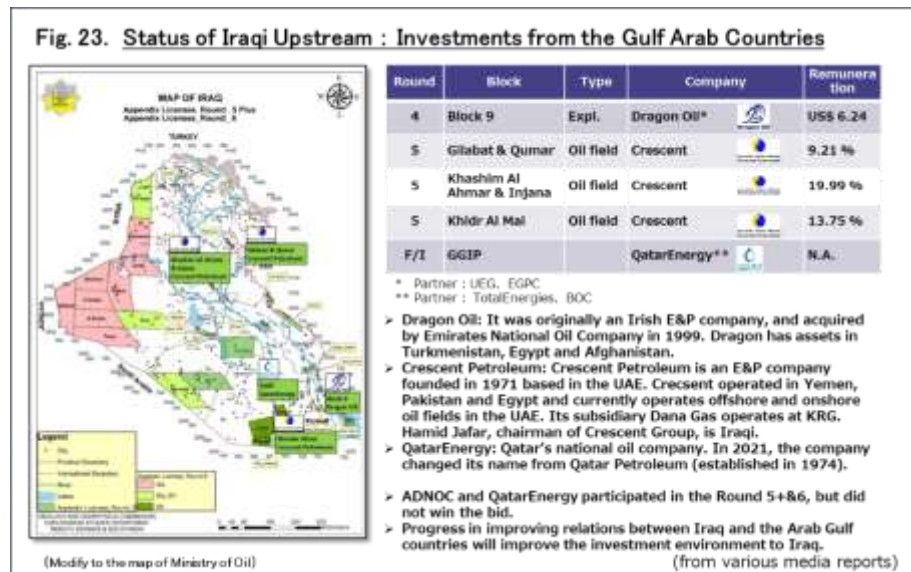
Table 9. Status of Iraqi Upstream : Expansion of Chinese Company -Services Contractors

Seismic Survey	BGP
Well Drilling	Great Wall Drilling Company
Geophysical Log	China National Logging Company (CNLC)
Engineering	China Petroleum Engineering & Construction Corp (CPECC) China CAMC Engineering Co. Ltd. (CAMC) China Oil HBP Group (HBP) China National Chemical Engineering Co., Ltd. (CNCEC)
Pipeline	China Petroleum Pipeline Engineering Co., Ltd. (CPP)
Investment	China International Trust Investment Corporation (CITIC)

Chinese contractors are also playing a pivotal role in Iraq's upstream sector (Table 9). Examples include CPECC's contracts for Central Processing Facilities in West Qurna 1 and Rumaila oil fields. The "Belt and Road Initiative (BRI)" has likely facilitated the expansion of Chinese involvement in Iraq, with energy investments exceeding \$30.52 billion, second only to Saudi Arabia (Figure 22). This investment is vital for Iraq, supporting infrastructure development and oil exports.



inally, Gulf Arab countries have also ramped up their investment in Iraq's upstream development (Figure 23). UAE-based Dragon Oil and Crescent Petroleum acquired blocks



in the fourth and fifth licensing rounds, respectively, while QatarEnergy joined TotalEnergies in the Mega Deal. Although ADNOC and QatarEnergy did not acquire blocks in the fifth+ licensing round, their participation reflects the growing ties between Iraq and its Gulf neighbors.

5. The Future of Iraq

There are three key aspects to consider regarding the future of upstream development in Iraq.

- ◆ **Has the main role changed?**
- ✓ **The main operators are changed from Majors to Chinese companies (mostly CNPC)**
 - ✓ **Chinese independent E&P companies are entering the Iraqi upstream business**
 - ✓ **What does "China's market dominance" bring?**
 - ✓ **Will the tide turn further?**

First, the dominant players in Iraq’s upstream sector have shifted. Major Western companies have largely been replaced by Chinese firms, particularly CNPC, along with other non-major Chinese E&P companies. The increasing presence of Chinese firms in Iraq’s upstream market requires careful consideration. From Iraq's perspective, Chinese investment extends beyond oil, encompassing infrastructure projects that address critical needs. However, competition between Chinese companies and other foreign firms has introduced complications. For instance, during the development of the port at Faw, Chinese firms, backed by political factions affiliated with Iran-supported militias, competed with South Korean Daewoo, which was supported by groups aligned with the Sadr faction. Such entanglements in Iraq’s internal political struggles present challenges. Despite the growing Chinese influence, Iraq is unlikely to favor a China-dominated future. The changes in contract terms in recent licensing rounds reflect Iraq’s interest in attracting Western firms back, but it remains uncertain whether Iraq will continue down this path or make further efforts to retain Western major companies.

- ◆ **Launch of TotalEnergies' Mega Deal (2023)**
- ✓ **In domestic politics: Overcoming the internal political crisis in Iraq (on the way). In this circumstance, the contract for Round 5 was signed, and Round 5+&6 was implemented.**
 - ✓ **Upstream business: (1) the presence of a major in Iraq; (2) the possibility of a combined energy project; (3) Improvement of the Services Contract. (4) (associated and non-associated) Activation of the gas business.**
 - **BGC 250mmscf/d⇒950mmscf/d, Hlfaya Gas processing 300mmscf/d, Nasiriyah/Gharraf Gas processing 200mmscf/d**

The initiation of the TotalEnergies Mega Deal was delayed by political instability, but the finalization of the contract in 2023 indicates that Iraq is gradually overcoming some of its internal political challenges. The contract awards for the fifth licensing round, as well as the execution of the fifth+ and sixth licensing rounds, underscore this progress. These developments suggest that Iraq may continue to attract significant international investment in upstream projects, including more complex ventures like gas-related projects. The Ratawi Gas Hub, a key component of the Mega Deal, exemplifies the potential for revitalizing Iraq’s gas industry. Beyond associated gas processing, Iraq is expected to advance gas-fired power generation and chemical applications using domestically produced gas.

- ◆ **Gulf Arab Oil-Producing Countries**
- ✓ Iraq moves from political isolation in the Arab society to improved relations.
 - ✓ Investment in Iraq by GCC countries
 - ✓ Iraq-Jordan-Egypt Summit Meeting

Another important factor is the increasing investment from Gulf Arab countries. Iraq, once isolated from the Arab society following the Gulf War, has seen a notable improvement in its relations with Gulf Cooperation Council (GCC) countries. The growing investment from GCC countries signals a strengthening of ties. Additionally, Iraq, Jordan, and Egypt have held summits aimed at enhancing regional cooperation. While Jordan and Egypt lack the financial resources to invest in Iraq at the level of GCC countries, they are building stronger political relationships. Iraq’s current exports of oil to Jordan by truck could be supplemented by a future oil pipeline, further enhancing these connections. Such efforts to improve relations with neighboring Arab countries will not only boost Iraq’s standing in the Arab society but also attract further investment.

6. A new beginning, BP's "Another Mega Deal"

On August 1, BP announced the signing of a Memorandum of Understanding (MoU) with the Iraqi government for an integrated redevelopment program in the Kirkuk region, encompassing oil and gas investments, power generation, solar energy, and broader exploration activities. BP CEO Auchincloss stated in a press release: “This MoU is based on BP’s strategic and long-term relationship with Iraq. I believe today’s signing is an important step toward the possibility of further development in this very important area. This aligns with BP’s six clear priorities and supports our commitment to creating a simpler, more focused, and more valuable company.” BP and the Iraqi government aim to finalize the contract for this redevelopment program by early 2025.



The MoU covers oil and gas investments in the central-southern Kirkuk field, operated by the federal government's North Oil Company (NOC), as well as the adjacent Bai Hassan, Khabbaz, and Jambur oil fields (Figure 24). The redevelopment plan includes rehabilitating existing facilities, constructing new gas expansion projects, and drilling additional production wells to halt and increase the current output of 245,000 b/d at the Kirkuk field. At one point, the field was controlled by the Islamic State, but after its recapture, the Iraq Ministry of Oil set a production target of 700,000 b/d.

The specific format of the service contract was not disclosed, but media reports suggest it will follow the profit-sharing model adopted in the fifth licensing round, which replaces the fixed remuneration fee with a percentage-based remuneration system.

BP has a long-standing connection to the Kirkuk field, discovered in 1927 by the Turkish Petroleum Company (TPC), the predecessor of Iraq Petroleum Company (IPC). BP's predecessor, the Anglo-Persian Oil Company, was a major shareholder in TPC, holding a 50% stake (later reduced to 23.75%).

In recent years, BP adopted a strategy focused on the energy transition, including reducing oil production to meet decarbonization goals. However, the outbreak of the Ukraine War has prompted a reconsideration of energy security and the importance of hydrocarbon resources. BP's new CEO is revising the company's strategy, and BP's renewed interest in the Kirkuk oil field reflects this shift. While Chinese companies dominate Iraq's upstream sector and Western majors have shown less interest, BP's Kirkuk redevelopment program represents a notable exception. It mirrors the approach taken by TotalEnergies with its southern Iraq Mega Deal, which began last year, and could serve as a model for European companies to expand their operations in Iraq. Although Shell did not secure a deal in this year's licensing round, its participation signals the potential "return" of European majors to Iraq as the country's political situation stabilizes and contract conditions improve.

(end)

Keyword:

#Iraq, #Upstream, #Oil production, #Licensing Round, #Majors, #IOC, #NOC, #China, #India, #U.S., #Europe, #Middle East, #Gulf Arab countries, #TotalEnergies, #Mega Deal, #BP, #ExxonMobil, #Shell, #CNPC, #BRI



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