KIRKUK'S OIL CHESSBOARD

Control of Kirkuk's Oil Is Still Undecided and the Struggle to Rule this Commodity Has Become a Chess Match of Epic Proportions Stretching across Northern Iraq and Beyond

By Ellen R. Wald

t was late at night in November 2017 when Sweden-based oil trader Samir Madani noticed something strange about the oil tanker he was tracking. Madani is a cofounder of TankerTrackers.com, a website that provides data on the movement and storage of oil around the world. The tanker he was following, named VALTAMED, had loaded oil at a port in Ceyhan, Turkey. The VALTAMED sailed south toward the Suez Canal. Unexpectedly, it stopped in international waters off the coast of Tel Aviv, where it turned off its AIS transponder.

The lines of ownership of oil are almost always clear today. With very few exceptions—the occasional contraband shipment to North Korea, the Niger Delta Avengers militant group sabotaging oil supplies in Nigeria, and a power vacuum in Libya—the ownership of a barrel of oil can be tracked from its time in the ground to the well, to the pipeline, to the tanker, and all the way to the refinery. Madani had stumbled on a mystery.

Madani observed a change in the VALTAMED's draught, or the distance between the waterline and the bottom of the tanker's hull, and concluded that the VALTAMED, which was carrying nearly 1 million barrels of oil from the Kurdistan region of Iraq, was clandestinely transferring oil to Israel. The delivery was not logged. The VALTAMED remained in the dark for ten days off the coast of Israel before it finally reactivated its transponder and sailed north toward Cyprus. Over the next several days the ship sat empty until it finally returned to Ceyhan to pick up another cargo of oil from northern Iraq. This was the first of several clandestine oil shipments that Madani and TankerTrackers.com observed in the same place that month.

De Iraqi firefighters battle fire from burning oil wells in Kirkuk, northern Iraq, June 2, 2016. European Press Agency There had to be a good reason for the secrecy, because when an oil tanker turns off its AIS transponder it invalidates the insurance it has on that shipment of oil. This action represents an extreme tactic derided by risk managers,



leaving such valuable cargo without insurance. This was not the only oil heading from Ceyhan to Israel. In fact, the data from TankerTrackers.com showed that between September 25 and December 13, Israel received over 36,000 barrels of oil per day from Ceyhan, making it the third-largest recipient after Greece and Croatia.

Madani and TankerTrackers.com had been paying particular attention to oil flowing out of the Kirkuk-Ceyhan pipeline, a 600-mile pipeline that runs northwest through Iraqi Kurdistan. The pipeline crosses into Turkey right at the junction of Iraq, Syria, and Turkey before making a sharp westerly turn and continuing to Ceyhan, a small Turkish port city on the Mediterranean Sea.

The Kurdistan Regional Government (KRG) built the pipeline in 2013. It was designed specifically to transport Kirkuk's oil out of Iraq through territory occupied and defended by the KRG and not the Iraqi government. In the autumn of 2017, TankerTrackers.com was focused on the oil shipments from this specific pipeline to provide a clearer picture of how the Kurdish independence vote and reaction from the Iraqi government was affecting the flow of oil from the city of Kirkuk. Measuring the flow of oil would also provide some idea of whether the KRG or the Iraqi government controlled the oilfields. Control over the flow of oil was not just a sign of financial gain, but it also indicated political power. The flow of Kirkuk's oil is a central interest, and highlights the essential economic motivations behind the diplomatic and military efforts of a half-dozen powerful parties in the Middle East.

The Stakes on the Board

After Saddam Hussein's government was toppled in 2003, control of Kirkuk's oil became a contest between the Iraqi government and the KRG. If the KRG could control the oil, it would gain an important economic and political tool in its quest for Kurdish autonomy and perhaps independence. On the other hand, if Iraq's central government could control Kirkuk's oil, it could solidify itself as the country's sole power and secure the economic and political unity of Iraq.

Until 2013, the Iraqi government appeared to have the upper hand. In 2013, however, a third power—ISIS—destabilized the Iraqi state and sought control of oil resources for its caliphate. Kirkuk was caught in the middle and the KRG seized this moment to wrest control of Kirkuk's oilfields from the Iraqi government.

In 2017, with ISIS militarily defeated in the region, the fight between the KRG and the Iraqi government resumed—but with even higher stakes. Since the end of 2017, regional powers like Iran, Israel, and Turkey all have had economic and political interests in Kirkuk's oil. Russia, Saudi Arabia, and large international oil companies have financial and political interests at play as well. They all care about who controls Kirkuk's oil, how it is used, and where it goes.

Some of the parties are striving for control of Kirkuk's oil today, because they need it to generate revenue for their governments. Other parties seek to consume that oil, while others seek influence as investors. Some merely want to see the oil controlled by a political or business ally. One group wants to reap the financial benefits of transporting it while others need the oil to create an image of political power.

In this board game, political enemies sometimes find themselves to be business allies. Traditional opponents can become partners. In a region now experienced in upheaval and territorial disputes, the competition over Kirkuk's oil is an extreme example of the struggle for natural resources, with countries, regional powers, terrorist groups, and international businesses—neighbors, allies, and enemies—each pursuing their own goals. Instead of ideology, tribalism, or power politics, the struggle for this section of northern Iraq is driven by economics.

"Baba Gurgur" the Father Fire of Kirkuk

Oil was officially discovered in Kirkuk in 1927, although hints of the oilfields had been seeping through the northern Iraqi earth since biblical times. According to historian Michael Quentin Moore, geologists had observed oil seeping into the riverbed of the Tigris River before the Turkish Petroleum Company (later renamed the Iraq Petroleum Company) decided to drill several wells in northern Iraq to see what lay below the surface. The fourth of these test wells was drilled near Kirkuk and called "Baba Gurgur," meaning "father of fire."

The name came from the fires that burned continuously on the oil and gas bubbling out of the ground. The geologists drilled at a rate of only 20 feet per day, so they were surprised that after just three months they had reached limestone. At this point they stopped, cemented the well, and then switched to percussion drilling.

At three o'clock in the morning of October 14, 1927, when the crew retrieved the drill bit, oil and gas burst out. The spray of oil was so high that it shot above the 140-foot oil derrick and covered not only the drillers but everything in a 400-yard radius. Very quickly it became clear that if the geologists did not stop the fountain of oil pouring out of Baba Gurgur, it would overflow the nearby *wadi* and contaminate the city of Kirkuk's water supply.

Capping the well was a challenge, and it spilled 95,000 barrels of oil per day before drillers finally brought it under control. Over the next year, the company drilled other wells and established that an oilfield approximately 30 miles in length ran underneath the shallow layer of rock below the Kirkuk region. Later, that field was determined to hold about 12 billion barrels of oil, making it one of the world's supergiant oilfields.

Production from the Kirkuk field did not begin in earnest until 1934, largely due to conflicts between the Iraq Petroleum Company's various shareholders and because

transportation to refineries and ports in Haifa and Tripoli required the construction of a new pipeline. The Iraq Petroleum Company operated the field until 1972, when the government of Iraq nationalized all of Iraq's oil resources.

A Snapshot of Kirkuk

The city of Kirkuk is located approximately 150 miles north of Baghdad and, besides its oil wealth, has long been known for its multi-ethnic population. Iraqi Turkmen, Kurds, and Arabs all have significant populations in the city.

From the 1970s onward, Kirkuk's oil fell under the jurisdiction of the Iraqi National Oil Company (INOC) until 1989, and was then broken into regional companies and handed to the North Oil Company, which was headquartered in the city and was an Iraqi state-owned company. After the 1991 Gulf War, strict limits were placed on Iraq's oil exports, though the country was able to export several billion dollars' worth of oil through an oil-for-food agreement reached in 1996.

When the United States invaded Iraq in 2003, Kirkuk, with its giant oilfield, was one of the first targets. Plans which originally called for the 4th Infantry Division to enter Iraq through Turkey to take Kirkuk were cancelled when Turkey refused to allow American troops transit rights. Instead, Kurdish forces working with a few U.S. Special Forces began their attack on April 9, 2003 and soon found themselves joined by Kirkuk's own Kurdish population.

This catalyzed an internal uprising that forced Iraqi troops to flee the city. By the afternoon, Kurdish Peshmerga forces had captured the city, and, with it, an oilfield that could produce up to 900,000 barrels of oil per day.

In 2003, the Kurds, or specifically forces led by Jalal Talabani of the Patriotic Union of Kurdistan, suddenly found themselves in control of a city outside of the territory that had been technically designated as the Kurdish autonomous region after the Gulf War. However, the Kurds did not maintain control, and Kirkuk was not annexed into the formal Kurdistan semi-autonomous region. The KRG shortly relinquished control of Kirkuk to the Iraqi government. Although the KRG had some of northern Iraq's oil resources under its control, without Kirkuk and its vast oilfields, economic independence could not be assured at the time.

Oil Chess Games and the Rise of ISIS

After the toppling of Saddam Hussein's government, with the oil ministry in shambles, Iraq's total oil production dipped as low as 1.3 million barrels per day from its pre-invasion high of 3.5 million barrels per day. As stability and security returned to Iraq in 2007 and 2008, total Iraqi oil production rose to 2.4 million barrels per day. Nevertheless, the Iraqi oil operation as a whole lacked the investment and expertise

needed to repair damaged infrastructure. Even with better security, insurgent attacks on oil facilities and pipelines continued to hurt the oil industry. Other issues hampering the Iraqi oil industry included corruption, lack of appropriate legislation and regulation, and disagreements with the Kurdish population represented by the KRG.

In 2008 and 2009, the Iraqi oil ministry began offering contracts to foreign companies to operate existing oilfields or develop new assets. Although many foreign companies stayed away due to security concerns, BP and China National Petroleum Company (CNPC) did sign contracts. Meanwhile, the KRG signed agreements with ExxonMobil and Chevron. The invitations to outside oil firms were controversial as no foreign oil company had been involved in Iraqi oil resources since their nationalization in 1972, but they were also necessary for Iraq to raise its oil output and therefore its revenue.

After clamoring for the right to export oil in Kurdish territories on their own and make their own contracts with foreign oil companies, the KRG finally signed an accord with the Iraqi government that permitted the KRG to export 100,000 barrels per day from specific fields. Some 73 percent of the revenue would be designated to the Iraqi government, 15 percent to the KRG, and 12 percent to any foreign oil companies with which the KRG signed contracts. The agreement also allowed for future increases in oil exports. The Kirkuk field, however, was not one of the fields designated for Kurdish control.

In the years before the rise of the Islamic State in Iraq and Syria (ISIS), in the words of one Iraqi government official, Kirkuk languished as a "no man's land." According to a 2013 S&P Global Platts interview with the chairman of the local Kirkuk Governing Council's committee on oil and gas, Kirkuk's oil was stuck in limbo because the Kirkuk Governing Council believed that Iraq's constitution gave it the right to be involved in all decisions related to oil and gas. The Kirkuk Governing Council was unhappy with the Iraqi oil ministry's unilateral decision to grant BP a contract to do preliminary technical work on assessing Kirkuk's oilfield and the development needed to increase its production.

The local Kirkuk government thought it was in the midst of a bidding process when the Iraqi oil ministry announced the contract with BP. The local council had hoped to attract the highest bids from ExxonMobil, Total, and Chevron. Some of these companies had already signed production-sharing contracts with the KRG for Kurdish-controlled oilfields near Kirkuk. However, the Iraqi government refused to recognize these Kurdish contracts. Kirkuk was stuck between a neglectful national government that had devoted most of its focus to Iraq's southern oil resources and an autonomous Kurdish government looking to expand its power, influence, and control over Iraq's northern oil resources.

The tug of war over Kirkuk's oil might have been resolved through negotiation had another force not burst onto the scene in 2014. ISIS emerged in January in Fallujah.

From there, ISIS expanded rapidly in Iraq, taking control of Mosul only six months later. To the KRG, based in Erbil, just east of Mosul and north of Kirkuk, it appeared that ISIS was bearing down on Kirkuk.

On June 13, the Kurdish Peshmerga advanced into Kirkuk, occupying the city as the Iraqi army retreated in the face of the advancing ISIS forces. Even though Kirkuk was officially outside of the area allotted to the KRG, the Peshmerga held Kirkuk for nearly three and a half years and the KRG fought to keep that city's oil out of the hands of ISIS.

It was known, in 2014, that ISIS was funding itself through the illicit production, transportation, refining, and sale of oil. However, the depth and complexity of its oil operation were not generally understood until late in 2016, when the public was shown files seized during a 2015 U.S. military operation to kill Abu Sayyaf, the ISIS operative in charge of oil logistics. Matthew Reed, a D.C. analyst, examined the public documents at length to better understand how the ISIS oil operation worked and how the organization managed to make between \$40 and \$50 million per month in oil revenue. According to Reed's research, ISIS controlled at least 253 oil wells in both Iraq and Syria before the May 2015 strike that killed Abu Sayyaf.

The material seized from Abu Sayyaf revealed what had likely been obvious to the Kurdish forces on the frontline—that ISIS was running a surprisingly sophisticated oil operation in which skilled oil professionals oversaw the operation of wells, pipelines, and refineries. In 2014, even though Peshmerga forces occupied Kirkuk and some of the surrounding areas, ISIS oil was being run through the city on its way across the border to Iran. ISIS tried several times to capture the Baiji Refinery, Kirkuk's largest, and multiple times attacked the pipeline that transported oil from Kirkuk to the Turkish port of Ceyhan.

Eventually, ISIS managed to knock out 80 percent of the Iraqi leg of the pipeline. By September 2014, oil output from Kirkuk was down to only 90,000 barrels per day, a 90 percent drop from earlier that year.

The KRG ignored its oil disputes with the Iraqi government and simply struck out on its own. Iraq lacked the power to stop the KRG from making its own oil deals. In an agreement that seemed to defy traditional understandings of Middle Eastern allies and enemies, the KRG signed a contract with Turkey to cover the transportation and sale of its oil through the Ceyhan port. Despite the historical and continued animosity between the KRG and the Turkish government, Turkey arranged for the KRG to receive payment from the sale directly, and not through the Iraqi government.

In another unusual pairing, the first barrels of oil sold under this new arrangement went to Israel, which had terrible relations with Turkey at the time but was close to the KRG. Although Turkey could have theoretically shut down KRG oil sales to Israel, the country was more interested in the economic benefits of transporting KRG oil than in its geopolitical relationships.

With this new Turkish agreement in hand, the KRG decided to build a series of pipelines that ran entirely through its own territory. These pipelines bypassed the section of the Kirkuk-Ceyhan pipeline that was vulnerable. It hooked into the main pipeline at the border with Turkey.

Throughout 2016, the United States bombed ISIS oil assets and targeted the ISIS commander at its helm. The organization's oil revenue dropped precipitously as a result. The combined ground offenses against ISIS from the Iraqi army, American advisors, Kurdish forces, and Shia militias made slow progress in Iraq. ISIS demolished or ignited oil assets as it retreated. Mosul was a particularly devastating example. The battle for the city lasted nine months, and ISIS torched so many oil wells that sheep grazing in the surrounding territory turned black.

The Great Oil Game

While Iraq was busy negotiating the details of a deal to cut oil production with its fellow Organization of the Petroleum Exporting Countries (OPEC) members in November 2016, the Kurds were just as busy looking for ways to increase oil production in northern Iraq. Even after Iraq agreed to an OPEC quota of 4.351 million barrels per day, the KRG signed an agreement with Rosneft in which the Russian oil company would invest billions of dollars in the KRG oil industry and export Kurdish oil to refineries in Europe. Commodities analysts questioned whether Iraq could honestly commit to the OPEC quota given its lack of control over northern oil.

By the summer of 2017, the KRG had expanded the territory under its control by about 40 percent. With Kirkuk, the oil reserves under Kurdish control grew from 6 percent to 20 percent of Iraq's total. In 2016, the Kurds pumped 544,600 barrels per day—12 percent of Iraq's total oil production. Out of Kirkuk alone, the Kurds were pumping between 350,000 and 400,000 barrels per day. Tensions between the Iraqi government and the KRG rose as the KRG refused to relinquish Kirkuk and its oil.

To complicate matters, on June 7, 2017, the KRG announced that in September it would hold a referendum on independence for its semi-autonomous region and also for additional territories including the Kirkuk region. Multiple attempts were made to dissuade the KRG from holding this vote, and yet all of the pieces needed for independence seemed aligned. The common goal of fighting ISIS had seemingly united disparate Kurdish parties. It had a strong army, hardened by years of fighting ISIS militants and bolstered with U.S. military equipment. The KRG controlled 28.5 billion barrels of oil—more than Nigeria—and it had the means to independently export and sell it.

With so much oil, a fledgling country like Kurdistan could build an economy.

On September 25, 2017, the people of Iraqi Kurdistan voted to seek independence. When the prime minister of Iraq called the vote "a strategic and historic mistake,"

he also called for the KRG to turn over revenue from the sale of Kirkuk's oil. As expected, Turkish President Recep Tayyip Erdoğan threatened to impose a severe blockade. Erdoğan easily could have halted the KRG's primary source of income and stifled the Kurdish economy just by refusing to load the KRG's oil into tankers at the Ceyhan port. However, to the surprise of many, he did not.

This was when TankerTrackers.com started watching the KRG berths in Ceyhan. It wanted to observe if Turkey would follow through on its threat. However, the data showed that Kurdish oil, including oil from Kirkuk, continued to flow unimpeded through Turkey with sales mostly to customers in Greece, Israel, Poland, Cyprus, and Croatia.

On October 17, three weeks after the independence referendum, the Iraqi government, with the support of Iranian-backed Shia militias, entered the city of Kirkuk and swiftly took control of its airport, military base, and multiple oil facilities. The ease with which Iraqi forces recaptured Kirkuk from Kurdish forces confounded most in the West who were not familiar with finer points of intra-Kurdish politics. Essentially, one powerful Kurdish party abandoned its posts. The group was accused of selling out the KRG to the Iraqi government in a deal orchestrated by Iran before Iraqi forces even marched on Kirkuk. The KRG lost control of Kirkuk's oil.

During the battle and in its immediate aftermath, commodities analysts were looking for signs of whether the production and distribution of Kirkuk oil had been disrupted. Oil markets barely reacted, because there was a lack of evidence of an immediate disruption. With Iraq quickly regaining control of Kirkuk oil, the government had to decide how to transport it to sell. The government did not want to use the KRG bypass and the original pipeline was still out of commission. As a result, the Iraqi government decreased production. Several days after Iraqi forces retook Kirkuk the flow of oil was down to only 200,000 barrels per day from 600,000 barrels per day.

On October 25, the KRG officially suspended the referendum results. The Iraqi government restarted oil production in Kirkuk the next day and sent only 90,000 barrels per day through the Kurdish pipelines to Ceyhan. According to port agents in Ceyhan, that oil was marked for sale by SOMO, the Iraqi government's marketing group. The flow of oil from assets still held by the KRG was also temporarily halted, but it resumed by October 30, according to port agents in Ceyhan.

Fifteen days later, on November 14, TankerTrackers.com observed the first clandestine shipments of KRG oil from the Ceyhan port. The explanation given for the clandestine nature of the transfers is that Baghdad had threatened legal action against customers of KRG oil from Ceyhan. Turning off the AIS transponders officially "hides" the transaction. However, satellite imagery revealed an Israeli refinery in Ashkelon received most of that oil. It is also unclear whether the Iraqi government could effectively fine any supposed violators.

Oil flow through the Ceyhan pipeline was still running at decreased levels. Indeed, the Iraqi government seemed to lack a clear plan for how to exploit one of the highest potential oilfields in the world. First, it announced it would divert Kirkuk's oil to refineries in Iraq, though the refineries it has are not well-equipped to process that oil. Then, in an abrupt turn of events, Iraq announced that Kirkuk oil would shortly be trucked over the border to Iran and sold to Iranian refineries.

Fate of the Father Fire

The fate of Kirkuk's oil has yet to be resolved as the players continue to vie for influence over this single resource. Control of this oil is crucial for political control and influence within Iraq. Though the government in Baghdad appears to have a slight upper hand, another period of political instability could easily return control to the KRG or a rogue group. The immediate players, the KRG and the Iraqi government, are not the only ones with stakes in the game. A host of secondary and tertiary players are all pursuing their own economic and political interests. As has been evident, these interests are not always clear-cut. In many cases, energy business interests and geopolitical interests directly contradict each other.

The KRG's interest in Kirkuk's oil is fairly straightforward. Even though Kirkuk was not part of the original semi-autonomous Kurdish region, the KRG clearly, if not legitimately under Iraqi law, held and exploited Kirkuk's oil until recently. If the KRG could regain control of Kirkuk oil, it would obtain a large revenue source and enough money to sustain a government and to serve as a foundation for a new economy.

In terms of prospects, the KRG is left with only two avenues for leverage over Kirkuk's oil. It can attempt to retake Kirkuk militarily from the Iraqi forces (an unlikely move given the internal disputes and fragmentation of the KRG since losing Kirkuk) or it can negotiate a new revenue-sharing deal with the Iraqi government. In December 2017, Argus Media and Reuters reported that the Iraqi government proposed a respective 12 and 12.6 percent revenue-sharing plan with the KRG. This is less than the pre-ISIS revenue-sharing plan and, not surprisingly, the KRG said it was not interested.

ISIS, though largely destroyed and defeated in Iraq, serves as an important lesson on the vulnerability of Iraqi's oil resources. The organization's primary oil interests were revenue and sabotage. Its ability to quickly establish a sophisticated network of oil production, transport, and illicit sales could easily be reproduced by a future militant organization and used to fund nefarious practices in Iraq or elsewhere. A different rogue group could seize control and exploit the oil for its own economic purposes, perhaps to fund its own activities.

The Iraqi government has the most to lose in the fight for control over Kirkuk's oil. Its primary interest is revenue, coupled with the long-term goal of increasing

production from the Kirkuk field to its potential. Iraq hopes that the Kirkuk field could soon produce 1 million barrels of oil per day, with the necessary investment, pressure maintenance, and repairs to its infrastructure. At the same time, Iraq must keep Kirkuk's oil out of the hands of the KRG and any terrorist organization to prevent them from receiving the revenue.

Controlling and exploiting Kirkuk's oil is also a sign of the Iraqi government's sovereignty and power, something it sorely needs to project after years of instability and weakness. Iraq's sudden desire to sell Kirkuk's oil to Iran might not be the optimal solution for the Iraqi government but it would effectively prevent the KRG or a terrorist organization from financing themselves.

The Iraqi government's prospects for maintaining control of Kirkuk's oil seem promising, but it is unclear if it will be able to entice foreign companies to return to the area given the geopolitical risks. BP, which was originally contracted for minor technical studies pre-ISIS, has been mentioned by the Iraqi government as a potential partner, but plans have not progressed beyond BP's commitment to study ways of boosting Kirkuk's capacity.

Though Iran is a major oil producer in its own right, the country seems to have taken a very keen interest in Iraqi oil, and particularly Kirkuk's oil. Iran's oil industry suffered during the sanctions regime as necessary repairs to aging fields were neglected. After sanctions were relaxed in 2016, Iran was able to jumpstart its oil production but could not keep producing at a high rate. Oil production has fallen off, and Iran continues to suffer shortages in refined products. It cannot supply its population with enough gasoline and diesel fuel. Iran has made overtures to the Iraqi government and has entered into an agreement to ship 30,000 to 60,000 barrels per day of oil from Kirkuk to refineries in Iran by truck. The two governments have further agreed to build a pipeline to connect Kirkuk's oilfields with an Iranian refinery just over the border. This will be the cornerstone of a larger oil swap, in which Kirkuk's oil will travel to Iran via a pipeline and Iraq will receive oil from Iran at its facilities in southern Iraq.

Iran's motivation to secure access to Kirkuk's oil is economically driven. It seems that Iran is logistically unable to supply its northern refineries with crude oil or requires the specific grade of crude oil that Kirkuk produces. The pipeline, which would take at least two years to build, and the crude oil swap deal are both evidence of Iran's long-term interest in northern Iraq's oil industry.

A long-term crude oil swap contract would intertwine the Iraqi and Iranian oil industries to a great extent. In many ways their oil policies would be united. Together, Iraq's and Iran's oil reserves rival those of oil giant Saudi Arabia, and combined they could present a challenge to Saudi Arabia's de facto control over OPEC policy. Even though OPEC makes decisions by consensus, Saudi oil minister Khalid Al-Falih

uses Saudi Arabia's larger production capacity and massive reserves to persuade and compel smaller oil-producing countries to agree to Saudi-friendly policies within OPEC. Iranian oil minister Bijan Namdar Zangeneh would love to have the kind of influence Al-Falih has, and with Iraq's oil, Iran could challenge Saudi Arabia within OPEC in the coming years.

An integrated Iraqi–Iranian oil industry would give Iran an influential voice in OPEC, and it would establish Iran as a valuable partner in the oil industry. Iran has struggled to attract foreign companies to partner with the National Iranian Oil Company on oil projects since sanctions ended. With greater influence in the oil market and a say over Iraq's oil resources, Iran might be able to attract better partners despite the risks of doing business with Iran.

Iran's prospects depend largely on whether the Iraqi government maintains control over Kirkuk and is able to subdue Kurdish nationalism. If so, Iran's role in helping the Iraqi government secure its control will give Iran significant geopolitical influence over Iraq. Pipelines physically connecting both oil industries would certainly cement this relationship. Still, a pipeline is at least two years away.

Turkey might throw a wrench into Iran's plans. Despite vehement opposition to Kurdish independence in northern Iraq, Turkey did more than any other country to improve the KRG's strength between 2014 and 2017. Turkey has profited from the KRG's oil and, specifically during that period, from the KRG's Kirkuk oil. However, Turkey does not necessarily need the KRG to control Kirkuk to continue benefiting from Kirkuk's oil; it only needs to make sure that the oil is not going to Iran. Turkey has made it clear that it prioritizes revenue over ethnic or political stands in this arena.

Even as Baghdad continues negotiations with Iran, the Iraqi government ordered the repair of the original Kirkuk–Ceyhan pipeline. If Turkey can entice Iraq to rebuild the destroyed sections of the Ceyhan–Kirkuk pipeline, it will be able to bypass its former business partners, the Kurds, and continue to profit off of the sale of northern Iraq's oil.

Meanwhile, Israel is watching to see if a major source of oil will be cut off. Access to crude oil has always been a challenge for Israel, because most of the nearby suppliers refuse to sell to it. Gasoline in Israel is very expensive as a result. Since 2015, it is believed that Israel has received as much as 77 percent of its oil from the KRG. These numbers actually could be higher because of the clandestine shipments like those discovered by TankerTrackers.com.

If Kirkuk oil is permanently diverted to Iran, Israel would suffer the loss of an important source of crude oil. Is this enough for Israel to support any effort by the KRG to retake Kirkuk? The prospect is unlikely but not impossible.

With Iraq's recapture of Kirkuk, Saudi Arabia has suddenly renewed its interest in Iraq's oil industry. The Saudi government is looking to strengthen its geopolitical relationship with the Iraqi government and present itself as an alternative to Iran. Generally, the Saudis seek security along their northern border from bad actors in Iraq and are looking to extend their regional influence beyond the Persian Gulf monarchies. In terms of oil, the Saudis would like to turn Iraq into a reliable partner within OPEC, like Kuwait and the United Arab Emirates, for example. More importantly, Saudi Arabia does not want Iraq's oil policy to fall under the influence of Tehran.

Iraq also presents Saudi Arabia with investment opportunities. Saudi ARAMCO the Saudi national oil company, is flush with capital and looking for avenues to invest that money. The beleaguered Iraqi oil industry presents an opportunity for the Saudis. ARAMCO has everything Iraq needs—expertise in mature oil reservoir management, connections to the best international oil service providers, logistics support, and a strong management team. Al-Falih traveled to Iraq at the beginning of December and signed eighteen separate memoranda of understanding with Iraq designed to increase cooperation between the Saudi and Iraqi oil industries. Sabic, Saudi Arabia's partially state-owned petrochemicals manufacturer, confirmed plans to open an office in Iraq as well. So far, Saudi Arabia's prospects in Iraq have been confined to southern Iraqi oil assets, but if Saudi Arabia is serious about investing in Iraq's oil industry, Kirkuk will be on Saudi Arabia's radar. No one in the industry knows more about getting the most out of an aging, low-pressure field than ARAMCO.

Watching this game unfold from the periphery are international oil companies (IOCs) and Russia. Between 2014 and 2016, IOCs pulled out of contracted development projects in northern and central Iraq. ExxonMobil walked away from six exploration areas in the Kurdistan region and Chevron gave up an interest near Erbil in 2015. ExxonMobil cited instability in the Sulaimaniyah region (on the border between Iraq and Iran) as the reason for pulling out of three blocks. These companies will most likely wait to see how the relationship between the KRG and the Iraqi government unfolds before diving back into asset development in Iraq.

American-based IOCs will be hesitant to venture into any Iraqi region with Iranian influence. The U.S. government, for its part, is relatively uninterested and has had a hands-off policy regarding international oil in recent years.

Working directly with the KRG is also a risky proposition, given its internal instability and unsettled oil relations with Baghdad. To enter the region, an IOC would need to commit significant capital and risk the safety of personnel at a time when all IOCs are significantly decreasing their exploration and production activities worldwide. For most IOCs, Iraq just does not present an attractive opportunity at the moment.

Russia, on the other hand, showed a great interest in Iraqi oil under Kurdish control. There is evidence that Russian oil giant Rosneft agreed to finance a \$1 billion gas project in Iraqi Kurdistan right before the KRG held its independence referendum.

Some sources said that Rosneft's investments in the Kurdish region topped \$4 billion. This comes on top of \$1.2 billion that Rosneft lent the KRG to help finance Kurdish oil exports in February 2017. With the Iraqi government controlling Kirkuk's oil, the question is whether Russia will find as much opportunity.

Once again, parties are coming from near and far to stake their claim on this valuable commodity. Both the KRG and the Iraqi government consider Kirkuk's oil key to their future economic success. Who controls Kirkuk's oil, however, reverberates far outside of Iraq's borders. Regional powers like Israel, Turkey, Iran, and Saudi Arabia all seek to benefit economically from the development, sale, transport, or purchase of Kirkuk's oil. Even farther outside this Middle Eastern web, major IOCs like BP and Exxon and Russian oil giants like Rosneft wait to see who will win the game.