Chapter 14

From a Curse to Blessing: Kurdistan's Oil and Natural Resources

Ashti Hawrami

"The large revenue that Iraq gets from the oil-fields might be used to help us instead of being spent on waging wars in these mountains and making the Kurds bitter and hostile. Remember the oil fields are in Kurdistan, so we have some right to ask for benefits from the revenue they earn. Yet all we seem to derive from our oil are bullets and bombs."[1] So said Ismael Beg, the governor of Rawanduz, during a conversation with the New Zealand-born engineer A. M. Hamilton, who recorded it in his classic book *The Road Through Kurdistan*.

Their discussion took place around 1930, but Ismael Beg's sentiments and remarkably prophetic thoughts about the Kurds and oil are still relevant today. Anyone trying to unravel the complexities of the oil industry in post-Saddam Iraq would do well to consider this historical context.

Ever since oil was discovered in the huge Kirkuk oil fields in 1927, the Kurds have been marginalized as successive governments in Baghdad systematically excluded them from either the production of oil or its proceeds. It was no coincidence that the waves of "Arabization" campaigns conducted by the Ba'ath party, which resulted in the forced displacement of Kurds (as well as Turkmens and Christian minorities) from their villages and towns across northern Iraq, were at their most ruthless around the oil fields of Kirkuk. It helps explain why Kurds often mutter that the black gold beneath their feet has been more of a curse than a blessing. It also provides the backdrop as to why since the removal of the Ba'athist regime in 2003, the Kurdistan Regional Government (KRG) has insisted on its rights—in the face of significant pressure to back down from federal authorities in Baghdad, and unfortunately, a few senior U.S. diplomats serving in Iraq—to develop an oil industry of its own.

It is not just about economics and the distribution of wealth. The dispute over who controls and manages the natural resources in the Kurdistan

[1] Beg, Ismael. The Road Through Kurdistan. Faber and Faber Limited, 1937.

Region of Iraq (KRI) goes right to the very heart of Iraq's chances of survival as a democratic, federal state. The Kurds are determined that they will never return to the days when Baghdad governments used oil revenues to buy tanks and helicopters to destroy their villages.

Oil can either be a reason for Iraq breaking up, or the glue that binds it together. Equally important to Kurdish authorities is their view of the KRI's oil and gas reserves—both potential and proven—as the primary spur not just of economic growth and diversification, but also of the internationalization of Kurdistan's underdeveloped economy.

Major Legal Landmarks

In late 2005, Iraq's Kurdish, Shia, and Sunni political leaders agreed to clauses in Iraq's historic permanent constitution that essentially gave the Kurdistan Region decision making powers over oil and gas exploration and production in the areas under its control and required that all oil revenue be fairly and transparently shared across Iraq. For the Kurds, this was a test case for honoring constitutional agreements on regional autonomy, one that many believe the federal authorities have since failed.

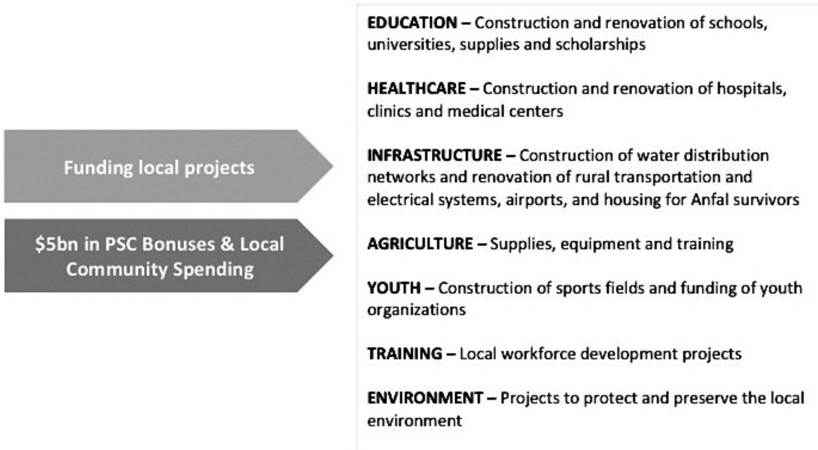
Another important milestone occurred in 2007 when, in the absence of an Iraq-wide hydrocarbons law (which the Kurds fought hard to achieve), the Kurdistan Region's parliament debated and passed its own oil and gas law. The law was designed to comply in both letter and spirit with Iraq's federal constitution.

Production Sharing Contracts

The KRG's great success in attracting foreign investment is the Production Sharing Contracts (PSCs) that go hand-in-hand with the oil and gas law. The PSCs are risk-reward type contracts that are ideal for the KRG's situation because they incentivize companies to take the risk of efficiently and rapidly developing unknown fields. In drawing up a model PSC for the KRI, the KRG looked at many other countries' PSCs and the best practices around the world. As with the oil and gas law, the KRG published the model PSC for public comment and held two consultation seminars, so that important feedback was incorporated.

In a first for Iraq, the state was reduced to a largely regulatory role.

Figure 1. Projects in the Kurdistan Region funded from PSC Bonuses and Local Community Spending by IOCs.



Another unique feature of the Region's PSC model was the capacity-building bonuses provided by the IOCs on the signing of each exploration contract. This money helped the KRG to develop its infrastructure, with some 4.7 billion dollars allocated to Anfal victims' housing, roads, water resources, electricity, airports, hospitals, schools and universities, even before any oil was found and produced. In addition, the IOCs contributed around 300 million dollars in local community spending (or Corporate Social Responsibility—CSR).

The First Fifty Exploration Blocks

In 2007, the KRG invited bids for 50 blocks covering the Kurdistan Region. With limited surface geological data available, companies could still see the potential and in little more than five years, the KRI became one of the foremost exploration destinations in the world. Early upstream pioneers included companies such as Petoil, Genel Energy, Western Zagros and DNO ASA, and by 2009, the KRG had attracted more than 35 companies from Canada, Russia, Turkey, Korea, US, Austria, the U.K., and other countries. More recently, oil majors such as ExxonMobil, Chevron, Rozneft, and Gazprom have been active in the KRI.

Another milestone occurred on June 1, 2009 when the KRG oversaw the launch of the first Kurdish oil exports through Iraq's northern pipeline to Turkey. At a ceremony in Erbil, KRG President Massoud Barzani and then-Iraqi president Jalal Talabani together opened a symbolic valve allowing crude to flow from the first newly developed oilfields to come online from Iraq in three decades.

The export-ready oil came from two fields: one at Tawke on the Turkish border, which was explored and developed by DNO ASA, a Norwegian outfit. The other was at Taq-Taq, (near Koisanjaq) the product of a joint venture led by Genel Energy of Turkey.

The Start of Crude Export via the Kurdistan Pipeline

The KRG's first crude export occurred via the Iraqi state oil marketing organization, but flows were intermittent due to non-payment by the central government in Baghdad and deliberate interruptions to the pipeline in areas outside of KRG control. In May 2014, the KRG began independent export through its own newly constructed pipeline.

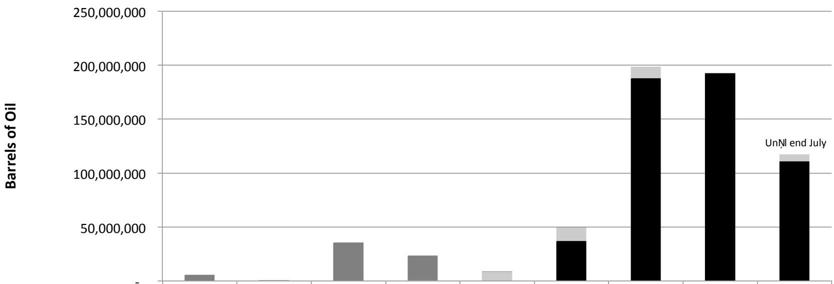
The speed of the exploration and development and subsequent export of Kurdistan's oil resources took many observers by surprise and the development of the oil sector as a key pillar of the economy is one of the KRG's major achievements.

In only a decade since the passing of the KRG oil and gas law in the Kurdistan Region's parliament in 2007, the KRI's oil and gas industry has grown swiftly, achieving significant levels of oil production, export and refining, and providing fuel for power generation. With vision and determination, and hand-in-hand with its investment partners, the KRG has developed an industry that contributes to economic wealth, provides employment for the people and creates a launching pad for future economic diversification.

Oil and Gas Key to Strategic Relationship with Turkey

The KRI's oil and gas resources are an important part of the KRG's strategic relationship with Turkey. Twenty-five years ago, in the previous political climate, an oil pipeline from the KRI to Turkey was unimaginable. Thanks to improved relations and Turkey's goal of becoming a regional energy hub, the KRG built that pipeline to gain access to the Turkish port of Ceyhan for loading to cargo ships. It began independent crude oil sales to international buyers in early 2014. The pipeline's throughput capacity is currently 650,000 barrels per day (bpd), with plans to increase it to 1 million bpd.

Figure 2. The KRI's Oil Exports



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Exports via SOMO	5,284,574	196,577	35,209,717	23,374,981	5,971	-	-	-	-
Exports via Trucking	-	-	-	815	8,123,936	12,694,274	10,957,180	24,624	6,364,753
*Exports via KRG Pipeline	-	-	-	-	-	36,787,612	187,503,492	192,239,321	110,729,822

The KRG hopes that once its significant gas fields have been developed and its domestic gas needs met, a gas pipeline will position the KRI for a prominent role in international gas markets and cement its economic relationship with Turkey. The Kurdistan Region holds significant volumes of natural gas reserves to satisfy local consumption needs and with surplus to export to Turkey and beyond.

Mining and Downstream Investment

The Ministry of Natural Resources has also announced plans to regulate mining activity in the KRI and have offered up several blocks for prospective investors. Experts predict that the chief interest lies in a belt approximately 15–25 kilometers wide that runs along the KRI's border with Iran and Turkey. The area is considered to offer "high potential" for mineral deposits such as iron, chrome, nickel, platinum, gold, copper, barite, and zinc.

Meanwhile, the KRG is planning to seek private sector investment in downstream industries such as petrochemicals. Urea production for fertilizer is seen as one major area for development.

Working with Industry to Develop the Local Workforce

From the outset, the KRG has emphasized the creation of jobs for local workers in both exploration and services companies. Now, the percentage of local staff in the international oil companies is over 80 percent, (See

Figure 3. Localization Progress of Operators since 2013.

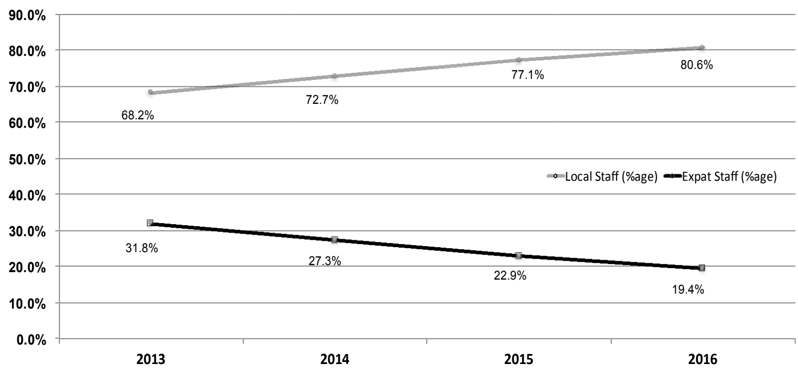


Figure 4. Status of Major Operators.

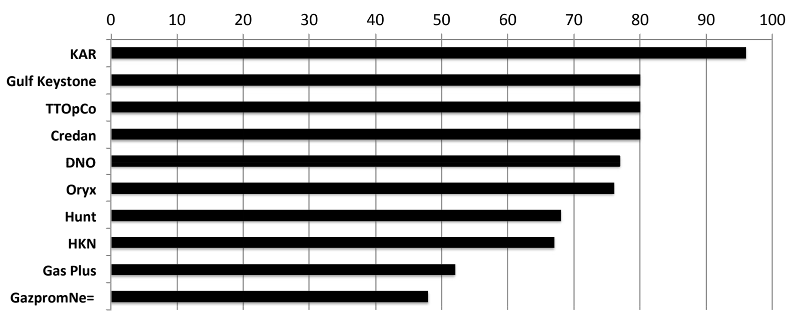


Figure 3 below) having grown from 68 percent in 2013, and in the service sector the ratio is even higher. (See Figure 4 below for top ten operators).

Today, the KRG obliges the international oil companies and larger services companies to provide local workforce development plans and report their progress in recruiting (and developing the competency of) local workers, to demonstrate their ongoing commitment to regional development.

The remaining challenge is to increase the percentage of local workers in highly skilled roles, which takes time. We are working with the industry to ensure that citizens of the Kurdistan Region gain the expertise to work in the most senior positions.

Transparency and Accountability

Of course, improving transparency in oil revenue and spending sends an important message to our citizens and the international community that the KRG is taking positive steps towards good governance. In this respect, the KRG is making admirable progress. The Regional Oil and Gas Council (comprising the KRG Prime Minister, the Deputy Prime Minister, in addition to the ministers of planning, finance, and natural resources) has commissioned international auditors Deloitte and E&Y to conduct independent, forensic audits of the KRG's oil and gas production and revenue. The results of the audit will be presented in summary in a series of quarterly public reports. The unprecedented scope of the audits demonstrates that the KRG has committed to a robust regime of transparency and accountability in its oil and gas sector.

Building Refining and Power Generation from Ground Zero

A long-held goal of the KRG has been to improve the supply of electricity and fuel, as the people of the Kurdistan Region have suffered considerably from shortages of both for many years. During 2008–2010, a new 75,000 barrel-per-day capacity refinery was built in Erbil, taking crude oil from the Khurmala field to produce the needed diesel, benzene, and kerosene. At the same time, another refinery in Bazian was installed to refine 40,000 barrels of oil per day. Today, the total installed refining capacity of the Region is 200,000 bpd and, if fully utilized, can help meet the needs of the liberated areas of Mosul and beyond.

To increase power generation, five new power stations that are fed by natural gas and diesel were built by private sector operators. Presently, Kurdistan's actual electricity generation 2,800 Mega Watts compared with 480 Mega Watts in 2007. The installed power generation capacity is now over 5,500 Mega Watts.

To underpin the fuel needs for power generation plans, in 2007 the KRG also started the development of some of its natural gas fields, which gradually resulted in the partial supply of natural gas to power plants, which currently stands at 300–330 mmscf/day.

The Kurdistan Region's power plants are now 85 percent fueled by natural gas and 15 percent by diesel/heavy fuel oil. The KRI's excess generating capacity has enabled the KRG to supply neighboring Kirkuk with 200 to 220 Mega Watts since November 2011. In addition, the KRG has coordinated with the federal Ministry of Electricity in Baghdad to provide surplus power to help reconstruct Mosul and other areas newly liberated from ISIS. The current supply to Mosul is around 225 Mega Watts, which is set to increase to more than 600 Mega Watts in the coming months.

Electricity Sector Reform

In addition to developing natural gas reserves to fuel power generation, the KRG is also prioritizing urgent reform of the electricity transmission and distribution system. Some 30 percent of electricity produced is lost either through inefficiencies in the outdated transmission system or because of theft (people tapping into power lines illegally). There are also problems with tariff collection. Provision of electricity costs the KRG around 2 billion dollars in diesel costs, yet it collects only around 250 million dollars in tariffs.

Compounding the problems is that current electricity consumption per household in the Kurdistan Region is more than in most major industrialized countries in the West. To improve revenue performance in the electricity sector, the KRG intends to introduce smart metering and robust billing and collection.

The medium-term reform plan, drawn up with the assistance of the World Bank, aims to improve and sustain the quality of service for all electricity consumers through a transition to a modern institutional and regulatory framework.

This will have three main goals:

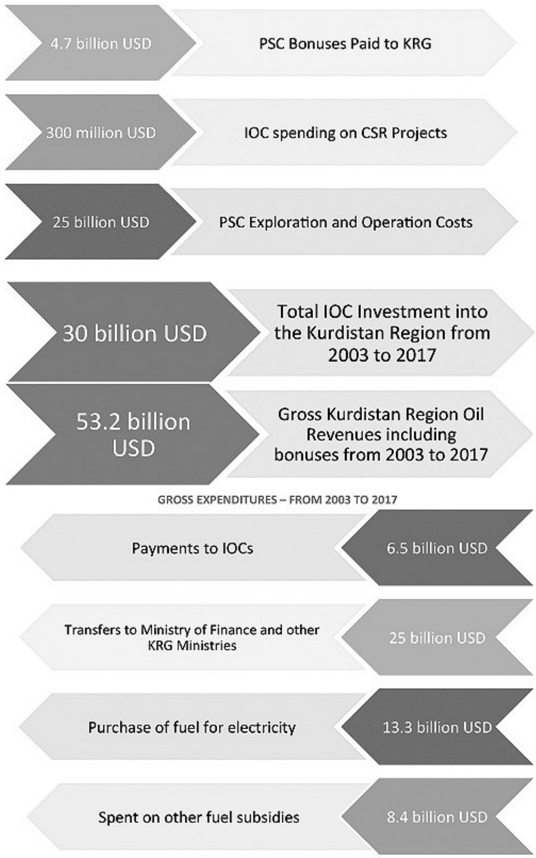
- to separate generation from transmission and distribution;
- to strengthen financial discipline and energy accountability;
- to promote private sector participation in the whole grid and investment in downstream activities.

This transition will encompass a shift to fully cost-reflective tariffs that protect vulnerable groups in line with international practice. The KRG's ultimate goal is to ensure consumers are provided with better electricity service without recourse to costly and unsustainable subsidies.

Holding Fast in the Face of Multiple Shocks

The Kurdistan Region has faced multiple shocks since early 2014; namely the cut of the KRI's budget by Baghdad in January 2014, the collapse of the world oil price, and the war with ISIS that also resulted in an

Figure 5. Investment, Revenues and Expenditures 2003–17.



influx of almost 2 million IDPs and refugees. Continuing Kurdistan's direct oil export sales was vital to mitigate the effects of the large budget deficit left by Baghdad's unlawful cutting of the KRG's budget, to pay public and Peshmerga salaries, to fight the war against ISIS, and to provide help to IDPs and refugees.

The collapse of the oil price from 2014–and the Kurdistan Region was no exception. In the face of the downturn, many of the oil companies in Kurdistan were unable to allocate essential funds for further exploration and production. Despite the enormous financial pressures, the KRG has continued the regular and some of the arrears payments to the producing IOCs so that they can reinvest in their blocks and increase production.

In 2009, Prime Minister Nechirvan Barzani said that the KRG "is determined to use our natural resources in a constructive manner for the benefit of all Iraqi citizens, and to create a better future for ourselves and our neighbors, as well as for future generations."[2] The KRG will continue to develop its hydrocarbons resources with this vision in mind, so that oil and gas provide greater prosperity for the people of the Kurdistan Region and Iraq, and can help to strengthen regional cooperation with its neighbors.

[2] "Prime Minister's speech at launch of KRG Strategy on Good Governance and Transparency." July 12, 2009. http://cabinet.gov.krd/a/d.aspx?s=02040100&l=12&r=268&a=30495&s=010000.