

Oil and Gas Factsheet

October 2011

Oil and gas outlook

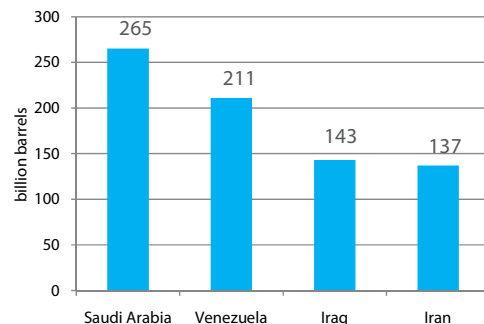
The oil industry dominates the Iraqi economy. Oil contributes 60% of GDP, 99% of exports and over 90% of Government revenue.¹ This dominance will increase in future years as oil production and exports rise. Government revenues from oil will also grow.

Iraq has proven oil reserves of 143 billion barrels, and a potential further 200 billion barrels have been identified and are recoverable. Under current oil development plans, the country will become the world's oil superpower with the ability to influence markets on a global scale.² Two thirds of reserves are located in the South and a third are in the North.

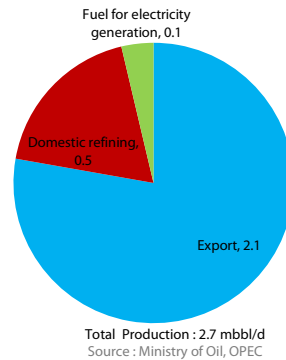
Iraq currently produces 2.6 million barrels of oil per day:

- 2 million barrels are exported³
- 400 thousand barrels are refined domestically
- 70 thousand are used for electric fuel generation
- Iraq net imports about 150-200 thousand barrels per day of refined oil for electricity generation and road transport

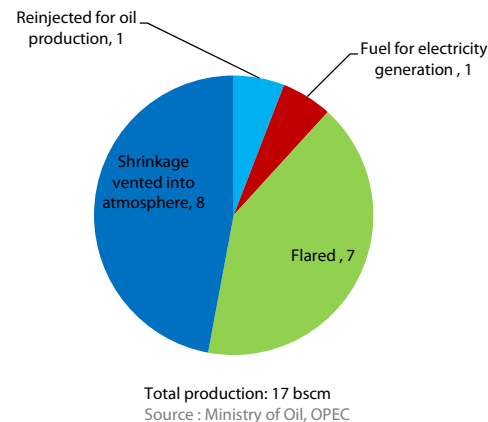
Proven oil reserves by country



Oil Production 2010 (million barrels per day)



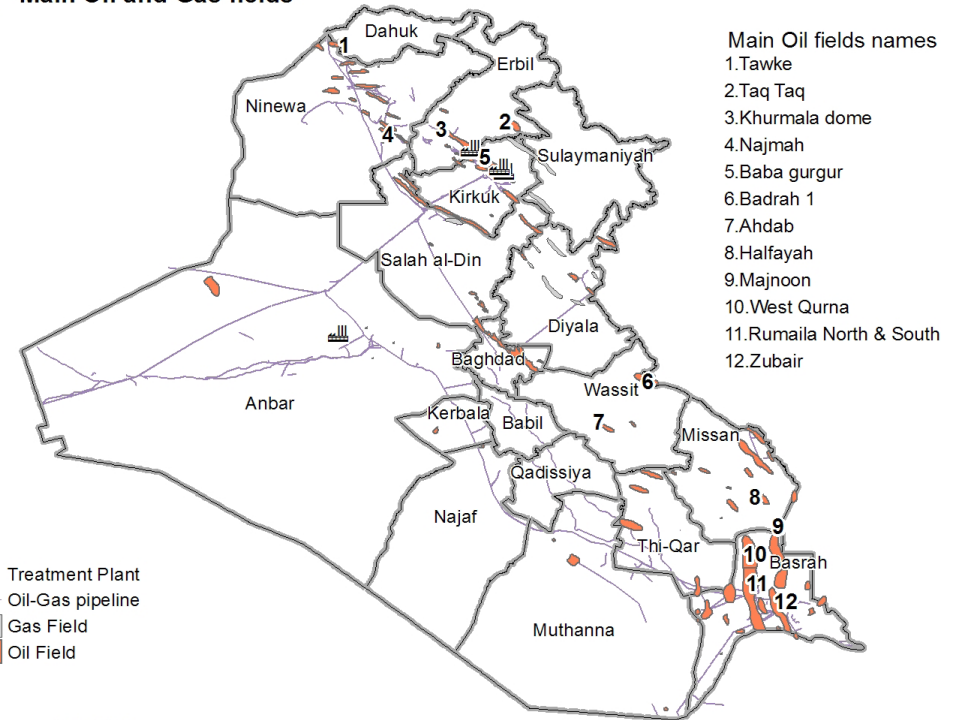
Gas production 2010 (billion standard cubic metres)



Production is likely to rise to between 4 and 5 million barrels per day by 2016-2017.

- At this production level, proven oil reserves would last for 70-90 years

Iraq - Main Oil and Gas fields



Data source: HIC 2003

- Government revenues could double from US\$ 75-80 billion in 2011 to US\$ 150-160 billion by 2016 if oil prices remain at \$100 per barrel.⁴

Iraq's proven gas reserves are around 3,100 billion standard cubic metres,⁵ equivalent to around 15 billion barrels of oil. These gas reserves are currently underutilized.

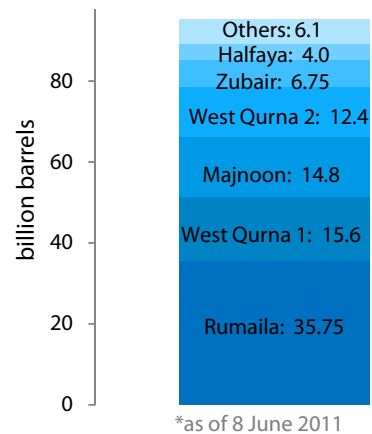
Contracting for oil and gas

Over the past several years, both the Federal Government and the Kurdistan Regional Government (KRG) have contracted with

international oil companies (IOCs) to develop hydrocarbon resources. The Federal Government and KRG use slightly different methods of contracting.

The Federal Government has signed Technical Services Contracts (TSCs) with IOCs in which state participation is 25%. The KRG has signed Production Sharing Agreements (PSAs) with oil companies in which state participation is 20%. While similar to the Federal Government's TSCs in many respects, the PSAs give title to a share of the oil to the IOCs who produce it, and the constitutionality of this feature is being

Initial reserves of oilfields in South and Centre for which agreements have been reached with IOCs



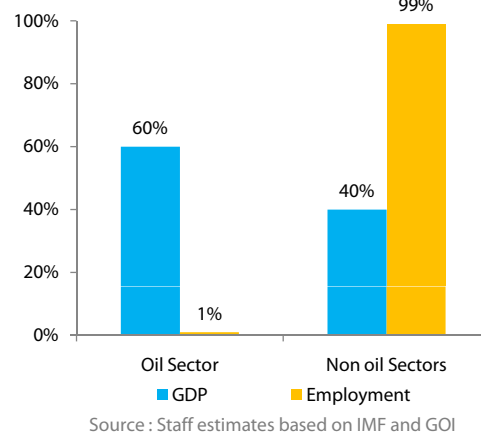
contested. TSCs could also be in question, as they have not yet been approved by Parliament. The vagueness of constitutional articles dealing with oil and federal-regional disagreements over their interpretation has prevented Iraq from passing adequate oil legislation.

At the federal level, three rounds of bidding for oil and gas have been concluded successfully, and a fourth round is scheduled for early 2012. IOCs that won major contracts to produce oil include consortia led by BP, Shell, ENI, ExxonMobil, Lukoil and CNOOC. In the KRG, in addition to two fields currently producing, there are about 40 exploration contracts held by as many foreign oil firms, including Talisman, Hess, KNOC, Marathon, and Murphy Oil.

Oil's impact on economy and governance

The size of Iraq's oil revenues inhibits efforts to diversify its economy. Oil export revenues have led to an appreciation of the real exchange

Percentage of GDP and employment provided by the oil sector



rate.⁶ This makes exporting difficult for non-oil sectors, increases competition from imports and raises costs in non-traded sectors.

Expansion of more labour-intensive non-oil sectors is therefore inhibited, limiting the ability of the Iraqi economy to create sustainable jobs and reduce poverty. This problem, commonly known as "Dutch Disease", is set to increase as Iraq's oil sector expands faster than non-oil sectors over the coming years. 23% of Iraq's population live below the poverty line of US\$ 2.2 expenditure per capita per day, and more jobs are required to alleviate poverty.⁷

The huge revenues from oil exports are channeled to the Government of Iraq, constituting 90% of all Government revenues. The Government's reliance on tax revenues is therefore low, reducing the pressure for accountability to the Iraqi public.

In addition, the size of the oil revenues relaxes the constraint on Government spending, meaning that the private sector is crowded out. For example, the Government is able to offer

higher salaries than the private sector, driving up private sector wages and making private sector employment less attractive. The income of a household with a public sector worker is on average 14% higher than a household with no public sector workers.⁸

The size of Government oil revenues are also too large for the Government to spend prudently on investments in high priority needs and services.

Mitigating the impact

A proportion of the oil revenue could be channeled towards the private sector, possibly as long-term credit to assist with capital formation. Investment in manufacturing should be fostered for providing high-productivity, high-wage jobs. Other activities, such as high-end services and small and medium enterprises should also be encouraged to grow.

The potential for private sector growth will improve when state-owned enterprises are reformed to separate ownership from operational management. This will reduce the role of the Government in the economy and make it easier for private sector competition to emerge. In addition, Iraq's oil refining capacity is set to expand, creating further value-added and employment.⁹

Oil revenues cannot be considered as ordinary, current income, as they arise from the exploitation of a depletable natural resource. Some revenues should therefore be saved for future generations, as well as to stabilize spending from highly volatile revenues. A direct oil dividend to the population could also be considered if such a system could be properly managed and negative effects (such as inflation) controlled.

Underutilized gas reserves

Only a small amount of Iraq's gas production is used effectively. Iraq produces around 16-17

billion standard cubic metres of gas per year. One billion is marketed locally and a further one billion is re-injected into the reservoirs to assist with oil production. The rest is either flared, lost or vented into the atmosphere.¹⁰

Gas is set to become the dominant fuel for Iraq's electricity industry, partly because Iraq lacks the capacity to refine enough oil to satisfy the country's electricity generation needs. Currently, the average household receives just eight hours of electricity through the public network.¹¹ The use of supplementary private generators places pressure on household expenditures and could raise costs for small enterprises. Gas is cheaper and more environmentally friendly than oil, making it a sound option for electricity production. In the longer, term there is potential for gas to be exported.

Endnotes

1. IMF, Country Report No. 11/75 (March 2011)
2. US Geological Survey
3. This is set to rise to about 3 Mbbl/d by the end of the year.
4. The Kirkuk fields, which currently produce about 0.5 Mbbl/d are worked directly by the North Oil Company and are not contracted out to any IOCs. UNOOC has a contract for the Adhab field which is just starting to produce.
5. About 115 trillion cubic feet (tcf)
6. The Central Bank of Iraq is committed to a fixed exchange rate of IQD 1170 per US Dollar. However, there are indications that the real exchange rate continues to appreciate: there is persistent internal inflation and the informal market shows the US Dollar trading at about IQD 1000.
7. World Bank/COSIT/KRSO Iraq Household Socio-Economic Survey (IHSES) 2007
8. WFP/COSIT/KRSO Comprehensive Food Security and Vulnerability Analysis Survey 2007
9. A contract for a refinery in Kerbala with the capacity to produce 140 thousand barrels per day was signed with a European consortium in mid-2011.
10. Data for 2009 from OPEC's *Statistical Bulletin*. Note that flaring the gas emits CO₂ in the atmosphere while venting methane (natural gas) is potentially worse as it is a more potent Greenhouse gas.
11. World Bank/COSIT/KRSO IHSES 2007