Congo (Brazzaville)

# ntry Analysis Briefs

# Gabon

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# **Background**

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Since peak production in 1997, oil output has declined by one-third, as large oil fields have matured. Consequently, Gabon has fallen from the third largest oil producer in sub-Saharan Africa to the sixth.

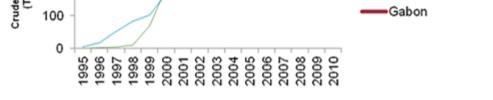
Gabon is an established oil producing country in West Africa and has enjoyed decades of economic growth and political stability in comparison to other countries in the region. Oil production undergirds Gabon's economy, accounting for 45 percent of gross domestic product (GDP) and 60 percent of government revenue, according to the World Bank.



Aging oil fields are placing pressure on the Gabonese government to increase economic diversification efforts, as oil output has declined by about 34 percent since its peak in 1997. As a result, Gabon has dropped from being the third largest oil producer in sub-Saharan Africa to the sixth after: Nigeria, Angola, Sudan, Equatorial Guinea, and Congo (Brazzaville).

> Top Oil Producing Countries in sub-Saharan Africa, 1995-2010

# 600 Crude Oll, NGPL, and Other Liquids \*Excluding Nigeria (2.5 million) bbl/d) and Angola (2 million bbl/d) (Thousand Barrels Per Day) 500 to maintain scale. 400 Sudan 300 Equatorial Guinea

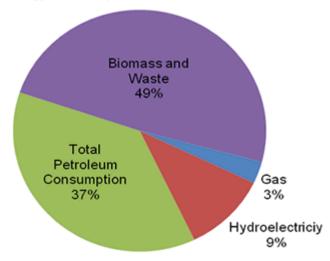


Source: U.S. Energy Information Administration, International Energy Statistics

Gabon's domestic power sector is underdeveloped, although it has vast potential to expand its hydropower. Nonetheless, the country lacks adequate infrastructure to capitalize on its natural resources, as less than 50 percent of the population is connected to the electricity grid. Most installed energy is consumed in urban hubs, while rural electricity access is low. EIA estimates

that nearly half of Gabon's energy consumption is from traditional biomass.

### Energy Consumption in Gabon, 2010



Source: U.S. Energy Information Administration, International Energy Statistics

## Oil

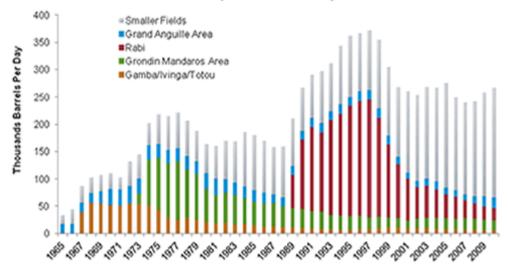
### Overview

After two decades without a national oil company, the Gabon Oil Company was established in June 2011 to increase government's involvement in new oil production.

According to *Oil & Gas Journal (OGJ)* in 2012, Gabon has 2 billion barrels of proven oil reserves, the fourth-largest in sub-Saharan Africa after Nigeria, Angola, and Sudan. The country's production of crude oil and lease condensate has decreased by about one-third from its peak of 370,000 bbl/d in 1997 to 246,000 bbl/d in 2010. Most of Gabon's oil fields are located in the Port-Gentil area and are both onshore and offshore.

Historically, Gabon's oil production has been concentrated in one large oil field and supported by several smaller fields. As the largest field matured and production declined, a larger field would emerge and replace dwindling production. Dominant fields have included Gamba/Ivinga/Totou (1967-1973), Grondin Mandaros Area (1974-1984), and Rabi (1989-2010). Gabon's greatest success, the Rabi oil field, significantly boosted the country's total output in the 1990s and reached 217,000 bbl/d at its peak in 1997. Although Rabi is still one of Gabon's largest producing fields, it has matured and production has gradually declined to about 23,000 bbl/d in 2010. Since Rabi's descend, a new large field has not yet emerged, since recent exploration has yielded only modest finds.

### Gabon Oil and Other Liquids Production, by Field, 1965-2010



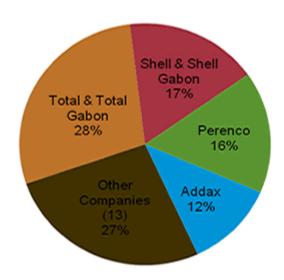
Source: Wood Mackenzie, Annual Production, Liquida by Field
Oil production numbers differ from EIA estimates due to different modelling method ology.

**Sector Organization** 

In June 2011, the government created a national oil company, the Gabon Oil Company, to increase the government's involvement in oil production by taking equity stakes in future awards. Gabon did not have a national oil company for over two decades after Société Nationale Petrolière Gabonaise was disbanded in 1987. Traditionally, the oil sector has been regulated by the president's office and the Ministry of Mines, Energy, and Petroleum. Although ownership of oil and gas resources is vested in the state, foreign companies are allowed to take large equity stakes in exploration and development through production-sharing contracts (PSCs).

The government is currently finalizing new regulatory terms to facilitate new deepwater exploration. The 10<sup>th</sup> oil license round was scheduled for October 2010, but then cancelled. The round was expected to include 42 deepwater and ultra-deepwater blocks, with a focus on the country's pre-salt prospects. The government is now engaging in direct negotiations to award the acreage. The government is also expected to strengthen local content requirements by limiting the number of foreign workers in the oil sector to 10 percent and requiring that all executive posts be held by Gabonese. The government agreed to these concessions to mitigate oil worker strikes led by the National Organization of Oil Employees, which temporarily disrupted production in April 2011.

Currently, Gabon's oil sector is dominated by foreign oil companies. Total is the largest operator in Gabon and has been present for over 80 years. The company's equity production averaged 71,000 bbl/d in 2009. Shell and its subsidiary Shell Gabon together are the second largest producers followed by Perenco, which produces 65,000 bbl/d from its four offshore fields. The fourth largest, Addax, has interest in five PSCs, covering both offshore and onshore license areas at their five producing fields.



Top Oil Producing Companies in Gabon, 2011

Source: Wood Mackenzie, Annual Production by Participant

**Exploration and Production** 

# Offshore Brazilian pre-salt discoveries have piqued investor interest in Gabon's pre-salt deepwater potential.

The Gabonese government expects to mitigate the gradual decrease in oil output by encouraging more investment to prolong the life of existing fields. Total is increasing investment to boost production from the offshore Anguille oil field, one of the largest oil producing fields in Gabon. The government has also sought investment from smaller companies willing to develop smaller fields. In the short-term, declines in production from larger fields will continue to be mitigated by smaller fields; nevertheless, in the long-run Gabon's oil production will depend on the success of new explorations, particularly the prospects of deepwater, pre-salt fields.

Offshore Brazilian pre-salt discoveries have piqued investor interest in Gabon's pre-salt potential. The country's pre-salt had been untapped until recently when U.S.-based Harvest Natural Resources struck oil at its Ruche-1 wildcat well in the pre-salt layers offshore Gabon in June 2011. A month following, the company had a second oil discovery at the same well. Brazil's oil company Petrobras joined pre-salt exploration activities in June 2011, acquiring a 50 percent stake in Ophir Energy's PSC. Petrobras is expected to apply its extensive experience in Brazil to capture deepwater pre-salt layers in Gabon that have been unexplored. Future discoveries in pre-salt fields could offset the decline from Gabon's large mature fields.

#### Downstream

Gabon's downstream sector is very small; the country has one refinery, the Sogara Refinery located at Port-Gentil. After experiencing losses for the past five years, the refinery boosted the production of refined petroleum products by 59 percent in 2010. According to Sogara's general manager, output increased to more than 18,500 bbl/d from about 11,650 bbl/d in 2009. *OGJ* estimates that the refinery's capacity is 24,000 b/cd. Total SA owns about 44 percent of Sogara, the Gabonese government controls about 25 percent, and the remainder is owned by a consortium of companies. Sogara produces petroleum products for export and also supplies the domestic market with kerosene, butane, and gasoil.

### **Exports**

About 90 percent of Gabon's crude oil is exported, since the country's domestic petroleum consumption is minimal at 18,000 bbl/d in 2010. Crude oil exports consist of Rabi Light and the Mandji blend and have accounted for 80 percent of Gabon's total exports on average for the last five years. EIA estimates that in 2010, Gabon exported about 225,000 bbl/d of crude oil of which almost half went to the United States. Other top export destinations are the European Union and Malaysia.

### **Natural Gas**

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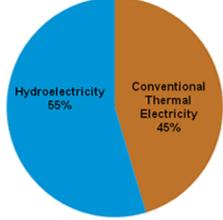
Gabon has 1 trillion cubic feet (Tcf) proven natural gas reserves, according to *OGJ*. The country's natural gas resources have not been exploited because Gabon lacks the infrastructure to utilize the natural gas for domestic industry or electricity generation. Nearly all the associated natural gas produced is vented and flared or reinjected. The country produces 73 billion cubic feet (Bcf) of natural gas and only 3 Bcf is consumed by the local market. Power plants in Libreville, Gabon's capital city, and Port-Gentil, the petroleum hub, consume the most gas in the country.

The latest gas developments in Gabon were initiated by Perenco. In 2005, Perenco agreed to supply gas to various power plants, and since then, the company has installed a network of gas pipelines from the Ganga Field to provide more power to Libreville and Port-Gentil.

# **Electricity**

Société d'Electricité et d'Eaux du Gabon (SEEG), Gabon's national utility company, owns and runs Gabon's electricity sector. The French Company Vivendi currently owns 51 percent of SEEG and is responsible for electricity generation and distribution in Gabon. Conventional thermal power and hydroelectricity account for nearly all of the country's installed generation capacity. According to EIA estimates in 2009, hydroelectricity net generation is 0.9 Billion kilowatthours (KWH) and thermal electricity net generation is 0.7 Billion KWH.

# Total Electricity Net Generation in Gabon, 2009



Source: U.S. Energy Information Administration, International Energy Statistics

### **Sector Organization**

Gabon's urban areas consume a majority of the power generated, while electricity access in rural

Gabon contains substantial natural gas reserves but is currently constrained by the lack of available foreign investment and natural gas export pipeline infrastructure. Gabon also serves as a transit country for gas from Turkmenistan to Russia and China.

areas remains low. As of 2009, Gabon's electrification rate was 36.7 percent and 900,000 people were without electricity, according to the International Energy Agency. Gabon has approximately 6,000 MW of undeveloped hydropower potential, which if exploited, could substantially increase the country's electrification rate.

Gabon recently launched a plan to develop the electricity sector with the construction of six power plants and 5,000 kilometer transmission lines. The first project anticipated to come online in early 2013 is the 160-MW Poubara hydroelectric dam on the Ogooué River, which is being built by China's Sinohydro. The hydro plant is expected to supply power to regional manganese mining and for exports to Congo (Brazzaville). Paris-based Bouygues also began construction of a 40-MW hydroelectric dam in northern Gabon in December 2010 and completion is expected in about two years. Gabon recently released plans to build a 180-MW hydroelectric dam in the southern part of the country as well.

# Links

### **EIA Links**

EIA - Country Information on Gabon International Energy Statistics

### **U.S. Government**

CIA Factbook - Gabon
U.S. State Department - Gabon
U.S. Embassy in Gabon

### **Foreign Government**

Official Portal of the Gabonese Republic

### **International Companies**

Total Shell Perenco Addax

#### General

BBC Gabon
Africa Focus & AllAfrica on Gabon
African Economic Outlook: Gabon
World Bank- Gabon

# **Sources**

Asia Pulse

**BBC** Worldwide Monitoring Caspian Petroleum Investor Central Asia Newswire China National Petroleum Co. **Dow Jones** FSU Oil and Gas Monitor Heren Energy IHS Global Insight International Crisis Group International Monetary Fund International Oil Daily National Oceanic and Atmospheric Administration (NOAA) **Nefte Compass** Oil and Gas Journal PFC Energy Platt's Oilgram News Reuters Riazone Russia Petroleum Investor U.S. Energy Information Administration The World Bank

## **Contact Info**

cabs@eia.gov (202)586-8800 cabs@eia.gov