

Republic of Congo – Energy sector



Congo's economic development is centered around the oil sector which accounts for 90% of exports and 65% of GDP.

Until now, upstream oil activity has mainly been offshore, where about 80% of the hydrocarbons are produced. In recent years, with the M'Boundi field, onshore activity has become a major aspect of Congo's energy sector and will grow in importance with the future Gas Monetisation projects implemented by Eni.

With some 240,000 Bopd, Congo is the fifth largest Sub-Saharan oil producer after Nigeria, Angola, Sudan and Equatorial Guinea.

Congo has proven oil reserves of 1.6 billion barrels and about 3.2 trillion cubic feet (TCF) of gas, according to the Oil and Gas Journal and in 2008 national hydrocarbon production will be about 290,000 barrels per day after the start-up of the new Moho-Bilondo (Total), Ikalou-Ikalou Sud and Awa-Paloukou (Eni) fields.

On 31 May 2007, the Congolese government issued decree 2007-294 which established the rules for the use and monetisation of the gas and requires oil companies to propose solutions to reduce gas flaring (target: zero flaring by 2012¹).

Some Energy Figures

Parameters	Unit of measurement		Year
Gas consumption	Million m ³	115.1	2005
Oil consumption	K bbl/day	7.0	2005
Gas reserves	TCF	3.2	2006
Oil reserves	Billion bbl	1.5	2006
Gas production	Million m ³	115.1	2005
Oil production	K bbl/day	235.9	2007
Oil exports	K bbl/day	229.7	2004
Electricity production	Billion kWh	5.2	2005
Domestic electricity consumption	Billion kWh	7.3	2005
Electricity imports	Billion kWh	1.8	2005

Source: World Fact Book –www.cia.gov

¹ Source: www.eia.doe.gov

Eni's presence in the Country

Eni has been present in the Republic of Congo since 1969, with the creation of Agip Recherches Congo (ARC), now Eni Congo S.A. Through this vehicle Eni began exploring for oil and gas offshore from Pointe Noire over an area of 9,797 km².

In the Congo, where exploration and production are currently regulated by Production Sharing Agreements (PSAs), Eni operates both offshore and onshore. The main offshore fields operated by Eni are:

- Zatchi and Loango in the Madingo Permit
- Kitina in the Marine VII Permit
- Djambala, Foukanda and Mwafi in the Marine VI Permit

Moreover, Eni is a partner in the fields operated by Total in the Pointe Noire Grand Fonde (PNGF) and PEX permits.

Eni also has an offshore presence in the Mer Très Profond Nord, Marine X and Marine XII, Mer Très Profond Sud (operated by Total) exploration blocks. As part of Mer Très Profond Sud permit, exploration discovered Andromede in 2001, Pegase Nord in 2004, Aurige Nord in 2006, Cassiopee East in 2007 and Persee NE in 2007.

In relation to onshore activities, following the acquisition of the production and exploration assets of Maurel & Prom in 2007 and of Burren in January 2008, Eni took operatorship of the M'Boundi and Kouakouala A fields and of the Le Koilou exploration permit. Through Burren, it acquired a 37% equity investment in the La Noumbi exploration permit (operated by M&P). In 2008 onshore production is expected to be 43,000 Bopd (100% values), which will increase in the future as a result of the planned interventions to improve the recovery factor by using water injection.

In 2007 Eni, as an operator, provided approximately 35% of Congo's oil production; if non-operated oil is added, it amounts to 64%. Eni's current total operated production is approximately 100,000 barrels of oil equivalent per day, while the total equity production amounts to about 86,000 barrels per day.

Current offshore developments include Awa Palokou in the Marine X permit, where start-up is expected in July 2008 and Ikalou-Ikalou Sud in the Madingo permit, which started up in December 2007. In May 2006, Eni signed a letter of intent for the research and development of the potential gas in the Marine XII block, where Eni took operatorship in April 2007.

In relation to the electricity sector, Eni has built, on behalf of the government, the 25 MW electrical power station in Djeno. The facility came on line in 2002 and is fed by the associated gas provided by the Kitina field (Marine VII permit) and is the first example of associated gas monetization in Congo.

Finally, within the acquisition of the M&P assets in May 2007, a letter of intent was signed whereby Eni Congo is committed to doubling the capacity of the electrical power station in Djeno from 25 MW with a second turbo generator that will be fed by the associated gas from the M'Boundi field. Start-up of the power station is expected for the end of 2008.

Eni's contribution to the country's development

Health



In 2005, the laboratory for molecular biology and serology for the diagnosis of mother-child transmission of the HIV virus was inaugurated in Pointe Noire at the Hôpital des Armées. Completion of the laboratory was a key milestone in the project for the diagnosis and treatment of infection from mother-infant transmitted HIV established by Eni in 2004 in collaboration with the *Infectious Diseases Clinic* of the University of Genoa. The initiative was included in the Congolese National Health Plan to fight AIDS. With the help of the measures adopted, 98% of the children born within the framework of the applied health protocols were HIV free. As part of the project doctors from the University of Genoa were present in Pointe Noire to handle the specialist clinical activities and to train local health workers.

Eni and the university of Genoa plan to work towards expanding activities to other healthcare establishments and mother-child transmittable diseases. In Dolisie, 150

kilometers northeast of Pointe Noire, Eni has restructured and renovated the gynecology and maternity wards of the local hospital that serves the region of Niari.

Social development



Eni has completed a pilot project to introduce the cultivation of rice into the Cuvette region in the Oyo district. This will promote new agriculture prospects and create an innovative model for working the land. The general objective is to contribute to reducing the country's deficit in rice production. At present Congo is forced to import because of a lack of resistant rice varieties and suitable technology necessary to cultivate crops. Current rice consumption in the Congo is estimated at 25,000 tons/year, the majority of which is imported.

The pilot phase, which started in October 2004 in collaboration with the West African Rice Development Center (WARDA) and the local authorities, completed successfully in May 2005. It provides support to local farmers for the reintroduction of rice cultivation and the restoration of the seed stocks that were destroyed during the war.

Furthermore, the construction of a center for the treatment and preparation of rice in Edou has helped to meet the nutritional needs of the district. From the beginning, the initiative has involved local agronomist technicians and workers and will therefore will enable them to apply the cultivation techniques and the acquired knowhow.

Health, Safety and the Environment (HSE)

Eni, through its subsidiary Eni Congo, has always been committed to improving HSE performance and ensuring compliance with best practice standards in relation to health, safety and the environment.

Eni Congo has adopted an integrated HSE Management System, which in 2003 was certified ISO14001 for the environmental aspects. The OHSAS18001 certification for health and safety aspects is the 2008 target.

This Management System covers the activities of the main office in Pointe Noire and the offshore operations. Its extension is planned to also include recently acquired assets, which are predominantly onshore.

Eni in Congo - Milestones

- 1968 signing of the *Convention d'Etablissement* (Concession Agreement);
- 1969 establishment of Agip Recherches Congo (ARC);
- 1977 production begins in the Loango field;
- 1988 production begins in the Zatchi field;
- 1995 move away from concessions to PSAs;
- 1997 production begins in the Kitina field;
- 2000 production begins in the Djambala field.
- 2001 production begins in the Foukanda and Mwafi fields; Discovery of Andromede MTPS (30% Eni Congo – operator Total). This is the first ultra deep offshore discovery in Congo;
- 2004 discovery of Pegase Nord MTPS (30% Eni Congo - operator Total);
- 2006 Eni signs an agreement (*Protocole d'Accord*) for research and the monetisation of potential gas in the Marine XII permit by constructing a 300 MW electrical power station. Discovery of Aurige Nord –MTPS (30% Eni Congo, operator Total);
- 2007 Eni Congo is awarded the operatorship of the Marine XII permit; acquisition of the M&P onshore assets; signing of the *Accord Particulier M'Boundi* (private agreement) that grants Eni ownership of the associated gas;
- 2008 acquisition of Burren Energy.

