



ANAPI

Democratic Republic of Congo Investment Promotion Agency

Energy Investment Opportunities

The Democratic Republic of the Congo (DRC) has a vast renewable energy potential, with its notable resources in the biomass, wind, solar and biofuel sectors. The country's energy potential is approximately 37% of Africa's total potential and 6% of the world's total. Additionally, when it comes to hydropower, the Congo River has a usable energy potential estimated at 100,000 MW across 780 different development sites.

The total installed energy capacity in the DRC is estimated at 2,516 megawatts (MW), but actual production is approximately 6,000-7,000 GWh annually. The country's electrification rate remains low at 9.6% and the Congolese government's goal is to increase the level of service to 32% in 2030, particularly by encouraging private investment in the sector through new codes and reforms.

Recently, the government has made progress toward attracting foreign investment in the energy sector in three major ways:

1. Liberalizing the sector to allow investment by private partners;
2. Implementing public-private partnerships in projects in great Katende, Kakobola, Zongo II and others; and
3. Engaging in a public-private partnership between the DRC and South Africa for the construction of the Inga III plant, which has a capacity of 4,500 MW.

Moving forward, a priority of the DRC government and a key opportunity for investors is the development of energy highways along the following routes:

- Inga Site → Gabon → Cameroon → Nigeria → Mali
- Inga Site → Central Africa → Chad → Libya
- Inga Site → Angola → Namibia → Botswana → South Africa
- Inga Site → South Africa → Sudan → Egypt
- Inga Site → Malawi → Zambia → Zimbabwe → Lesotho

Additionally, each of the DRC's various provinces have tremendous energy potential, providing key opportunities for investment. Below is a breakdown of energy potential in various sectors by province:

Kinshasa

- Solar potential: varies between 3.22 and 4.89 kWh/m²/day
- Wind potential: average wind speed measured at 10 m height is 1.3 m/second
- Electrification rate: 44.1%

Katanga

- Solar potential: average sunshine amounts to 6.5 kWh/m²/day

- Wind potential: average wind speed is over 5m/second
- Total current installed capacity: 567 MW; current demand: ~900 MW (including 600 MW solely for the mining sector)

Bas-Congo

- Hydropower potential: estimated at 560,640 GWh per year (Inga site alone is 69% of this potential)

Province Orientale

- Overall potential: 7200 MW (among sites currently identified)
- Electrification rate: 3.6%

Kasaï Oriental

- Solar potential: varies between 4.4 and 5.14 kWh/m²/day
- Total installed capacity as of 2012: 1.94 MW; demand as of 2012: 264.774 MW
- Electrification rate: 0.5%

Kasaï Occidental

- Solar potential: varies between 5.16 and 5.26 kWh/m²/day
- Hydroelectric potential: 103 MW
- Total current installed capacity: 31.7 MW
- Electrification rate: 1%

Nord-Kivu

- Solar potential: varies between 4 and 5.5 kWh/ m²/day
- Biomass potential: the annual producible energy can reach 76,583.74 MWh
- Natural gas potential: 57 billion Nm³
- Electrification rate: ~3.1%

Sud-Kivu

- Solar potential: 5 kWh/m²/day
- Hydroelectric potential: 1050.00 MW
- Biomass potential: 109 878.88 MWh/year
- Natural gas potential: 57 billion Nm³
- Electrification rate: 7.9%.

Maniema

- Solar potential: varies between 3.5 and 6.75 kWh/m²/day
- Total available production: 2.1MW
- Electrification rate: 3.0%

Bandundu

- Solar potential: varies between 4.5 and 7 kWh /m²/day
- Hydroelectric potential: ~104 MW
- Total current installed capacity: 22.66 MW; current demand: 431.01MW
- Electrification rate: 0.6%

Equateur

- Solar potential: varies between 5 and 5.5 kWh/m²/day
- Biomass potential: 426, 085 MW (about 40 million hectares of forest)

- Electrification rate: ~1.4%