

# Identifying Opportunities in Angola's Renewable Energy Sector

July 21, 2022



With Angola aiming to improve its electricity access rate to 60%, renewable energy sources including wind, solar, hydrogen, hydropower and natural gas will play a critical role in moving the country towards this goal.

While hydropower already accounts for nearly two-thirds of Angola's installed power generation capacity, new renewable energy sources carry the potential to further expand the country's generation capacity and boost rural and urban electrification rates alike.

## Solar

Angola has an opportunity to add up to 55 GW of new generation capacity and strengthen its supply network. To take advantage of this potential, the Angolan government is implementing a series of public-private partnerships to enable project financing, while opening the market to private sector participation. Angola's Ministry of Energy and Water, for example, is deploying 30,000 off-grid systems with a total capacity of 600 MW, while the U.S government has committed to invest two billion dollars in solar power project rollouts.

## Hydropower

Despite having 47 potential watersheds, only five percent of the country's hydropower potential is currently being exploited. If fully optimized, Angola's hydropower sector has the potential to increase power generation capacity by 18 GW through the deployment of large-scale hydropower projects along the Kwanza, Cunene, Catumbela and Queve rivers.

#### Wind

The country's high wind speeds provide favorable conditions for the deployment of power generation projects, which could add up to 3 GW of capacity, helping to strengthen the country's grid network.

#### Rural electrification

Through a wide range of policies and programs, such as the National Program for Rural Electrification of Rural Areas and the 2025 Angola Long Term Strategy, Angola has set a target to achieve rural electrification rate of 60% by 2025, providing an opportunity for increased renewable-based mini-grids for rural consumers.

# Green hydrogen

Angola is also positioning itself ahead of the energy transition through green hydrogen development and exploitation. State energy firm Sonangol is driving these developments, having signed an agreement with German firms, Gauff Engineering and Conjuncta, for the construction of a facility that will produce 280,000 tons of green ammonia for export from 2024.

### **Natural** gas

With natural gas considered to be a relatively clean burning fuel, increasing Angola's gas reserves on the back of rising investments in exploration activities continues to expand opportunities within the country's natural gas sector. In this regard, low emissions and large-scale liquefied natural gas projects (LNG), such as the \$2-billion Soyo LNG plant and the Chissonga, Agogo and Cameia-Golfinho gas projects, will not only enhance the country's energy security, but also open the market to increased investments.

https://energycapitalpower.com/angola-opportunities-renewable-energy/