

Energy

Sector Report, Africa: DECEMBER 2024

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Monthly Overview

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Africa's Growth Amid Transition:

Over the past month, the global energy sector has remained dynamic, shaped by economic trends, the Russia-Ukraine war, and the accelerating transition to renewables. Oil and gas prices fluctuated in response to OPEC+ supply adjustments and shifting demand across major economies.

Africa's energy sector experienced steady growth in oil and gas production over the past month, fuelled by strong export demand and continued exploration activities, despite global price volatility. While the sector shows promise, persistent challenges such as infrastructure deficits and regulatory hurdles remain. In renewable energy, Morocco and Egypt continue to lead with notable advancements in solar, wind, and hydro projects, reflecting Africa's commitment to improving energy access and driving a transition toward sustainable solutions.

Select Energy Prices:

Crude Oil:

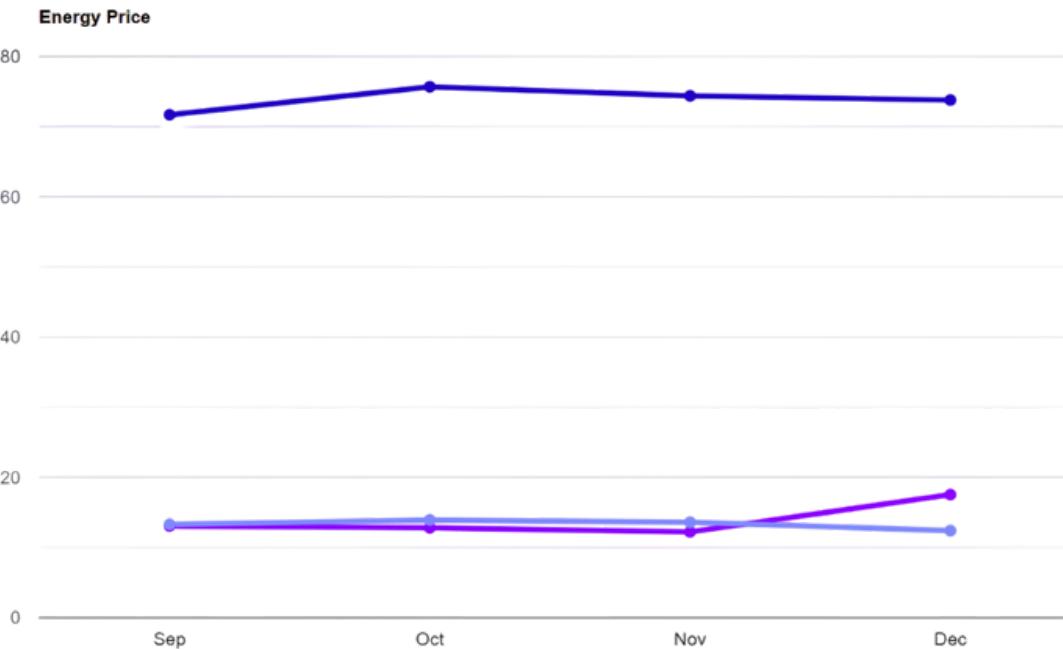
- Africa plays a crucial role in the global crude oil market, accounting for about 8% of global production, with leading producers such as Nigeria, Angola, Algeria, Libya, and Egypt driving output to meet global demand. Beyond generating revenue, crude oil underpins infrastructure development, job creation, and economic growth across the continent. With significant investments in exploration and production, Africa is strategically positioned to meet the rising energy demands of rapidly growing markets like China and India.

Natural Gas:

- Africa remains a key player in global natural gas markets, with leading producers such as Algeria, Egypt, Nigeria, and Mozambique leveraging some of the world's largest reserves. Recent LNG developments, including the commencement of production at Mozambique's Rovuma LNG project in 2024, underscore the continent's rising prominence, positioning Africa as a top exporter to Europe and Asia, solidifying its role as a key player on the global energy stage.

Coal:

- Coal plays a significant role in Africa's energy landscape, with South Africa and Mozambique as leading producers. Despite the global shift towards decarbonisation, many African nations, including South Africa, continue to depend heavily on coal for electricity generation. As a major global exporter, coal provides reliable power, supports industrial growth, creates jobs, and generates substantial government revenues, whilst addressing the continent's rising energy demands.



| | | SEPTEMBER 2024 | OCTOBER 2024 | NOVEMBER 2024 | DECEMBER 2024 |
|-------------|-----------|----------------|--------------|---------------|---------------|
| Crude Oil | (USD/boe) | 71.7 | 75.7 | 74.4 | 73.8 |
| Natural Gas | (USD/boe) | 13.05 | 12.80 | 12.21 | 17.53 |
| Coal | (USD/boe) | 13.3 | 13.92 | 13.59 | 12.39 |

The price of crude oil declined slightly in December, likely due to reduced global demand following peak winter heating needs or increased supply. Seasonal factors and macroeconomic pressures could have also contributed to the stabilization in oil markets.

Natural gas experienced a significant price increase, which was driven by heightened winter demand for heating in major markets. Supply constraints or geopolitical factors affecting gas trade routes may have further exacerbated the price hike.

Coal prices fell as demand eased after peak winter usage, and renewable energy sources might have contributed to reduced coal reliance. Additionally, increased Australian coal production or export competition could have added downward pressure on prices.

December's energy price shifts hit Africa hard, with soaring natural gas costs exacerbating energy shortages and economic pressures, although the relative stability of crude oil prices and falling coal prices provided limited relief.

Industry Milestone 1

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Nigeria's Dangote Refinery achieved a significant milestone by exporting its first petrol shipment to Cameroon.

Context:

In December 2024, the Dangote Refinery achieved a historic milestone by exporting its first petrol shipment to Cameroon. This marks a major step for Africa's energy sector, highlighting the continent's growing capacity to refine and export petroleum. With rising demand for fuel, strategic infrastructure investments, and economic diversification efforts, Africa is cementing its role in the global energy market.

Significance:

The Dangote Refinery's petrol export to Cameroon represents a pivotal development for Africa's downstream oil market, positioning Nigeria as a key player and fostering regional economic integration. The refinery's export meets Cameroon's annual fuel demand of 1.2 million metric tons, reduces dependency on distant suppliers, and ensures a reliable and strategic energy supply. This milestone emphasises the potential of African resources being processed and utilised within the continent, paving the way for stronger economic resilience. The Dangote Refinery's role in this shift is pivotal, showcasing how strategic investments in infrastructure can drive job creation, economic diversification, and regional collaboration.

Key Potential Beneficiaries:

Nigeria's Energy Sector - The Dangote Refinery boosts Nigeria's economic diversification by adding value to crude oil exports, earning foreign exchange, and reducing reliance on oil sales. It strengthens Nigeria's role in regional markets while creating jobs across refining, logistics, and distribution, fostering skill development and long-term growth.

Cameroon's Economy - Cameroon benefits from stabilised fuel prices, lower import costs, and enhanced energy security. Reliable fuel supply supports industrial development and reduces dependence on distant suppliers, boosting economic activity across the country.

Regional Integration - This milestone strengthens Nigeria-Cameroon economic ties and showcases the potential of intra-African trade. By processing resources within Africa, the initiative enhances regional self-sufficiency and resilience, driving collaboration and shared prosperity.

Relevant Data:

- Dangote Refinery Capacity: Largest refinery in Africa.
- Cameroon's Fuel Demand: 1.2 million metric tons annually.
- Fuel Import Amount: Approximately 60,000 metric tons exported in the first shipment.
- Economic Contribution (Nigeria): Adds value to crude oil exports and earns foreign exchange.
- Job Creation (Nigeria): Jobs created across the supply chain in refining, logistics, and distribution
- Economic Impact (Cameroon): Stabilised energy prices and reduced reliance on imports.

Industry Milestone 2

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Third Way Investment Partners Surpasses \$158 million in Renewable Energy Investments:

Context:

By December 2024, Third Way Investment Partners surpassed \$158 million in renewable energy investments, supporting South Africa's goal of 40% renewables by 2030. Spanning 64 projects across six provinces, these investments have added 5.1 GW of solar, wind, and hydro power to the grid.

Significance:

This milestone represents a critical step in tackling South Africa's persistent energy challenges, including rolling blackouts (load-shedding) caused by aging coal-fired plants and years of economic mismanagement.

By expanding renewable energy capacity, these projects stabilise the power grid, reduce the frequency of power outages, and advance the country's net-zero emissions goal for 2050.

Furthermore, they stimulate economic growth through infrastructure development and job creation, contributing to long-term sustainability.

Relevant Data for Visualisation:

- Total Investment: \$158 million in renewable energy projects.
- Renewable Energy Goal: Supports South Africa's target of 40% renewables by 2030.
- Project Coverage: 64 renewable energy projects across 6 provinces.
- Energy Capacity Added: 5.1 GW from solar, wind, and hydro power.

Key Potential Beneficiaries:

Local Business: Reliable energy supply reduces disruptions to operations, allowing businesses to maintain consistent productivity and lower operational costs from reduced reliance on expensive alternative energy solutions, such as diesel generators; enhancing profitability, particularly for SMEs who are most vulnerable to power outages.

Consumers: Greater energy stability ensures improved daily living conditions for South Africans by mitigating the inconvenience and unpredictability of load-shedding.

Government: Alleviating the strain of energy shortages enables the government to focus on broader development goals, boosting investor confidence in the nation's economic recovery.

Industry Trends: Challenges & Opportunities

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Rising Investments in Renewable Energy

In December 2024, Africa experienced a surge in renewable energy investments, signalling the continent's shift towards cleaner energy solutions. Total investments in renewable energy projects for the month reached \$1.3 billion, reflecting a 5% increase from November 2024. Solar energy dominated, capturing 60% of the total funding, while wind projects accounted for 30%.

South Africa and Morocco emerged as leaders, exemplifying Africa's growing commitment to renewable energy adoption.

For example, South Africa achieved notable progress with a 150 MW increase in wind energy capacity in December, driving a 7% month-on-month rise in wind energy generation. Additionally, the expansion of the Battery Energy Storage System (BESS) project by 200 MW significantly enhanced grid stability, reducing peak-hour electricity disruptions by 15%. These advancements showcase South Africa's determination to integrate renewables into its energy grid.

Similarly, Morocco reported a 10% increase in solar energy output compared to November 2024. The Noor Ouarzazate Solar Complex alone generated an additional 45 GWh, solidifying the country's status as a regional solar energy leader.

Key Drivers:

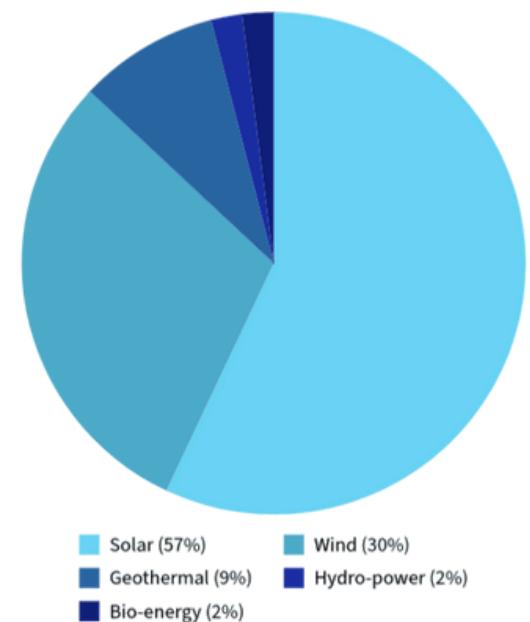
- **Government Initiatives** - Increased policy support and financing for renewable energy projects in South Africa and Morocco have been pivotal in advancing clean energy targets.
- **Technological Advancements** - Expansions in wind turbine efficiency, solar panel productivity, and grid storage systems are enabling higher energy outputs.
- **Key Projects**
 - **South Africa** - BESS capacity expanded by 200 MW, contributing to a 15% reduction in peak-hour disruptions.
 - **Morocco** - The Noor Ouarzazate Solar Complex, generating 45 GWh in December alone.

Relevant Data:

- Investment Growth: \$1.3 billion total renewable energy investments, a 5% increase month-on-month.
- Key Project Outputs: 150 MW of new wind energy in South Africa and a 10% solar output rise in - Morocco.
- Energy Storage Impact: 200 MW BESS expansion in South Africa, reducing disruptions by 15%.

Renewable Energy Investments

Shares of renewable energy investment in Africa by technology



Key Challenges:

- **Infrastructure Deficits** - Limited transmission infrastructure in rural areas impedes the distribution of renewable energy to underserved regions.
- **Policy Delays** - The complex regulatory framework required for the implementation of large-scale renewable projects slows down the speed in which projects often slow the approval process for large-scale renewable projects.
- **Economic Constraints** - High start-up costs of renewable energy technology remain a barrier for nations with low fiscal budgets.

Potential Solutions:

- **Donor Support and International Financing** - Secure funding from international financial institutions, such as the African Development Bank (AfDB) and the World Bank, to accelerate rural energy infrastructure development.
- **Standardised Policies** - Implement regional policy frameworks, such as those proposed by the African Union, to harmonise regulations across borders and streamline processes for developers operating in multiple countries.
- **Subsidies and Tax Incentives** - Introduce targeted subsidies or tax relief for renewable energy technology imports, local manufacturing, and project development to reduce initial capital costs.

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Glossary:

1. LNG (Liquefied Natural Gas)

Natural gas cooled to liquid form for transport and storage.

2. BESS (Battery Energy Storage System)

Advanced storage technology that holds excess energy for use during high-demand periods

3. Energy Availability Factor (EAF)

A measure of how often power plants are operational and able to meet energy demands.

4. Integrated Resource Plan (IRP)

South Africa's strategic roadmap for diversifying its energy mix, aiming for 40% renewable energy by 2030.

5. Noor Ouarzazate Solar Complex

One of the largest solar energy installations globally, located in Morocco. The complex symbolizes Africa's leadership in renewable energy, producing an additional 45 GWh of solar energy in December 2024.

6. Intra-African Trade

Economic trade between African countries, such as Nigeria's Dangote Refinery exporting petrol to Cameroon. This trade reduces reliance on external markets and promotes regional economic resilience and integration.

7. Energy Transition

The global movement from fossil fuels to cleaner energy sources. Africa's energy transition involves significant investments in renewables like solar and wind while addressing infrastructure and funding challenges.

8. Decarbonisation

Reducing carbon emissions by shifting from coal and other fossil fuels to renewable energy. Africa's efforts, like Morocco's solar projects and South Africa's renewable investments, are key to this global trend.

9. OPEC

Organisation of Petroleum Exporting Countries

