

What Investors Want to Know: Colombian Energy and Power Utilities

Natural Gas Supports Hydrocarbon Outlook Amid Energy Transition



Prices and Contract Pipeline Support Oil and Gas Industry

Colombia's crude oil reserves are expected to be flat or decrease slightly in the next few years, and the lack of bidding rounds for new exploration licenses raises questions about the industry's longevity. Strong crude prices and a robust pipeline of existing contracts will support the energy industry in the short and medium terms, but in the longer term, sizable offshore findings and the worldwide preference for natural gas as the fuel of the energy transition will power Colombia's economy and hydrocarbon industry.

Adverse Regulatory Conditions Weigh on Power Utilities

Colombia's utilities sector continues to face adverse regulatory developments that create uncertainty and discourage private investment to guarantee the expansion and the quality of the country's electric system. Fitch Ratings estimates generation capacity needs to grow by 1 gigawatt (GW) annually to meet growing demand and maintain current reserve margins. This assumes expansion is provided by solar projects valued at USD800 million per installed GW. Additional firm capacity will be required beginning in 2026.

[What Is the Outlook for Crude Oil and Natural Gas Production?](#)

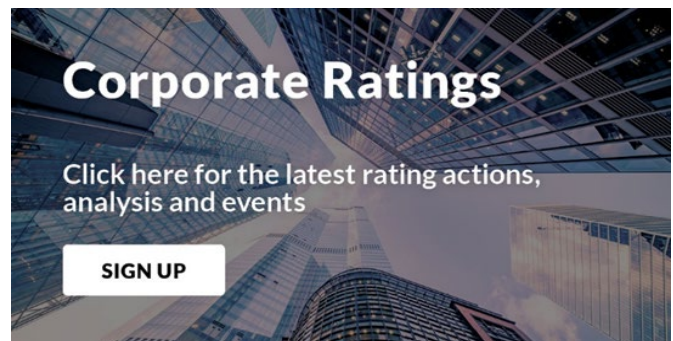
[How Is the Energy Transition Expected to Affect the Sector?](#)

[What Are the Current Strategies of Independent Oil Producers?](#)

[What Are the Main Challenges Facing Power Utilities?](#)

[How Prepared Is the Colombian Power Sector to Face El Niño?](#)

[What Are Generation Expansion and Investment Needs?](#)



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What Is the Outlook for Crude Oil and Natural Gas Production?

According to Colombia's National Hydrocarbon Agency, proved (1P) crude reserves at YE 2022 were 2.1 billion barrels, which at current production rates imply reserve life of 7.5 years, while 1P natural gas reserves were estimated at 2.82 trillion cubic feet (Tcf), for reserve life of 7.2 years, should production remain at 0.39Tcf annually. Fitch estimates the development of proved and probable (2P) and proved, probable and possible (3P) reserves could add one year to crude oil's 1P reserve life and four years to natural gas.

Reserves did not grow significantly in the last few years; average replacement rates barely exceeded 100%. However, Colombia is not running out of hydrocarbons. Over 200 exploration contracts still allocated among producers could sustain the industry for a few more years. Promising new offshore Caribbean gas discoveries and studies for deep-water basins could change Colombia's energy matrix and export basket by the end of this decade.

Colombia's government has endorsed policy measures that support environmental protection and the development of value-added industries such as manufacturing and IT. These priorities signal efforts to steer the Colombian economy away from extractive activities. Toward that end, the government enacted a windfall tax on the industry in 2022 and announced plans to bring new bidding rounds for exploration licenses to a complete halt. Neither measure will have a deep impact on Colombian producers given strong oil prices, good liquidity and a robust contracted exploration pipeline.

How Is the Energy Transition Expected to Affect the Sector?

The global adoption of natural gas as the bridge fuel of the energy transition will drive industry growth in the next decade. Colombia has established its commitment to decarbonization, with leading oil and gas company Ecopetrol S.A. (BB+/Stable) developing natural gas reservoirs for the transition and nontraditional renewable sources, including solar, wind and hydrogen. There is little question that energy transition in Colombia needs to be funded by the hydrocarbon industry, as it has the largest financial and technological resources at its disposal.

Although Colombia has ample natural gas potential, the development of gas reserves will require costly investments of time and capital. In the short term, Colombia will still need to rely on crude to meet its energy needs, especially for transportation, and to maintain economic growth, government spending and foreign currency inflow.

The possibility of fueling the energy matrix entirely by renewable sources is, at this point, unrealistic, given the low reliability of wind and solar generation and the lack of robust electric infrastructure throughout the territory. In the long term, natural gas will supply that reliability, and that provides a positive outlook for the hydrocarbon industry.

What Are the Current Strategies of Independent Oil Producers?

As reserves dwindle, independent producers are considering their approach to organic and inorganic growth. Organic growth would entail more aggressive exploration and drilling, which would allow producers to increase reserves and develop findings. Should bids for new exploration licenses become limited or non-existent, having a robust pipeline, like what is currently in place, would be a welcome mitigant that provides opportunities for companies to continue operating in the medium term.

Inorganic growth takes two forms: consolidating within the country and seeking opportunities abroad. The strong prices that have propped up the industry since 2021 and enhanced producers' cash positions, balance sheet structures and access to capital support the pursuit of M&A. High interest rates may delay M&A, but as they are expected to ease in the next 12-18 months, some activity, including the formation of joint ventures and other partnerships, is likely to take place.

What Are the Main Challenges Facing Power Utilities?

Adverse regulatory actions that the government has taken since late 2022 to curb inflationary pressures on tariffs for end users have created higher uncertainty for market participants. In Fitch's view, these have discouraged the investment in new electricity generation capacity required to attend to the growing mismatch between energy demand and necessary system expansion, which is pushing up energy prices in the spot market well above historical levels. Electricity prices in the spot market averaged COP963/kWh in September 2023, compared with COP257/kWh in August 2022 and COP110/kWh in August 2021. This might be exacerbated should El Niño climate phenomena materialize in 4Q23.

Distribution companies face difficulties from the application of the "tariff option" and temporary measures prompted by the government to limit tariff increases to Colombia's CPI. These prevent distribution companies from properly passing through increased energy costs and inflationary pressures to end users. Increased working capital needs have been funded with debt at prevailing higher financing costs, impairing distribution companies' cash flows from operations and financial positions. Accrued receivables reached COP7.2 trillion as of July 31, 2023, with the potential to amount to COP10.5 trillion by YE 2023, according to Asocodis, the union that brings together Colombia's main distribution companies. This has potential to impair the financial viability of the country's smaller and more vulnerable distribution companies.

How Prepared Is the Colombian Power Sector to Face El Niño?

Fitch believes the system is well prepared for expected El Niño climate effects, based on the country's available firm capacity, which would enable it to meet projected demand under severe dry hydrological conditions. The country's firm capacity averages 240 gigawatt-hours (GWh)/day, relative to average demand of 225GWh/day. Generation companies with storage capacity are

managing their reservoirs to withstand the dry season coming in November. Colombia's aggregated reservoir levels reached 81% of useful capacity (18,183MW) in August 2023, which would allow hydro generation to meet current demand for up to two months, assuming no water inflows.

On the other hand, thermal power plants have been anticipating preventive maintenance to be prepared for the expected higher generation and procuring required local natural gas or imported liquefied natural gas. Coal and natural gas-fired power plants made up roughly 23% of the country's total electricity generation in July and August 2023, which remains below maximums of 38% in February 2020. The country has 5.8GW of thermal power capacity, which has the potential to sustain approximately 59% of Colombia's electricity demand, assuming capacity factors of 90%.

What Are Generation Expansion and Investment Needs?

Colombia continues to face a mismatch between energy demand and required system expansion. Demand has been growing, up 3.5% yoy in August 2023, and the addition of sizable new generation capacity is not anticipated in the medium term. The country expects to add 600MW from units 3 and 4 of the Ituango hydroelectric project and 250MW from the combined cycle project expansion of the Termocandelaria natural gas-fired power plant by YE 2023.

As current electricity demand reached 78,000GWh/year as of August 2023, the country's generation will be required to provide approximately 2,350GWh/year. Assuming expansion is facilitated through solar photovoltaic and wind plants with average factor plants between 20%-25%, the system would need to incorporate approximately 1GW of new capacity to maintain current reserve margins. Fitch estimates the required capital investment needs could represent approximately USD800 million per year at USD800 per installed MW.

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