

RatingsDirect®

Research Update:

Ecopetrol S.A. 'BBB-' Ratings Affirmed; Outlook Remains Stable

Primary Credit Analyst:

Fabiola Ortiz, Mexico City (52) 55-5081-4449; fabiola.ortiz@spglobal.com

Secondary Contact:

Patricia R Calvo, Mexico City (52) 55-5081-4481; patricia.calvo@spglobal.com

Table Of Contents

Overview

Rating Action

Rationale

Outlook

Ratings--Subordination Risk Analysis

Ratings Score Snapshot

Related Criteria

Ratings List

Research Update:

Ecopetrol S.A. 'BBB-' Ratings Affirmed; Outlook Remains Stable

Overview

- Colombia-based oil and gas company Ecopetrol continues to post a solid financial performance and maintain production levels despite operating disruptions in 2017.
- We expect Ecopetrol to continue to benefit from favorable crude oil prices. We're affirming our ratings on the company, including our 'BBB-'long-term corporate credit rating. The stand-alone credit profile (SACP) remains at 'bb+'.
- The stable outlook reflects our view that Ecopetrol will continue to play a very important role in the Colombian economy and maintain its very strong link to the government.

Rating Action

On June 27, 2018, S&P Global Ratings affirmed its 'BBB-' long-term corporate credit rating on Ecopetrol S.A. The outlook remains stable. At the same time, we affirmed our 'BBB-' rating on its senior unsecured debt. The company's SACP remains unchanged at 'bb+'.

Rationale

The affirmation reflects Ecopetrol's solid financial performance despite slightly lower production in 2017. Despite the natural decline of the company's oil and gas fields and the attacks on the Caño Limon-Coveñas pipeline, which was out of operations for about half of the year, Ecopetrol maintained total production similar to the 2016 level. The production reached 715,000 barrels oil equivalent per day (boed) at the end of 2017. Nonetheless, higher oil prices and the company's cost discipline allowed it to report solid key credit metrics with a debt to EBITDA below 2x, EBITDA margins above 40%, and discretionary cash flow (DCF) generation.

The modernization of the Cartagena refinery and its recent stabilization stage have increased the company's downstream segment for a total throughput to about 359.4 thousand barrels of oil per day (Mbd) during the first quarter of 2018, a 18% increase compared with the same period of 2017. At its midstream segment, to mitigate the impact of the attacks on the Caño-Limon Coveñas oil pipeline, the company used the Bicentenario pipeline bi-directionally to prevent the generation of deferred production in the fields next to the

pipeline. We expect the company's downstream and midstream segments to post a solid operating performance in 2018.

The company will focus on expanding its reserve base through ongoing exploration projects in Colombia and outside the country. In 2017, Ecopetrol received license agreements to explore two shallow water blocks (blocks 6 and 8) in Mexico. This represents an opportunity for the company to expand its reserve base and quality of its oil production, which currently mostly consists of heavy oil. As of Dec. 31, 2017, Ecopetrol's proven hydrocarbon reserves totaled 1,659 mmboe. Although reserve replacement for the year was 126%, the three-year average reserve replacement continues to be low--at 41.7%--that is lower than that of other international companies and has been a key credit concern.

Our rating also reflects our assessment of a very high likelihood that the Colombian government will provide timely and sufficient extraordinary support to Ecopetrol under a financial distress scenario. We view Ecopetrol as playing a very important role in Colombia, given its position as the largest company in the country. Ecopetrol has a significant presence in Colombia's oil and gas sector, acts as the main supplier of oil-derived products in the domestic market, and has a very strong link with the government, which has the controlling ownership and strategic oversight despite the company's independent management. As a result, the company' rating benefits from one-notch of support from its SACP.

In line with company's strategy to focus on capital discipline, cash flow generation, cost efficiency, and profitable growth in the exploration and production (E&P) segment, we expect debt to EBITDA and DCF to debt to continue improving in 2018. This will be mainly stem from recovering oil prices, a lower spread between Ecopetrol's crude basket prices and Brent, and continued operating efficiencies.

Our base-case scenario assumes the following factors:

- A slight increase in production levels to approximately 725,000 boed in 2018. This will result from efficiencies in production facilities, mitigated by the natural decline of the fields, lower volume of gas sales, and the temporary closure of the Cano-Limon Covenas pipeline. For 2019, an output of 740,000 boed thanks to higher estimated capex mostly for the E&P segment and projects to increase the recovery factor of existing mature fields.
- Average realized sale price of \$58.5 per barrel of oil equivalent (boe) during 2018 and 2019. This price level ultimately depends on our price assumption for Brent crude oil at \$65 per oil barrel (bbl) for 2018 and \$60 per bbl for 2019, minus \$7 per bbl given the recent improvement of the Vasconia oil price. However, we expect a higher spread in 2020, resulting from changes in the International Marine Organization specifications for marine pollution stemming from crude and fuels with high sulfur content.
- The company to focus on achieving structural efficiencies, such as

continuing to reduce the dilution costs of heavy crude and implementing more efficient procurement and services strategies.

- Annual capex of \$3.0 billion \$3.5 billion in the next two years, of which 90% will be for E&P, because the company has finished all of its midstream and downstream projects.
- Dividend payments of around 40% for the next two years.
- The company to pay debt as it comes due.

These assumptions result in the following credit measures:

- EBITDA margin of more than 40% for the next two years;
- Adjusted net debt to EBITDAX (EBITDA plus exploration expenses) of about 1.4x in 2018 and 1.3x in 2019;
- Adjusted FFO to debt of 47% in 2018 and 48% in 2019; and
- DCF to debt of more than 10% for the next two years.

Liquidity

We continue to assess Ecopetrol's liquidity as strong, which benefits from a lower cost structure and more favorable oil prices. Our assessment reflects our expectation that the company's sources of liquidity will exceed its uses by more than 1.5x in 2018 and remain above 1x for the subsequent 12 months. Ecopetrol can withstand high-impact, low-probability events, has sound banking relationships and satisfactory access to capital markets.

Principal Liquidity Sources:

- Cash balances of about \$2.8 billion as of March 31, 2018;
- Cash FFO of slightly more than \$6.03 billion for the next 12 months; and
- Undrawn committed credit lines for \$335 million.

Principal Liquidity uses:

- Debt maturities of about \$910 million as of March 31, 2018;
- · Working capital outflows of \$510 million for the next 12 months;
- Capex of around \$3.2 billion for the next 12 months; and
- Dividends of about \$820 million for the next 12 months.

Outlook

The outlook on Ecopetrol reflects the stable outlook on the Republic of Colombia. We expect the company to continue to play a very important role in the Colombian economy and to maintain its very strong link with the government. Therefore, we believe that the ratings on Ecopetrol would most likely move in tandem with those on the sovereign.

Downside scenario

We will lower the ratings on Ecopetrol if we were to lower the sovereign ratings. We could lower our SACP if the company's production growth or oil prices are lower than expected, reducing EBITDA. A downgrade is also possible if Ecopetrol incurs additional debt, which could increase the company's debt metric to above 3.0x and DCF to debt is lower than 5%, leading to a revision of the company's financial risk profile to a weaker assessment.

Upside scenario

An upgrade will follow the same rating action on the sovereign. Additionally, the SACP could improve to 'bbb-' if we have see a longer track record of debt to EBITDA remaining below 1.5x, coupled with a DCF to debt at or above 15% amid oil price volatility.

Ratings--Subordination Risk Analysis

Capital structure

Ecopetrol's debt currently totals COP40.96 billion, consisting of several senior unsecured bonds with maturities between 2018 and 2045, and two subordinated unsecured notes maturing in 2020 and 2040. The debt at the subsidiaries' level (OCENSA, ODL, Bicentenario, and Bioenergy) totals about COP3.9 billion.

Analytical conclusions

Ecopetrol's unsecured debt at the subsidiaries level represents around 19% of the company's total debt, which is well below our priority debt ratio of 50%. As a result, we rate the senior unsecured notes 'BBB-', which is in line with the corporate credit rating.

Ratings Score Snapshot

Corporate Credit Rating
Global scale: BBB-/Stable/--

Business risk: Satisfactory
• Country risk: Moderately high

• Industry risk: Intermediate

• Competitive position: Satisfactory

Financial risk: Significant

• Cash flow/Leverage: Significant

Anchor: bb+

Modifiers

- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Liquidity: Strong (no impact)
- Financial policy: Neutral (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: bb+ Likelihood of government support: Very high Sovereign foreign currency rating: BBB-

Related Criteria

- Criteria Corporates General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Criteria Corporates General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria Corporates Industrials: Key Credit Factors For The Oil And Gas Exploration And Production Industry, Dec. 12, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Methodology For Crude Oil And Natural Gas Price Assumptions For Corporates And Sovereigns, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria Corporates General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria Corporates General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

Ratings List

Ratings Affirmed

Ecopetrol S.A.
Corporate Credit Rating
Senior Unsecured

BBB-/Stable/--BBB-

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditoortal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors, Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.