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Credit Opinion: **Ecopetrol S.A.**

Global Credit Research - 05 Aug 2014

Bogota, Colombia

Ratings

Category	Moody's Rating
Outlook	Stable
Issuer Rating -Dom Curr	Baa2
Senior Unsecured	Baa2

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Key Indicators

[1]Ecopetrol S.A.

	3/31/2014(L)	12/31/2013	12/31/2012	12/31/2011	12/31/2010
Average Daily Production (Mboe/d)	661.8	665.6	630.5	602.5	513.6
Proved Reserves (Million boe)	1,945.0	1,945.0	1,851.4	1,832.4	1,690.2
Total Crude Distillation Capacity (mmbbl/day)	335.0	335.0	335.0	335.0	335.0
EBIT/Average Book Capitalisation	27.6%	24.5%	30.1%	40.7%	25.3%
Downstream EBIT/Total Throughput Barrels (\$/bbl)	-\$919.1	-\$10,212.0	-\$5,191.8	\$1,032.5	-\$5,552.2
EBIT / Interest Expense	16.7x	17.5x	16.6x	35.8x	21.9x
Retained Cash Flow/Net Debt	60.1%	40.4%	188.6%	582.2%	131.6%
Total Debt/Capital	26.1%	23.0%	17.8%	13.8%	20.0%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics

Note: For definitions of Moody's most common ratio terms please see the accompanying [User's Guide](#).

Opinion

Rating Drivers

- Leading integrated energy company in Colombia
- Growing production and reserves profile
- Aggressive capital program with execution risk
- Moderate leverage profile
- Political risk concerns

Issuer Profile

Headquartered in Colombia, Ecopetrol S.A. (Ecopetrol) is the largest integrated oil and gas company in Colombia. It is responsible for 64% of total Colombian oil production and has a proved hydrocarbon reserve position of roughly two billion barrels of oil equivalent at the end of 2013. For the twelve months ended March 31, the company generated revenues of \$36 billion and production averaged 734 mboed in the second quarter of 2014. Following an IPO in 2007 and a second round share offering in August 2011, the government owns 88.5% of the company through shares held by the Ministry of Finance.

Rating Rationale

Ecopetrol's Baa2 global local currency issuer rating (GLCR) reflects its status as Colombia's leading oil and gas producer and position as a mid-sized integrated oil company, as well as its growing production, reserves and crude oil export profile. A rising level of upstream and infrastructure investment under its Mega plan is leading to increased hydrocarbon production, primarily in heavy oil, and to the expansion of refining and transportation infrastructure to deliver growing oil and gas production to market. Rising production and stronger oil-based cash margins are supporting strong cash flows with moderate debt increases. However, the ratings also factor in the staging and execution risks of its ambitious growth strategy and expectations for a moderate increase in leverage under the Mega Plan.

DETAILED RATING CONSIDERATIONS

LEADING INTEGRATED ENERGY COMPANY IN COLOMBIA

Ecopetrol is the leading oil and gas producer in Colombia, accounting for approximately 64% of the country's BOE reserves and 66% and 58% of its respective current crude oil and natural gas production. With roughly 2 billion BOEs of net proved reserves as of year-end 2013 (73% liquids) and production averaging 750,200 BOE/day in the first half of 2014, Ecopetrol ranks as a mid-sized integrated oil company relative to its larger state oil company peers. In addition to selling its own production, Ecopetrol purchases and trades the government's royalty crude oil as well as a portion of third-party production in Colombia.

In the downstream, Ecopetrol owns all of the country's 335,000 barrels per day (bpd) of crude refining capacity through the 250,000 bpd inland refinery at Barrancabermeja and an 80,000 bpd plant at Cartagena, plus other smaller plants. The Cartagena refinery was shutdown in March 3 of 2014 in preparation for the new refinery which is expected to start operations in 2015 with a new capacity of 165 mboed. The company produced approximately 233 bpd of refined product in the first half of 2014.

Ecopetrol is also Colombia's largest petrochemical producer, with 500,000 tons per annum of polypropylene capacity. It also owns indirectly and operates directly or in joint ventures more than 8,400 kilometers of crude oil and refined product pipelines, including 100% or majority stakes in four of the largest crude pipelines, which connect field production to the refineries and to wholesale product and export terminals.

GROWING PRODUCTION AND RESERVES PROFILE

Ecopetrol's production is spread among various regions within Colombia, a geographic diversity that helps protect investors against terrorist attacks on Ecopetrol facilities, since the company can access production from other fields and infrastructure in the event of disruptions. Ecopetrol is also building more storage capacity to protect end-user demand from disruptions. The company has also increased its exports to Asia, which reached 37% of its exported volumes in 2013, up from 21% in 2012, while decreasing its US exports to 46% from 59%.

The company is also increasing its focus on natural gas exploration and production, with efforts concentrated onshore in the Foothills and Catatumbo areas and offshore on the Caribbean basin. Furthermore, Colombia is in the early stages of exploring unconventional shale gas and coal bed methane opportunities, which are also attracting international partners such as ExxonMobil and ConocoPhillips. Ecopetrol increased its gas production by about 8% per annum over the last three years.

Historically, Ecopetrol's production has grown by 12% annually on average between 2008 and 2013 and we expect its scale will continue to increase as it grows production at new fields, improves recoveries at mature fields, and continues to replace reserves at a 100%-plus annual rate.

However, there are risks surrounding the pace of production growth due to permitting issues at the fields in the Llanos Region, communities blocking its operations, and continued terrorist attacks on Ecopetrol's assets. Additionally, while close to 83% of its production is crude oil, with a rising share of heavy oil, we expect lifting costs

to continue to rise. In the second quarter of 2014, lifting costs rose approximately 10% year-over-year, not enough to offset the 5% increase in the net-backs. Costs may continue to increase over our rating horizon, until production growth rises enough to substantively bring down unit costs.

AGGRESSIVE CAPITAL PROGRAM WITH EXECUTION RISK

Ecopetrol has ramped up capital spending significantly since 2008 to fund its Mega plan, which is expected keep spending at elevated levels to increase crude oil and gas production, support infrastructure expansion, and refining upgrades. The Mega plan sets an ambitious capital program estimated at \$68.5 billion for 2014-2020. Spending from 2014 to 2020 includes \$55 billion in the upstream to raise production to 1.3 million BOE/day by 2020.

In the midstream, infrastructure spending will remain elevated as Ecopetrol and its partners expand pipeline takeaway and storage capacity, particularly to meet rising production from the Llanos Basin. The goal is to increase crude pipeline takeaway capacity and to grow compression capacity to about 1.4 million bpd in 2016. Most recently, the largest pipeline project was completed, the \$1.6 billion first phase of the Bicentenario pipeline, with 110,000 bpd connecting the Llanos Basin via the Cano Limon Pipeline to the port of Covenas.

In the downstream, the two refineries are smaller scale with relatively low conversion capabilities. The company is in planning stages on an upgrade of the Barrancabermeja refinery that could exceed \$7 billion and nearing completion of a \$6.5 billion project to double throughput capacity at Cartagena from 80,000 bpd to 165,000 bpd by 2015, while increasing conversion to handle a heavier domestic crude slate (from current 20% to 60%) and produce a higher value yield of gasoline and middle distillates at both refineries.

Ecopetrol spent \$3.5 billion on its capital budget in the first half of 2014 and expects to spend roughly \$10.6 billion for the full year (Ecopetrol S.A. plus its subsidiaries). Over half of the budget will be directed to higher exploration and development spending in Colombia. Infrastructure spending will also continue to be elevated, including Bicentenario and other growth projects. Ecopetrol also controls a new mid-stream subsidiary, Cenit, which holds its interest in Bicentenario, Ocesa, and its other pipelines.

MODERATE LEVERAGE PROFILE

Ecopetrol's moderate leverage position allows for flexibility to withstand potential production disruptions and the possibility of lower oil prices. We expect Debt/EBITDA to remain in the 1.3x - 1.5x range over the next two to three years, with robust interest coverage of more than 8x.

Our ratings for Ecopetrol incorporate rising financial leverage over the next two to three years as spending for the Mega plan is expected to exceed internal cash flow. In addition, a high statutory dividend payout will compete with funds needed for reinvestment. However, we do not expect leverage increases to affect Ecopetrol's ratings, given its relatively modest debt balances and solid liquidity. In addition, the company's leverage metrics relative to its reserves and production are strong for the peer group.

POLITICAL RISK CONCERNS

Ecopetrol and the oil industry in Colombia remain subject to periodic terrorist activity, including pipeline and compression station bombings and kidnappings, as well as agitation in areas such as the eastern provinces along the border of Venezuela and in the far south.

Colombia has witnessed a widespread decline in guerilla activity since the early 2000 period. However, Colombia's long-running war with the FARC insurgency movement leads to frequent attacks on its energy infrastructure, which could limit Ecopetrol's (Baa2 stable) future production growth, and community protests can delay or halt crude deliveries. In the first half of 2014, the Cano Limon pipeline was out of service for nearly two months and impacted production by roughly 7,000 to 9,000 barrels per day on annual basis. The Transandino pipeline was also interrupted, negatively impacting production.

However, President Juan Manuel Santos is a former defense minister and has stepped-up protection of energy infrastructure, as well as promoted social programs to gain the support of local populations. He is also negotiating with the FARC to try to end the insurgency. Other risks include labor disruptions and access to new areas for future exploration and development, which will require soliciting the support and participation of indigenous peoples.

Liquidity

Ecopetrol has a solid liquidity position, including \$7.9 billion of cash as of June 30, 2014. This cash could be drawn

down in 2014 and 2015 to support higher spending. We also expect cash flow from operations for the next 12 months to be in the \$8 billion - \$9 billion range, along with roughly \$9 billion - \$10 billion of capex and \$5 billion - \$6 billion of dividends. We expect negative free cash flow of \$6 billion - \$7 billion for both 2014 and 2015.

The company has access to international bond markets, drawings under a \$1 billion US Export Import Bank facility, or local Peso bonds. Additionally, the debt maturity profile is manageable with an average maturity of 15.7 years. And although the government's stake in Ecopetrol cannot fall below 80%, the company can still issue an additional 8.5% of equity for financing, if necessary.

Rating Outlook

The outlook for both the Baa2 foreign currency and Baa2 GLCR is stable, reflecting our expectation of good balance sheet flexibility to sustain higher capital spending and expected dividend payouts.

What Could Change the Rating - Up

While an upgrade is unlikely in the near-term, a positive outlook on Ecopetrol's ratings could occur if it continues to grow oil production and successfully execute on the Mega plan while maintaining moderate financial leverage.

What Could Change the Rating - Down

The BCA and ratings could face downward pressure if Debt/EBITDA increases materially beyond the 1.5x range or if production growth significantly underperforms. The ratings could also be pressured if we viewed the likelihood of government support to be weaker.

Rating Factors

Ecopetrol S.A.

Integrated Oil & Gas Industry Grid [1][2]	Current LTM 3/31/2014		[3]Moody's 12-18 Month Forward ViewAs of 8/5/2014	
Factor 1 : Scale (25%)	Measure	Score	Measure	Score
a) Average Daily Production (Mboe/d)	661.8	A	669	A
b) Proved Reserves (Million boe)	1,945.0	Baa	2302	A
c) Total Crude Distillation Capacity (mmbbl/day)	335.0	Ba	335	Ba
Factor 2 : Business Position (20%)				
a) Business Position	Baa	Baa	Baa	Baa
Factor 3 : Profitability and Returns (10%)				
a) EBIT/Average Book Capitalisation	27.6%	Aaa	25%	Aaa
b) Downstream EBIT/Total Throughput Barrels (\$/bbl)	-\$919.1	Ca	-\$919.1	Ca
Factor 4 : Financial Policy (20%)				
a) Financial Policy	Ba	Ba	Ba	Ba
Factor 5 : Leverage and Coverage(25%)				
a) EBIT / Interest Expense	16.7x	Aa	13x	Aa
b) Retained Cash Flow/Net Debt	60.1%	Aaa	50%	Aa
c) Total Debt/Capital	26.1%	Aa	30%	Aa
Rating:				
Indicated Rating from Grid Factor 1-5		Baa1		Baa1
Rating Drag	2	2	2	2
a) Indicated Rating from Grid		Ba2		Baa3
b) Actual Rating Assigned				Baa2

Government-Related Issuer	Factor
a) Baseline Credit Assessment	baa3
b) Government Local Currency Rating	Baa2

c) Default Dependence	Moderate
d) Support	High
e) Final Rating Outcome	Baa2

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 3/31/2014(L); Source: Moody's Financial Metrics [3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

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