

Research Update:

Braskem S.A. Downgraded To 'BB' From 'BB+' On Continued High Leverage; Outlook Negative

May 27, 2025

Rating Action Overview

- The global petrochemicals industry continues to see cyclically low prices due to demand and supply imbalances, and we don't foresee relevant improvements in the near term.
- After weak EBITDA generation and credit metrics over the past quarters, we again revised downwards our forecast for Braskem and now expect debt to EBITDA close to 6x and funds from operations to debt around 7% by the end of 2025.
- On May 27, 2025, S&P Global Ratings lowered its global scale issuer credit rating on Braskem to 'BB' from 'BB+'. We also lowered our issue-level ratings on the company's senior unsecured notes to 'BB' from 'BB+' and on its subordinated notes to 'B' from 'B+'.
- We affirmed the national scale issuer and issue-level ratings at 'brAAA'.
- The negative outlook reflects risks of challenging market conditions limiting the expected improvements in profitability and credit metrics that we forecast in our base case.

Rating Action Rationale

Braskem's EBITDA and cash flow generation didn't improve over the past quarters, and prolonged weak market conditions will likely continue straining the company's credit metrics. S&P Global Ratings' adjusted leverage for Braskem in 2024 and first-quarter 2025 was above 9x, mainly due to a combination of weaker-than-expected volumes at low prices. Additionally, leverage measured in Brazilian reais had an impact from peak foreign exchange (FX) rate at the end of 2024, as about 90% of company's debt is in U.S. dollars.

We believe industry conditions will remain challenging due to relevant capacity additions and limited demand growth amid global macroeconomic uncertainties. Even assuming that Braskem will be able to sell higher volumes thanks to the higher import tariffs for petrochemicals in Brazil for most of this year, we now forecast leverage around 6x by the end of 2025. And we forecast a

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Liquidity remains sound, with an extended debt maturity profile, to face the still-challenging industry conditions over the next two to three years. The company maintains a solid cash position. This, combined with a revolving credit line and no relevant debt maturities until 2028, provides a significant liquidity cushion amid weaker operating cash flows than historically. Credit strengths include having most debt at fixed rates at an average cost slightly above 6%, as well as its large scale and sound market position in Brazil.

The company could benefit from some positive developments for the Brazilian petrochemical industry in the short term, but the timing and impact on Braskem's cash flow generation are still uncertain. Braskem requested last year an investigation regarding dumping practices from U.S. and Canadian exports of polyethylene (PE) to Brazil, which might have a provisory vote over the next few months. If the outcome is for antidumping measures, it could boost Braskem's volumes and prices of PE.

Also, there is a discussion currently in Brazil's Congress about the REIQ and PRESIQ, a special tax regime for the chemical industry, to foster sector competitiveness, which might increase the tax relief on raw material purchases from current 0.73%, as was the case some years ago. But we don't incorporate any of these in our forecast given the uncertainty about timing and final impact.

Potential change of control in Braskem would likely be credit neutral. Braskem disclosed last Friday that Novonor received a nonbinding offer from Petroquímica Verde Fundo de Investimento em Participações, an investment vehicle owned by Nelson Tanure, to buy Novonor's controlling stake in Braskem. If the new fund would adhere to the existing shareholders' agreement and assume all the rights, benefits, liabilities, and obligations of Novonor's, we would likely keep our view of Braskem as insulated and delinked because neither Petrobras nor the new shareholder would be able to exercise control on its own.

Outlook

The negative outlook continues to reflect challenging industry conditions for petrochemical players and even more for naphtha-based operations, which are most of Braskem's. It indicates a one-in-three chance of a downgrade if we don't see an improvement in the company's profitability and cash flow generation in line with our base-case scenario.

Downside scenario

We could lower the ratings in the next 12-18 months if:

- Persistent low petrochemical spreads and pressures from imported products in Brazil lead to weaker sales volumes, utilization rates, and revenues. In this scenario, we would expect continued weak profitability, with EBITDA margin below 9% over the next years;
- Higher-than-expected cash burn reduces the company's currently sound liquidity cushion; or
- The company makes sizable additional provisions related to the geological event in Alagoas-but this isn't part of our base-case scenario.

Upside scenario

We could revise the outlook to stable in the next 12-18 months if we see improvements in profitability and credit metrics aligned with our base-case scenario or faster, with leverage trending to close to 5x until 2026. This could occur as a result of one or more the following:

- Lower competition from PE imports in Brazil if antidumping measures are applied, increasing Braskem's volumes and prices of PE sold;
- An increase of the REIQ tax relief, reducing the company's costs;
- · Higher petrochemical spreads than we currently forecast, with industry capacity rationalization happening at a faster pace than we expect; and
- Higher efficiency gains with a higher cost/expenses reduction than we currently forecast.

Company Description

Braskem is the largest thermoplastic resins producer in the Americas, with leading positions in polyethylene, polypropylene, and polyvinyl chloride. The company has 40 facilities across Brazil, the U.S., Germany, and Mexico, and it supplies clients in more than 70 countries.

Plastic product manufacturers use Braskem's products as inputs for almost all segments of the economy, such as food packing, consumer goods, personal care, household cleaning, construction, agribusiness, electronics, and infrastructure.

Braskem is controlled by Novonor (50.1%) and Petrobras (47.0%) through a shareholders' agreement.

Our Base-Case Scenario

Assumptions

- Average exchange rate of R\$5.80 in 2025, and R\$5.85 in 2026 and 2027.
- Brent crude oil price of \$65 for the rest of 2025 and \$70 per barrel from 2026 on, affecting naphtha input prices.
- Around 4%-5% average volumes expansion for 2025-2026. This is higher than GDP growth, assuming higher demand from sanitation investments in Brazil, some market share gains due to higher import taxes for most of this year, and a recovery of volumes sold in the U.S. and Europe after the decline in 2024 due to maintenance shutdowns.
- Mostly stable spreads in 2025, with improvements in 2026 assuming some industry rationalization globally and slow economic growth.
- Cost and expense reductions related to the several measures the company has in place.
- Capex at maintenance levels of about \$400 million in 2025 and 2026, and strategic investments for capacity expansion under the REIQ investments, through which the investments are compensated with tax exemptions. The investments in Rio de Janeiro are for a gas-based expansion project, which would increase company's competitiveness in feedstock base.
- Cash outflows related to the Alagoas geological event of about R\$1.8 billion in 2025 and R\$1.5 billion in 2026.

• We don't consolidate the Mexican subsidiary Braskem Idesa S.A.P.I. (B/Negative/--) in our financial analysis and forecasts for Braskem.

Key metrics

Braskem S.A.--Forecast summary

Period ending	Dec-31-2021	Dec-31-2022	Dec-31-2023	Dec-31-2024	Dec-31-2025	Dec-31-2026	Dec-31-2027	Dec-31-2028
(Mil. BRL)	2021a	2022a	2023a	2024a	2025e	2026f	2027f	2028f
Revenue	101,448	93,039	68,172	74,451	79,638	82,749	86,543	89,570
EBITDA (reported)	30,217	8,970	2,407	3,892	8,113	9,622	10,335	10,855
Plus/(less): Other	(3,099)	188	616	604	(1,087)	(1,286)	(1,387)	(1,387)
EBITDA	27,118	9,159	3,023	4,496	7,026	8,336	8,949	9,468
Less: Cash interest paid	(2,399)	(2,321)	(3,004)	(3,807)	(3,854)	(3,792)	(3,737)	(3,722)
Less: Cash taxes paid	(2,698)	(1,621)	(866)	(634)	(151)	(455)	(300)	(445)
Funds from operations (FFO)	22,021	5,217	(847)	55	3,021	4,089	4,911	5,301
Interest expense	2,845	3,170	3,338	4,340	3,905	3,832	3,777	3,762
Cash flow from operations (CFO)	12,328	5,431	221	(1,206)	2,421	4,588	6,896	7,278
Capital expenditure (capex)	3,057	3,951	3,433	1,320	3,173	3,212	4,212	4,212
Free operating cash flow (FOCF)	9,271	1,480	(3,212)	(2,526)	(752)	1,376	2,684	3,066
Dividends	5,993	1,350	7	6			191	319
Discretionary cash flow (DCF)	3,278	130	(3,219)	(2,532)	(752)	1,376	2,493	2,747
Debt (reported)	35,094	35,717	42,236	53,232	49,491	49,888	48,284	48,691
Plus: Lease liabilities debt	3,156	4,241	3,933	4,306	4,134	4,320	4,471	4,605
Plus: Pension and other postretirement debt	307	311	354	342	342	342	342	342
Less: Accessible cash and liquid Investments	(9,548)	(12,272)	(17,417)	(14,707)	(11,717)	(10,783)	(9,797)	(11,376)
Plus/(less): Other	(628)	(745)	(1,914)	(740)				
Debt	28,381	27,251	27,192	42,433	42,250	43,766	43,300	42,262
Equity	9,717	9,121	5,748	(4,670)	(2,195)	(1,430)	(347)	1,224
Cash and short-term investments (reported)	12,173	14,762	19,143	16,772	11,717	10,783	9,797	11,376
Adjusted ratios								
Debt/EBITDA (x)	1.0	3.0	9.0	9.4	6.0	5.3	4.8	4.5
FFO/debt (%)	77.6	19.1	(3.1)	0.1	7.2	9.3	11.3	12.5
FFO cash interest coverage (x)	10.2	3.2	0.7	1.0	1.8	2.1	2.3	2.4
EBITDA interest coverage (x)	9.5	2.9	0.9	1.0	1.8	2.2	2.4	2.5
CFO/debt (%)	43.4	19.9	0.8	(2.8)	5.7	10.5	15.9	17.2
FOCF/debt (%)	32.7	5.4	(11.8)	(6.0)	(1.8)	3.1	6.2	7.3
DCF/debt (%)	11.5	0.5	(11.8)	(6.0)	(1.8)	3.1	5.8	6.5
Annual revenue growth (%)	81.9	(8.3)	(26.7)	9.2	7.0	3.9	4.6	3.5
EBITDA margin (%)	26.7	9.8	4.4	6.0	8.8	10.1	10.3	10.6
Return on capital (%)	71.7	18.4	1.8	8.0	9.7	12.3	13.3	14.3
Debt/debt and equity (%)	74.5	74.9	82.6	112.4	105.5	103.4	100.8	97.2

Braskem S.A.--Forecast summary

All figures are adjusted by S&P Global Ratings, unless stated as reported. a--Actual. e--Estimate. f--Forecast. R\$--Brazilian real.

Liquidity

In our view, Braskem's liquidity remains strong. We expect sources to exceed uses by over 2.0x in the next 12 months and above 1.0x in the next 24 months thanks to the company's robust cash position, revolving credit line, and cash flows, which are more than enough to cover shortterm debt, capex, and working capital requirements. Moreover, Braskem has access to diversified funding sources, which supports its smooth debt maturity profile.

Principal liquidity sources

- Cash and cash equivalents of R\$11.2 billion as of March 2025
- Undrawn committed lines of \$1 billion (roughly R\$5.8 billion) due in December 2026 (with no covenants or material adverse change clauses)
- Cash funds from operations of about R\$3.1 billion in the next 12 months from March 2025

Principal liquidity uses

- Short-term debt maturities of R\$1.7 billion as of March 2025
- Capex close to R\$3.1 billion in the next 12 months from March 2025
- Working capital needs of R\$1.5 billion (including seasonal) in the next 12 months from March 2025
- · Cash outflows related to Alagoas disbursements and the leniency agreement totaling about R\$2.0 billion in the next 12 months from March 2025

Covenants

The company has no financial covenants on its debt.

Braskem's bonds have a payment acceleration clause in case the issue ratings are lowered as a result of a change of control at Braskem's level. We would need to monitor acceleration risk in case a change of control prompts us or another rating agency to take a negative rating action on the company.

Environmental, Social, And Governance

Environmental factors are a negative consideration in our credit rating analysis of Braskem. Producers of petrochemicals and thermoplastics are among the most intensive producers of carbon dioxide emissions. In addition, Brazilian authorities claimed that Braskem's rock salt extraction caused geological damage in the state of Alagoas. As of first-quarter 2025, the company provisioned R\$17.7 billion (around 60% of its financial debt as of December 2019) to shut down the salt extraction operation, relocate the affected families, and for socioenvironmental expenses. From that amount, about R\$12 billion has already been disbursed.

Braskem aims to achieve carbon neutrality by 2050 and to reduce scope 1 and 2 greenhouse gas emissions by 15% by 2030 from the average 2018-2020 level. This would be done by consuming more renewable energy and through efficient energy projects. Also, the company intends to

expand its production capacity of green ethylene, made from sugarcane ethanol, to produce polyethylene. Current capacity of 275,000 tons per year still represents only about 1% of total production capacity, but Braskem aims to increase this to 1 million tons by 2030.

Governance factors are a moderately negative factor in our credit rating analysis of the company. The leniency agreement following a corruption investigation of the company resulted in a R\$3.1 billion fine in 2016. As part of that agreement, Braskem went through considerable internal control changes and an independent monitoring period, complying with requirements from Brazil's Federal Prosecution Office and the U.S. Department of Justice and SEC. We believe this improved the company's governance practices, with more independent members on the board who are also part of the audit and compliance committee.

Issue Ratings--Recovery Analysis

Key analytical factors

We rate several senior unsecured notes and debentures, either issued or guaranteed by Braskem, rated at the same level of the parent due to our '3' recovery rating on all the senior unsecured debt.

We also rate the company's subordinated notes issued in 2020. The three-notch difference between the subordinated notes rating and ICR reflects our deduction of:

- Two notches to reflect subordination to the company' senior debt obligations; and
- One notch for loss absorption or cash conservation features. Braskem's coupon deferral is discretionary and not limited in time.

Our simulated default scenario assumes a payment default in 2030 due to persistent weak petrochemical spreads, causing revenues and margins to decline, primarily related to a prolonged deterioration in macroeconomic conditions, increased competition, and operational issues.

Our simulated default scenario assumes the company is restructured as a going concern, rather than liquidated, because of its solid market position in the markets it operates.

We derive our distressed enterprise value for Braskem by applying a 5.5x multiple to our estimated emergence EBITDA of about R\$5.2 billion. The 5.5x multiple is aligned with the one we use for industry peers with similar business strengths.

Simulated default assumptions

- Simulated year of default: 2030
- Jurisdiction: Brazil
- Emergence EBITDA: R\$5.2 billion
- EBITDA multiple: 5.5x

Simplified waterfall

- Net enterprise value (after 5% administrative expenses): R\$27.1 billion
- Senior unsecured debt: R\$49.2 billion (senior notes, debentures and bank loans)
- --Recovery expectations for senior unsecured notes and debentures: 55%

Note: All debt amounts include six months of prepetition interest.

Rating Component Scores

Rating Component Scores

Component			
Foreign currency issuer credit rating	BB/NEGATIVE/		
Local currency issuer credit rating	BB/NEGATIVE/		
Business risk	Satisfactory		
Country risk	Moderately High Risk		
Industry risk	Moderately High Risk		
Competitive position	Satisfactory		
Financial risk	Highly Leveraged		
Cash flow/leverage	Highly Leveraged		
Anchor	b+		
Diversification/portfolio effect	Neutral (no impact)		
Capital structure	Neutral (no impact)		
Financial policy	Neutral (no impact)		
Liquidity	Strong (+1 notch)		
Management and governance	Moderately Negative (no impact)		
Comparable rating analysis	Positive (+1 notch)		
Stand-alone credit profile	bb		

Related Criteria

- Criteria | Corporates | General: Sector-Specific Corporate Methodology, April 4, 2024
- General Criteria: Hybrid Capital: Methodology And Assumptions, Feb. 10, 2025
- Criteria | Corporates | General: Methodology: Management And Governance Credit Factors For Corporate Entities, Jan. 7, 2024
- Criteria | Corporates | General: Corporate Methodology, Jan. 7, 2024
- General Criteria: National And Regional Scale Credit Ratings Methodology, June 8, 2023
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10,
- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Criteria | Corporates | General: Recovery Rating Criteria For Speculative-Grade Corporate Issuers, Dec. 7, 2016
- General Criteria: Guarantee Criteria, Oct. 21, 2016

- Criteria | Corporates | Recovery: Methodology: Jurisdiction Ranking Assessments, Jan. 20, 2016
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

Ratings List

Ratings list

Downgraded			
	То	From	
Braskem S.A.			
Issuer Credit Rating	BB/Negative/	BB+/Negative/	
Braskem Netherlands Finance			
Subordinated	В	B+	
Downgraded; Recovery Expectations Revised			
	То	From	
Braskem Netherlands Finance			
Braskem America Finance Co.			
Senior Unsecured	BB	BB+	
Recovery Rating	3(55%)	3(60%)	
Ratings Affirmed			
Braskem S.A.			
Issuer Credit Rating			
Brazil National Scale	brAAA/Negative/		
Ratings Affirmed; Recovery Expectations Revised			
	То	From	
Braskem S.A.			
Senior Unsecured	brAAA	brAAA	
Recovery Rating	3(55%)	3(60%)	

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