

Research Update:

# Braskem S.A. Outlook Revised To Negative On Slower Spreads Recovery; Ratings Affirmed

September 13, 2024

## Rating Action Overview

- Petrochemical spreads are recovering more slowly than we initially expected, affecting industry perspectives. And for this reason, we now forecast Braskem S.A.'s EBITDA margin at around 9% and debt to EBITDA of about 5x by the end of 2024, and we no longer expect leverage to fall below 4x by 2025.
- On Sept. 13, 2024, S&P Global Ratings revised the outlook on Braskem's issuer credit ratings to negative from stable, indicating that we could lower the ratings in the next 12 months if debt to EBITDA and funds from operations (FFO) to debt do not trend to 4x and 15%, respectively.
- This could occur if Braskem's efficiency measures don't sufficiently compensate for prolonged weak petrochemical spreads.
- At the same time, we affirmed our global scale ('BB+') and national scale ('brAAA') issuer credit ratings on the company, the issue-level ratings on its senior unsecured notes ('BB+') and its subordinated notes ('B+'), and the national scale ratings on its debentures ('brAAA').

### PRIMARY CREDIT ANALYST

**Fabiana Gobbi**  
Sao Paulo  
+ 55 11 3039 9733  
fabiana.gobbi  
@spglobal.com

### SECONDARY CONTACTS

**Luciano D Gremone**  
Buenos Aires  
+ 54 114-891-2143  
luciano.gremone  
@spglobal.com

**Luisa Vilhena**  
Sao Paulo  
+ 55 11 3039 9727  
luisa.vilhena  
@spglobal.com

## Rating Action Rationale

**Petrochemical spreads are recovering more slowly than we initially expected, which will result in continued high leverage for Braskem over 2024 and likely 2025.** We now forecast S&P Global Ratings-adjusted debt to EBITDA of around 5x in 2024 and 4.5x in 2025, versus 4x previously. Continued uncertainty regarding global petrochemical capacity and economic growth will continue to weigh on our forecasts.

The still depressed spreads led to lower capacity utilization in the first half of 2024, and consequently lower volumes in Brazil, dampening the company's cash flow. The company is working on several efficiency measures such as cutting costs and expenses, reducing capital expenditure (capex), and managing working capital. We expect these and other actions should provide some relief to the balance sheet and contribute to moderately positive free operating cash flow, despite weaker revenue and EBITDA generation over 2024 and 2025.

**The company's liquidity has historically been an important credit strength during industry cycles.** Braskem has historically maintained a sound cash position and a smooth debt profile, providing cushion during industry downturns. The company ended June 2024 with a cash position of almost Brazilian real (R\$) 15.6 billion and an extended debt maturity profile. Its next large maturity is due in 2028.

## Outlook

The negative outlook indicates that we could lower the ratings in the next 12 months if Braskem's leverage remains above our expectations for its rating level. We expect debt to EBITDA around 5x by the end of 2024 and 4.5x in 2025, due to the prolonged weak industry conditions.

## Downside scenario

We could lower the ratings in the next 12 months if Braskem's credit metrics do not improve, with debt to EBITDA remaining at around 5.0x on a three-year moving average and negative free operating cash flow. This could be a result of low spreads until 2025 due to weak global economic growth and continued expansion of global petrochemical capacity. We could also lower the ratings if the company makes sizable additional provisions related to the geological event in Alagoas, but this isn't part of our base-case scenario at this point.

## Upside scenario

We could revise the outlook back to stable in the next 12 months if leverage improves toward 4.0x on a three-year moving average. This could result from a faster recovery in petrochemical spreads or if the company's actions to mitigate current market pressures bolster profitability and cash flow above our current 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.

The company had annual net revenue (excluding its Mexican subsidiary Braskem Idesa) of R\$68.2 billion (approximately \$13.5 billion) in 2023.

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\$5.10 per \$1 in 2024, R\$5.18 in 2025, and R\$5.23 in 2026.
- Brent crude oil price of \$85 per barrel for the rest of 2024, and \$80 per barrel in the subsequent years, affecting naphtha input prices.
- 5%-6% volumes expansion in 2024 versus 2023, mostly in the second half of the year from polyethylene and polypropylene, while polyvinyl chloride remains soft. For the next few years, we forecast volume growth will outpace GDP growth given higher demand from sanitation requirements and higher economic activity.
- Some recovery in average spreads for 2024 and 2025 due to persistent uncertainties regarding excess industry capacity and weak global economic growth. For 2026, we assume a more pronounced rebound in spreads, mainly from industry rationalization and no significant capacity entering the market.
- Cost and expense reductions related to the several measures the company has in place.
- Capex near maintenance levels of about \$400 million–\$470 million in 2024 and 2025, then increasing close to \$785 million in 2026 assuming higher cash flow with a stronger recovery of spreads.
- Cash outflows related to the Alagoas geological event of about R\$3 billion in 2024, about R\$2.4 billion in 2025, and about R\$750 million 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

Industry sector: chemical cos

(Mil. R\$)	--Fiscal year ended Dec. 31--								
	2020a	2021a	2022a	2023a	2024e	2025f	2026f	2027f	2028f
Revenue	55,780	101,448	93,039	68,172	71,515	71,118	79,189	81,949	84,955
EBITDA (reported)	3,996	30,217	8,970	2,407	8,194	9,173	11,501	11,868	12,026
Plus/(less): Other	5,400	-3,099	188	1,393	-1,497	-1,472	-2,313	-2,498	-2,498
EBITDA	9,396	27,118	9,159	3,800	6,697	7,701	9,188	9,370	9,528
Less: Cash interest paid	-2,989	-2,399	-2,321	-3,660	-3,430	-3,282	-3,271	-3,271	-3,140
Less: Cash taxes paid	-258	-2,698	-1,621	-866	-260	-233	-696	-842	-883
Funds from operations (FFO)	6,149	22,021	5,217	-726	3,007	4,186	5,222	5,257	5,504
Cash flow from operations (CFO)	7,172	12,328	5,431	-549	5,206	4,301	8,235	8,604	8,831
Capital expenditure (capex)	2,401	3,057	3,951	4,036	2,040	2,435	3,923	3,960	3,960
Free operating cash flow (FOCF)	4,772	9,271	1,480	-4,585	3,166	1,867	4,312	4,644	4,871
Dividends	2	5,993	1,350	7	--	--	277	676	818
Discretionary cash flow (DCF)	4,769	3,278	130	-4,592	3,166	1,867	4,035	3,968	4,054

## Braskem S.A.--Forecast summary (cont.)

Industry sector: chemical cos

(Mil. R\$)	--Fiscal year ended Dec. 31--								
	2020a	2021a	2022a	2023a	2024e	2025f	2026f	2027f	2028f
Debt (reported)	41,968	35,094	35,717	42,236	45,868	46,243	46,619	46,619	40,821
Plus: Lease liabilities debt	3,208	3,156	4,241	3,933	3,894	3,894	3,894	3,894	3,894
Plus: Pension and other postretirement debt	312	322	326	374	374	374	374	374	374
Less: Accessible cash and liquid Investments	-15,247	-9,548	-12,272	-17,417	-15,905	-13,809	-16,278	-18,574	-15,254
Plus/(less): Other	2,045	55	-6	-1,302	-926	-926	-926	-926	-926
Debt	32,286	29,080	28,005	27,824	33,304	35,776	33,683	31,386	28,908
Cash and short-term investments (reported)	17,490	12,173	14,762	19,143	16,912	15,139	17,353	20,101	17,137
<b>Adjusted ratios (%)</b>									
Debt/EBITDA (x)	3.4	1.1	3.1	7.3	5.0	4.6	3.7	3.3	3.0
FFO/debt	19.0	75.7	18.6	-2.6	9.0	11.7	15.5	16.7	19.0
EBITDA interest coverage (x)	4.2	9.6	2.9	1.1	1.8	2.2	2.6	2.7	2.9
CFO/debt	22.2	42.4	19.4	-2.0	15.6	12.0	24.4	27.4	30.5
FOCF/debt	14.8	31.9	5.3	-16.5	9.5	5.2	12.8	14.8	16.9
DCF/debt	14.8	11.3	0.5	-16.5	9.5	5.2	12.0	12.6	14.0
Annual revenue growth	11.6	81.9	-8.3	-26.7	4.9	-0.6	11.3	3.5	3.7
EBITDA margin	16.8	26.7	9.8	5.6	9.4	10.8	11.6	11.4	11.2
Return on capital	24.8	70.6	18.0	1.7	8.5	10.3	13.5	14.1	14.3
EBITDA/cash interest (x)	3.1	11.3	3.9	1.0	2.0	2.3	2.8	2.9	3.0
EBIT interest coverage (x)	3.3	8.8	2.2	0.2	0.8	1.2	1.6	1.7	1.8

All figures include S&P Global Ratings adjustments' unless stated as reported. a--Actual. e--Estimate. f--Forecast.

## Liquidity

In our view, Braskem's liquidity remains strong. We expect sources to exceed uses by over 2.5x in the next 12-24 months thanks to the company's robust cash position, revolving credit line, and cash flow, which we believe are more than enough to cover short-term debt, capex, and working capital requirements. Moreover, Braskem has access to diversified funding sources, which supports its smooth debt maturity profile.

The company has been prioritizing the maintenance of an even higher liquidity cushion than in the past to withstand the downcycle without pressuring cash flow.

Principal liquidity sources

- Cash and cash equivalents of R\$15.6 billion as of June 2024
- Undrawn committed lines of \$1 billion (roughly R\$5 billion) due in 2026 (with no covenants or material adverse change clauses)

- Cash FFO of about R\$5 billion in the 12 months from June 2024
- Asset sales of R\$200 million to receive until the end of this year, related to selling its stake in environmental services firm Cetrel

#### Principal liquidity uses

- Short-term debt maturities of R\$2 billion as of June 2024
- Capex of close to R\$2.2 billion in the 12 months from June 2024
- Seasonal working capital needs of R\$2.4 billion in the next 12 months
- Cash outflows related to Alagoas disbursements and the leniency agreement totaling about R\$3.4 billion in the 12 months after June 2024

## Covenants

The company has no financial covenants on its debt.

Braskem's bonds have a payment acceleration clause in case the issue ratings fall because 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. The company provisioned R\$14.4 billion (more than 40% of its debt as of December 2019) to shut down the salt extraction operation, relocate the affected families, and for socio-environmental expenses.

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 expanded its production capacity of green ethylene, made from sugarcane ethanol, to produce polyethylene. It recently invested \$87 million to increase green ethylene production capacity to 260,000 tons per year from 200,000 tons per year. This product 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

Our simulated default scenario assumes a payment default in 2029 due to persistent weak petrochemical spreads causing revenue 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 where it operates.

We derive our distressed enterprise value for Braskem by applying a 5.5x multiple to our estimated emergence EBITDA of about R\$5.1 billion. The recommended multiple for commodity chemical companies is 5x; however, we used a higher multiple given the comparative strength of the company's business risk compared with certain peers such as Nova Chemicals Corp. , Ineos Group Holdings S.A., and Olin Corp.

### Simulated default assumptions

- Simulated year of default: 2029
- Jurisdiction: Brazil
- Emergence EBITDA: R\$5.1 billion
- EBITDA multiple: 5.5x

### Simplified waterfall

- Net enterprise value (after 5% administrative adjustment): R\$26.7 billion
- Total unsecured claims: R\$44.7 billion (Senior notes, debentures, and other bank loans)
- Recovery expectations for senior unsecured notes and debentures: 60%
- Total subordinated claims: R\$3.5 billion (hybrid instrument)

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

### Ratings Score Snapshot

Issuer credit rating

- Global scale: BB+/Negative/--
- National scale: brAAA/Negative/--

Business risk: Satisfactory

- Country risk: Moderately high
- Industry risk: Moderately high

- Competitive position: Satisfactory

Financial risk: Aggressive

- Cash flow/leverage: Aggressive

Anchor: bb

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Strong (no impact)
- Management and governance: Moderately negative (no impact)
- Comparable rating analysis: Positive (+1 notch)

## **Related Criteria**

- Criteria | Corporates | General: Sector-Specific Corporate Methodology, April 4, 2024
- Criteria | Corporates | General: Corporate Methodology, Jan. 7, 2024
- Criteria | Corporates | General: Methodology: Management And Governance Credit Factors For Corporate Entities, Jan. 7, 2024
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- 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
- 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: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

## **Ratings List**

**Ratings Affirmed**

**Braskem S.A.**

Senior Unsecured	brAAA
------------------	-------

**Braskem America Finance Co.**

Senior Unsecured	BB+
------------------	-----

**Braskem Netherlands Finance**

Senior Unsecured	BB+
------------------	-----

Subordinated	B+
--------------	----

**Ratings Affirmed; CreditWatch/Outlook Action**

	To	From
<b>Braskem S.A.</b>		
Issuer Credit Rating	BB+/Negative/--	BB+/Stable/--
Brazil National Scale	brAAA/Negative/--	brAAA/Stable/--

**Ratings Affirmed**

**Braskem S.A.**

Senior Unsecured	
------------------	--

BRL244.056 mil fltg rate 16a Emissao deb ser 2a Serie due 05/12/2032	brAAA
--	-------

Recovery Rating	3(60%)
-----------------	--------

BRL755.944 mil fltg rate 16a Emissao deb ser 1a Serie due 05/12/2029	brAAA
--	-------

Recovery Rating	3(60%)
-----------------	--------

**Braskem America Finance Co.**

Senior Unsecured	
------------------	--

Local Currency	BB+
----------------	-----

Recovery Rating	3(60%)
-----------------	--------

**Braskem Netherlands Finance**

Senior Unsecured	
------------------	--

US\$1 bil 7.25% callable nts due 02/13/2033	BB+
---	-----

Recovery Rating	3(60%)
-----------------	--------

US\$1.25 bil 4.50% nts due 01/10/2028	BB+
---------------------------------------	-----

Recovery Rating	3(60%)
-----------------	--------

US\$1.5 bil 4.50% nts due 01/31/2030	BB+
--------------------------------------	-----

Recovery Rating	3(60%)
-----------------	--------

US\$750 mil 5.875% nts due 01/31/2050	BB+
---------------------------------------	-----

Recovery Rating	3(60%)
-----------------	--------

US\$850 mil 8.50% callable nts due 01/12/2031	BB+
---	-----

Recovery Rating	3(60%)
-----------------	--------

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.spglobal.com/ratings](http://www.spglobal.com/ratings) for further information. Complete ratings



**Research Update: Braskem S.A. Outlook Revised To Negative On Slower Spreads Recovery; Ratings Affirmed**

information is available to RatingsDirect subscribers at [www.capitaliq.com](http://www.capitaliq.com). All ratings affected by this rating action can be found on S&P Global Ratings' public website at [www.spglobal.com/ratings](http://www.spglobal.com/ratings).

Copyright © 2024 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, indirect, 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. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

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.spglobal.com/ratings](http://www.spglobal.com/ratings) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.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.spglobal.com/usratingsfees](http://www.spglobal.com/usratingsfees).

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