

Dutch Networks Stedin, Alliander And Enexis Ratings Affirmed On Government Support; Enexis Outlook Revised To Positive

February 14, 2023

Rating Action Overview

- The Dutch state and the power and gas distribution system operators (DSOs) Alliander, Enexis, and Stedin have signed a Framework Agreement whereby the state commits to ultimately support the capital adequacy of the DSOs at a minimum 'A-' or equivalent rating level. We view this agreement as binding and robust and therefore now consider the DSOs to be government-related entities (GREs) of The Netherlands (AAA/Stable/A-1+).
- In our view, these entities now benefit from a moderate likelihood of timely extraordinary support from the central government that could come in the form of common equity injections if the rating on a DSO was at risk of falling below 'A-' due to capital shortfalls. For all three DSOs, this results in a one-notch uplift of our issuer credit ratings above the respective stand-alone credit profiles (SACP).
- At the same time, we revised down by one notch our SACPs on the three DSOs to reflect an overall trend of pressured metrics over the current regulatory period, notably by front-loaded investments. As a result, we revised our SACPs on Alliander and Enexis to 'a' from 'a+' and on Stedin to 'bbb+' from 'a-'.
- The combination of SACPs and likelihood of support lead us to affirm our 'A+' long-term issuer credit and senior debt ratings on Alliander N.V. and Enexis Holding N.V. and our 'A-' long-term issuer credit and senior debt ratings on Stedin Holding N.V. We revised the outlook on Enexis to positive from stable to reflect its financial policy and stronger headroom on forecast credit metrics after the sale of Fudura.
- Because we have lowered our SACPs on Alliander and Stedin, we also lowered by one notch to 'BBB+' and 'BBB-', respectively, our long-term issue ratings on their junior subordinated debt instruments. We do not believe there is a measurable likelihood that these instruments would benefit from government support.

PRIMARY CREDIT ANALYSTS

Federico Loreti
Paris
+ 33140752509
federico.loreti
@spglobal.com

Pauline Pasquier
Paris
+ 33 14 420 6771
pauline.pasquier
@spglobal.com

SECONDARY CONTACTS

Claire Mauduit-Le Clercq
Paris
+ 33 14 420 7201
claire.mauduit
@spglobal.com

Emmanuel Dubois-Pelerin
Paris
+ 33 14 420 6673
emmanuel.dubois-pelerin
@spglobal.com

Rating Action Rationale

We believe the Dutch state would provide extraordinary support to the Dutch network operators if needed to protect a minimum 'A-' rating. On Nov. 28, 2022, the DSOs, their shareholders, and the central government reached a legally binding agreement that set out the conditions and the requirements under which the Dutch state would provide common equity to the companies. We consider the three Dutch DSOs to be GREs as we believe they could benefit from extraordinary government support that could enhance their capacity and willingness to meet their financial commitments as they come due (see "Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015, on RatingsDirect).

This support comes at a time when the three grid operators' balance sheets are under pressure. Their expected investments are €30 billion in aggregate by 2030, to upgrade their networks. This is in the context of the energy transition and of remuneration declining in real terms under the current regulatory period (ending December 2026). The Netherlands' net zero national policies warrant an acceleration of investments by the DSOs already from 2023, leading to hefty negative discretionary cash flow (DCF) since tariffs, constrained by affordability objectives, will only improve gradually. While the process plans for a capital injection from the central government as a last resort measure, i.e. after other credit remedy measures including support from current shareholders (currently exclusively local and regional governments) have been exhausted, it provides a strong credit backstop at a high credit quality level ('A-' or equivalent). Given the length of time energy-transition investments will bear on DCF, we expect the protection to last well into the next decade. Overall, we consider that this framework materially enhances the companies' senior-debt creditworthiness, which we reflect with a one-notch uplift above the SACP.

We believe there is a moderate likelihood of extraordinary support from the central government in case of need. Our assessment is driven by the important role of the three DSOs for the country as well as their limited link with the central government.

- Important role: The three companies together largely dominate the energy distribution market in the Netherlands, as together they distribute over 95% of domestic electricity volumes (Alliander and Enexis 30%-40% each, followed by Stedin at 20%-25%). We believe they have a central role in meeting key environmental and economic objectives of the Dutch state, as included in the EU-wide Fit for 55 package and the Klimaatakkoord, which identifies stringent emissions targets for the country. The three companies are key enablers of the energy transition as renewables generation ramps up and the electricity grid needs to be upgraded and adapted to the new energy mix.
- Limited link: Our assessment reflects our base-case expectation that the central government will be at most a minority shareholder. Should it become a minority shareholder, the Dutch state will obtain governance and information rights similar to the other shareholders (local and regional governments).

We consider the Dutch state is building a positive track record of support with the capital injection into Stedin expected by the end of 2023. We view the likelihood of the state taking a stake in Stedin, the DSO with the lowest SACP, as very high in the course of 2023 and note that the central government has already reserved €500 million in its 2023 budget to support Stedin. We consider this will help to build a track record of effectiveness for the framework, beyond the central government's past support to grid infrastructure, notably with repeated capital injections into electricity TSO TenneT.

For all three DSOs, our updated base-case scenario factors in the recovery of energy costs for grid losses as well as protection of cost inflation and rising cost of debt. We continue assessing the regulatory framework for energy networks as strong in the Netherlands, despite some weaknesses like the lack of adjustment mechanism for extraordinary costs. However, we recognize that the swift set-up of grid losses recovery by the Authority for Consumers and Markets highlights the relative agility of the framework. We expect that, during the 2022-2026 regulatory period, remuneration will cover--with a reduced lag--most of the difference in energy costs, and rising risk-free rates and cost of debt, while part of the impact of inflation is included in the update of the electricity weighted-average cost of capital (WACC). Notably, it is anticipated that the high cost increase expected in 2023 from unhedged grid losses will be mitigated by the recovery of these costs in the next regulatory period, with expected annual 2023 EBITDA already comprising the recovery of 75% of the difference in 2022 grid losses and 50% of 2023. We assume the ex-post calculation of electricity and gas grid losses for 2022 and 2023 will be recovered in full over 2024-2026 and we expect that 2024-2026 costs will also be compensated in full. Congestion management costs will be fully compensated at least up to year-end 2023. The 2022-2026 regulatory period initially showed a significant decline in the nominal pre-tax WACC to 2.78% by year-end 2026 from 2.95% in 2022 for gas and power distribution. However, this is mitigated by the regulation allowing WACC ex-post adjustments for rising interest rates in both cost of equity and cost of debt with a lag of two years, meaning in 2024 WACC will be adjusted for rising yields in 2022. The revised nominal pre-tax WACC assumption will rise to 4.8% in 2026 from 2.9% in 2022. In addition, the regulatory WACC for electricity is calculated as real WACC plus 50% of inflation expectations, while the nominal WACC for gas fully includes a 12% higher inflation rate in 2023.

Alliander N.V.

Primary analyst: Federico Loreti

Our SACP revision to 'a' factors in increasing pressure on the metrics until the next regulatory period. We expect funds from operations (FFO) to debt to average about 16% over 2024-2026, after remaining above 18% in 2022-2023. Our SACP already factors in the expected sale of Kenter, the company's unregulated subsidiary offering smart meter services, which should materialize by the end of this year. Nevertheless, we believe FFO to debt will not return to a level commensurate with our 18% expectation for an 'a+' SACP until the next regulatory period starting 2027, at the earliest. At that moment the regulator will consider a new cost base, which we expect will result in higher remuneration. This gradual but steady decline in credit metrics over the current 2022-2026 regulatory period stems from Alliander investing €5.4 billion in 2023-2026 to increase the readiness of its infrastructure for the energy transition just as remuneration declines in real terms. In our base case, Alliander will receive further compensation for energy procurement costs to cover grid losses in 2024 without the two-year delay envisaged by the regulation in the current period. According to our preliminary estimates, this would lead to metrics comfortably above the 15% threshold we consider commensurate with the new 'a' SACP.

We view the 'a' SACP as stable, given the company's financial policy. We understand Alliander's financial policy aims at maintaining a minimum 15% FFO to debt as adjusted in our methodology. We understand such policy remains unchanged even with the Dutch state's willingness to support the company. We expect management will put in place sufficient credit remedy measures to keep FFO to debt at about 15%, including potentially fully using hybrid

issuance capacity up to 15% of total capitalization (i.e. an additional €500 million hybrid if needed, on top of the existing one). We view the conversion of the €600 million shareholder loan granted by the other municipalities as less likely to occur at this stage. The company has the right to convert it if the rating is below 'A' or if FFO to debt is expected to fall below 16% without material prospects of recovery, which is not our expectation. We recognize Alliander's track record of prudent financial policy and shareholder support.

We have downgraded Alliander's junior subordinated debt to 'BBB+' from 'A-'. We do not consider that the current framework agreement with the state offers support to the company's hybrid layer, currently a deeply subordinated €500 million hybrid instrument with first call date June 2023. Because of this, we continue rating it two notches lower than the SACP.

Outlook

The stable outlook reflects our expectation that, despite incremental debt due to increased capital expenditure (capex) and a scheduled decline in remuneration, Alliander will post an FFO-to-debt ratio above 15% over the coming two to three years. It also incorporates the extraordinary recovery mechanism of grid losses by the regulator in 2024, the successful sale of Kenter (with proceeds applied to support debt) and also factors in management's further willingness to enact remedial measures if necessary to counter downward trending metrics.

Downside scenario: The rating could come under pressure if our forecast FFO to debt fell below 15% with no immediate likelihood of recovery. This could result from:

- Adverse regulatory decisions like the lack of compensation for energy purchase costs to cover grids losses in 2024; coupled with
- No timely and sufficient implementation of remedial measures from Alliander's shareholders.

Excluding a change in our views on extraordinary government support, a one-notch downward revision of the SACP would result in a one-notch lowering of the issuer credit rating. A one-notch downgrade of the Netherlands would not result in a downgrade of Alliander, all things remaining equal.

Upside scenario: We consider an upgrade unlikely, given the predictable ongoing decline of tariffs set by the regulator until 2026, alongside the company's steadily increasing capex plan. However, we would consider an upgrade if, Alliander were to achieve and sustain FFO to debt above 18%, backed by the company's financial policy, barring any change in our views on extraordinary government support.

Liquidity

We assess Alliander's liquidity as adequate, based on our view that the company's liquidity sources will exceed its funding in the 12 months from Dec. 31, 2022, by more than 1.1x.

Furthermore, our liquidity assessment factors in Alliander's high standing and good access to the credit markets.

Principal liquidity sources:

- Cash and near-term investments of €205 million,
- A committed credit facility of €900 million maturing in December 2026,

- Cash FFO of about €630 million (without considering the sale of Kenter) over the next 12 months.

Principal liquidity uses

- Debt maturities of €425 million over the next 12 months,
- Capex of more than €1 billion,
- Dividends of about €56 million.

Enexis

Primary analyst: Pauline Pasquier

We believe Enexis' credit metrics and upward trend in debt from negative cash flows will be more aligned to an 'a' SACP although the sale of Fudura's noncore energy services in 2022 provides the company headroom until 2024. We estimate FFO to debt reached close to 32% in 2022 after the disposal of Fudura's noncore energy services for €1.3 billion, compared with 21% in 2021. Most of the proceeds will be kept on the balance sheet in line with the company's track record of prudent financial policy. However, we expect FFO to debt to return to 18%-19% in 2023-2024, owing to a material acceleration of capex on the electricity grid. We forecast investments will rapidly accelerate to about €1.2 billion in 2023 from €762 million in 2021, about one-third of this rise being fueled by cost inflation and the rest supported by increased demand for infrastructure deployment to facilitate the energy transition. Workforce and raw material shortages will be key challenges for capex implementation.

We believe Enexis will not call for any state support in the medium term. We now expect Enexis to fund its capex needs over 2022-2024 thanks to the Fudura sale proceeds and €550 million-€650 million of annual operating cash flows. We do not forecast any Dutch government financial support or additional remedy measures from Enexis' shareholders. We still view positively the Dutch government's publicly stated willingness to participate in funding grid companies' investment plans, including those of Enexis, and we now expect a final decision to be taken in first-half 2023 for a capital injection into Stedin (see "Dutch Government's Willingness To Support Is Mildly Credit Positive For Energy Distributors," published July 25, 2022, on RatingsDirect).

We perceive Enexis' financial policy and risk management as being the most supportive of all three DSOs. Enexis has a publicly stated financial policy of a 'A' rating. This policy remains unchanged by the state's willingness to support the company and our GRE approach status. As demonstrated by the limited dividend distribution after the Fudura sale, Enexis has a very solid track record of prioritizing the reinforcement of the company's balance sheet over distributing dividends to shareholders. We expect management will put in place sufficient credit remedy measures to postpone as much as possible any future need for a state intervention.

Outlook

The positive outlook on Enexis reflects our expectation that the company will be able to maintain average FFO to debt above 18% over the current regulatory period thanks to managerial actions,

after a spike at about 32% in 2022 due to the exceptional cash-in of the Fudura sale. Although we forecast debt will increase due to an intensive capex program as part of the Dutch government's energy transition plan, we expect the company will maintain some financial headroom above the 18% threshold for the current rating. We expect that the effects of higher energy costs will be manageable for Enexis, thanks to the prudent hedging in place and cost recovery through the regulatory framework.

Downside scenario: We would revise the outlook on Enexis to stable if we assessed that the company's FFO to debt was likely to decline and remain below 18%. This could stem from a higher-than-expected increase in debt and shareholder distributions or a decrease in operating margins resulting from higher-than-expected price volatility or adverse regulatory decisions like a lack of compensation for energy purchase costs to cover grids losses in 2024.

A one-notch downward revision of the SACP, although unlikely, would result in a one-notch lowering of the issuer credit rating, barring any change in our views on extraordinary government support. In contrast, a one-notch downgrade of the Netherlands would not result in a downgrade of Enexis, all things remaining equal.

Upside scenario: We could raise the rating if we thought Enexis could sustain adjusted FFO to debt comfortably above 18% with no deterioration in business risk. This could result from an increase in return on capital allowed or a demonstrated change in management's financial policy.

Liquidity

Our 'A-1' short-term issuer credit rating on Enexis is based on our 'A+' long-term rating and adequate liquidity.

We continue to assess Enexis' liquidity as adequate based on our expectation that the company's sources will exceed its uses by more than 1.1x over the 12 months started Dec. 31, 2022, since the €1.3 billion proceeds from the Fudura sale will be mostly kept on the balance sheet to fund increasing capex needs. We also believe that the company could withstand the stress of a 10% drop in EBITDA. In addition, we believe that Enexis can absorb cash flow mismatches stemming from higher transportation fees and delayed capex realization. Our assessment captures qualitative factors such as Enexis' prudent risk management, reflected in the refinancing of its maturities well in advance, and its diverse sources of funding. However, we limit the liquidity assessment to adequate, despite the high cash level from the Fudura sale that might indicate a strong assessment, because we expect the €500 million bond, due October 2023, to be refinanced less than one year in advance. We also believe that Enexis has a high standing in the credit markets.

Principal liquidity sources:

- Unrestricted cash and short-term marketable securities of €870 million as of Dec. 31, 2022,
- Access to an undrawn committed revolving credit facility of €850 million, €164 million maturing December 2024, and €686 million maturing December 2025,
- Projected cash FFO of about €480 million,
- Working capital inflows of €40 million.

Principal liquidity uses:

- Debt maturities of about €500 million over the next 12 months mainly due to the €500 million bond maturing in October 2023,

- Capex of about €1.1 billion,
- Dividend distributions of about €195 million-€200 million, including an extraordinary dividend of up to €100 million following proceeds received from the Fudura sale.

Stedin

Primary analyst: Pauline Pasquier

We forecast Stedin's credit metrics will weaken, with FFO to debt below 11% over 2022-2024, despite the €500 million capital injection from the state. Our updated base case for Stedin confirms a deterioration of the metrics, with FFO to debt reaching 10.5% on average over 2022-2024. Credit metrics in 2022-2024 are hindered by higher-than-expected energy purchase costs to cover network losses, to which Stedin was relatively more exposed than its peers, albeit partially recovered by the regulated remuneration. We include the expected €500 million government support in 2023 and no further remedy measures from Stedin's shareholders as per the company's financial policy of maintaining the rating at 'A-'.

We perceive Stedin's financial policy and risk management as protective of an 'A-' rating.

Stedin's public financial policy is set at an 'A-' rating level and we understand this policy would not constrain the shareholders from applying remedy measures in the short term to reinforce the company's credit metrics, as long as FFO to debt is above our revised required threshold for the 'A-' rating of remaining comfortably above 9%.

We lowered our rating on Stedin's junior subordinated debt to 'BBB-' from 'BBB' to reflect the company's lower SACP. We do not consider that the current framework agreement with the state offers support to the company's hybrid layer. Because of this, we notch down from the revised 'bbb+' unsupported SACP by two notches to arrive at the rating for Stedin's deeply subordinated €500 million hybrid instrument with first call date September 2026.

Outlook

The stable outlook reflects our expectation that, despite incremental debt due to increased capex and a scheduled decline in remuneration, Stedin will post an FFO-to-debt ratio comfortably above 9% over the coming two to three years notably thanks to the €500 million capital injection from the Dutch state expected by year-end 2023. The stable outlook also factors in management's willingness to enact remedial measures if necessary to counter downward trending metrics.

Downside scenario: The rating could come under pressure if our forecast FFO to debt approached or fell below 9% with no immediate likelihood of recovery. This could result from:

- Adverse regulatory decisions like a lack of compensation for energy purchase costs to cover for grids losses in 2024, or
- The state failing to execute the equity injection of €500 million in 2023; and
- No timely and sufficient implementation of remedial measures from Stedin's shareholders.

A one-notch downward revision of the SACP would result in a one-notch downgrade of the issuer credit rating, all else remaining equal. In contrast, a one-notch downgrade of the Netherlands

would not result in a downgrade of Stedin, all things remaining equal.

We would downgrade the company if we considered the likelihood of support from the state had weakened.

Upside scenario: We consider an upgrade unlikely, given the predictable ongoing decline of tariffs set by the regulator until 2026, alongside the company's steadily increasing capex plan. However, we would consider an upgrade if, all else remaining equal, Stedin were to achieve and sustain FFO to debt comfortably above 11%, backed by the company's financial policy.

Liquidity

Our 'A-2' short-term issuer credit rating on Stedin is based on our 'A-' long-term rating and adequate liquidity.

Our adequate liquidity score is based on our view that Stedin's liquidity sources will exceed its funding in the 12 months from Dec. 31, 2022, by more than 1.1x. Stedin has access to an undrawn committed credit facility of €600 million maturing in July 2024, which supports the group's liquidity position.

Moreover, our assessment also considers Stedin's satisfactory standing in the credit markets, prudent risk management, and proven access to diverse sources of funding.

Principal liquidity sources:

- Cash of about €50 million,
- Committed credit line of €600 million maturing 2024,
- Cash FFO in the €390 million-€400 million range, and
- Share issuance of €500 million.

Principal liquidity uses:

- Debt repayment of €280 million,
- Working capital outflows of about €60 million,
- Capex, net of customer contributions, of about €700 million,
- Dividend distribution of about €10 million.

We expect Stedin to be fully compliant with its covenants of net debt to total equity ratio lower than 70% and interest coverage of 3.0x, over our forecast period

Ratings Score Snapshot

Ratings Score Snapshot

| | Alliander | Enexis | Stedin |
|----------------------|---------------|-----------------|---------------|
| Issuer Credit Rating | A+/Stable/A-1 | A+/Positive/A-1 | A-/Stable/A-2 |
| Business risk | Excellent | Excellent | Excellent |
| Country risk | Very low | Very low | Very low |
| Industry risk | Very low | Very low | Very low |

Ratings Score Snapshot (cont.)

| | Alliander | Enexis | Stedin |
|----------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Competitive position | Excellent | Excellent | Excellent |
| Financial risk | Intermediate | Intermediate | Significant |
| Cash flow/leverage | Intermediate | Intermediate | Significant |
| Anchor | a+ | a+ | a- |
| Modifiers | | | |
| Diversification/portfolio effect | Neutral (no impact) | Neutral (no impact) | Neutral (no impact) |
| Capital structure | Neutral (no impact) | Neutral (no impact) | Neutral (no impact) |
| Financial policy | Neutral (no impact) | Neutral (no impact) | Neutral (no impact) |
| Liquidity | Adequate (no impact) | Adequate (no impact) | Adequate (no impact) |
| Management and governance | Satisfactory (no impact) | Satisfactory (no impact) | Satisfactory (no impact) |
| Comparable rating analysis | Negative (-1 notch) | Negative (-1 notch) | Negative (-1 notch) |
| Stand-alone credit profile | a | a | bbb+ |
| Related government rating | AAA | AAA | AAA |
| Likelihood of government support | Moderate (+1 notch from SACP) | Moderate (+1 notch from SACP) | Moderate (+1 notch from SACP) |

ESG credit indicators:

- Alliander: E-2, S-2, G-2
- Enexis: E-2, S-2, G-2
- Stedin: E-2, S-2, G-2

Related Criteria

- General Criteria: Hybrid Capital: Methodology And Assumptions, March 2, 2022
- 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: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- 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
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013

- Criteria | Corporates | General: Corporate Methodology, Nov. 19, 2013
- Criteria | Corporates | Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010

Related Research

- Industry Top Trends 2023: EMEA Utilities, Jan. 23, 2023
- Enexis Holding N.V., Jan. 3, 2023
- Alliander N.V., Oct. 19, 2022
- Dutch Government's Willingness To Support Is Mildly Credit Positive For Energy Distributors, July 25, 2022
- Dutch DSO Stedin Holding Affirmed At 'A-/A-2' On Regulatory Visibility And Financial Policy; Outlook Stable, Nov. 8, 2021

Ratings List

Ratings Affirmed; Outlook Action

| | To | From |
|----------------------------|-----------------|---------------|
| Enexis Holding N.V. | | |
| Issuer Credit Rating | A+/Positive/A-1 | A+/Stable/A-1 |
| Senior Unsecured | A+ | A+ |
| Enexis Netbeheer B.V. | | |
| Issuer Credit Rating | A+/Positive/-- | A+/Stable/-- |
| Ratings Affirmed | | |
| Stedin Holding N.V. | | |
| Issuer Credit Rating | A-/Stable/A-2 | A-/Stable/A-2 |
| Commercial Paper | A-2 | A-2 |
| Senior Unsecured | A- | A- |
| Stedin Netbeheer B.V. | | |
| Issuer Credit Rating | A-/Stable/-- | A-/Stable/-- |
| Alliander N.V. | | |
| Issuer Credit Rating | A+/Stable/A-1 | A+/Stable/A-1 |
| Commercial Paper | A-1 | A-1 |
| Senior Unsecured | A+ | A+ |

Downgraded

| | To | From |
|----------------------------|------|------|
| Stedin Holding N.V. | | |
| Junior Subordinated | BBB- | BBB |
| Alliander N.V. | | |
| Junior Subordinated | BBB+ | A- |

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. A description of each of S&P Global Ratings' rating categories is contained in "S&P Global Ratings Definitions" at https://www.standardandpoors.com/en_US/web/guest/article/-/view/sourceld/504352 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. Alternatively, call one of the following S&P Global Ratings numbers: Client Support Europe (44) 20-7176-7176; London Press Office (44) 20-7176-3605; Paris (33) 1-4420-6708; Frankfurt (49) 69-33-999-225; or Stockholm (46) 8-440-5914

Copyright © 2023 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.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.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.