

# MOODY'S

## RATINGS

### Rating Action: Moody's Ratings takes rating actions on eight Turkish corporates following upgrade of Turkiye sovereign rating

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26 Jul 2024

Milan, July 26, 2024 -- Moody's Ratings (Moody's) has today taken rating actions on eight non-financial corporates domiciled in Turkiye. The rating actions follow the recent upgrade of Turkiye's government bond ratings to B1 from B3 while maintaining a positive outlook. Turkiye's foreign-currency bond ceiling was also raised to Ba3 from B2 and the local-currency bond ceiling to Ba1 from Ba3. For further information, refer to the 19 July sovereign press release: <https://ratings.moodys.com/ratings-news/425198>.

We have taken the following rating actions on eight Turkish non-financial corporates:

- Koc Holding A.S. (Koc Holding): Upgrade the corporate family rating (CFR) to Ba3 from B2, maintain positive outlook
- Turkcell Iletisim Hizmetleri A.S. (Turkcell): Upgrade the CFR to B1 from B2, maintain positive outlook
- Turk Hava Yollari Anonim Ortakligi (Turkish Airlines): Upgrade the CFR to Ba3 from B2, maintain positive outlook
- Turkiye Petrol Rafinerileri A.S. (Tupras): Upgrade the CFR to Ba3 from B2, maintain positive outlook
- Ordu Yardimlasma Kurumu (OYAK): Upgrade the CFR to B1 from B2, maintain positive outlook
- Turkiye Sise ve Cam Fabrikalari A.S. (Sisecam): Upgrade the CFR to B1 from B2, outlook changed to stable from positive
- Limak Cimento Sanayi ve Ticaret A.S. (Limak Cement): Upgrade the CFR to B2 from B3, outlook changed to stable from positive

- Eregli Demir ve Celik Fabrikalari T.A.S. (Erdemir): Upgrade the CFR to B2 from B3, outlook changed to stable from positive

The national scale CFR of Erdemir has also been upgraded to A1.tr from A3.tr.

Additionally, we have taken rating actions on two enhanced equipment trust certificate (EETC) transactions related to Turkish Airlines: Bosphorus Pass Through Trust 2015-1A and the Japanese Yen denominated, Anatolia Pass Through Trust, Class A and Class B, also issued in 2015. We upgraded the Class A certificates of the Bosphorus transaction to Ba3 from B2. The Anatolia Pass Through Trust Class A certificates were upgraded to Ba2 from B1 and the Class B were upgraded to Ba2 from B1. The outlook on both Anatolia Pass Through Trust and Bosphorus Pass Through Trust 2015-1A remains positive.

Please click on this link [https://www.moodys.com/viewresearchdoc.aspx?docid=PBC\\_ARFTL493504](https://www.moodys.com/viewresearchdoc.aspx?docid=PBC_ARFTL493504) for the List of Affected Credit Ratings. This list is an integral part of this Press Release and identifies each affected issuer.

## RATINGS RATIONALE

The rating actions on these corporate issuers are a direct consequence of the rating action on the Government of Turkiye. All eight non-financial corporates are domiciled in, and have substantial operating exposure to Turkiye.

## KOC HOLDING RATINGS RATIONALE

The upgrade of Koc Holding's CFR to Ba3 from B2 reflects the credit linkages and high exposure to the domestic operating environment in Turkiye. However, the company has a diversified investment portfolio with a number of mature, dividend generating investments as well as exposure to export revenues, which allow the rating to be one notch above the Government of Turkiye. The positive rating outlook on Koc Holding is aligned with the positive outlook on the sovereign rating and reflects the credit linkages of Koc Holding with the Turkish government.

Koc Holding benefits from a relatively diversified portfolio of investments in mature and high-growth companies, which diversify the entity's dividend income. Koc Holding's portfolio will generate, on average, a reliable dividend income stream, which is expected to continue growing as most of the investment programs at the level of key subsidiaries have been completed. The company has a track record of maintaining strong financial flexibility and has for many years maintained net cash positions. Koc Holding has a flexible dividend policy, which can be adjusted downward if necessary. As of 31 March 2024, the company has a net cash position of \$777 million.

The company is exposed to the geographic concentration of investments to Turkiye and the volatility in the Turkish equity market. Koc Holding benefits from a degree of natural hedge against the depreciation of the Turkish lira because of the exposure of

various operating companies to US dollar- and euro-linked cash flow.

The positive outlook mirrors that of the Government of Türkiye and reflects Koc Holding's exposure to the country's political, legal, fiscal and regulatory environment.

#### TURKCELL RATINGS RATIONALE

Turkcell's CFR was upgraded to B1 from B2 and its Baseline Credit Assessment (BCA) to b1 from b2. As a primarily domestic business, Turkcell's credit profile is exposed to the economic, political, legal, fiscal and regulatory environment of the country and is constrained at the rating of the Government of Türkiye. Its credit profile is otherwise strong, as the leader in the Turkish mobile telephony market. Turkcell continues to grow through significant net subscriber adds and pricing increases generally in line or above inflation. The company has conservative financial policies, with a maximum net debt/EBITDA target of 1.5x (reported 0.6x as of Q1 2024), good access to debt capital markets and strong relationships with international banks. Government-related issuer (GRI) assumptions for Turkcell of 'high' dependence and 'low' support from the Turkish government remain unchanged.

The positive outlook mirrors that of the Government of Türkiye.

#### TURKISH AIRLINES RATINGS RATIONALE

The upgrade of Turkish Airlines' CFR to Ba3 from B2 and BCA to ba3 from b2 reflects the airline's strong operating profile, strong recovery post covid-19 pandemic, low leverage, strong growth and good liquidity position. The Ba3 rating also reflects the credit linkages and high exposure to the domestic operating environment in Türkiye. We classify Turkish Airlines as a GRI because of the Government of Türkiye's 49.12% ownership stake held through its sovereign wealth fund.

GRI considerations for Turkish Airlines remain unchanged with 'moderate' government support assumption and 'high' dependence assumption. The credit fundamentals of Turkish Airlines suggest a higher rating level. Our assessment of Turkish Airlines' government support assumptions has not changed as a result of this rating action. However, the company's CFR and BCA are constrained by the Government of Türkiye's B1 rating and Ba3 foreign currency ceiling because of credit linkages with the sovereign.

Traffic data for the last two years has been strong and materially above 2019 levels. The company's available seat kilometers (ASK) and revenue passenger kilometers (RPK) in June 2024 were 38% and 41% above 2019 levels with a passenger load factor of 82% for the last 12 months (LTM) to June 2024. As of 31 March 2024 (LTM), Moody's adjusted leverage (measured as gross debt/EBITDA) was 2.1x and the company's cash position was \$4.9 billion compared to \$13.6 billion Moody's adjusted debt, of which \$3.3 billion are short term. The airline has a net short position in the Turkish Lira with 9% of 2023 revenues collected in lira as opposed to 28% of total

expenses in lira. Additionally, a significant 41% of the passengers it carries are international-to-international transfers as of Q1 2024, a revenue source which is less sensitive to the domestic economy. However, the airline is materially exposed to the domestic macroeconomic environment and is reliant upon the smooth functioning of its Istanbul hub.

The positive outlook mirrors that on the Government of Türkiye's rating and reflects Turkish Airlines' exposure to the country's political, legal, fiscal and regulatory environment.

## TURKISH AIRLINES RELATED EETCS

We also upgraded the company's enhanced equipment trust certificate financings. Bosphorus Pass Through Trust 2015-1A certificates were upgraded to Ba3 from B2. For the Anatolia Pass Through Trust transaction, the Class A notes and loans were upgraded to Ba2 from B1 and the Class B notes and loans were upgraded to Ba2 from B1. The two notch upgrades for each transaction accompany the two notch upgrade for Turkish Airlines. The ratings on each transaction remain constrained by the Ba3 foreign currency ceiling for Türkiye. However, the ratings on the Anatolia transaction reflect piercing of the foreign currency ceiling by one notch. We believe that the 18 month liquidity facilities provided by the Development Bank of Japan and the domicile of the transaction in Japan are sufficient enhancements that support the piercing by one notch as does our estimates of loan-to-value (LTV) of 32% and 35%, respectively. Notwithstanding that the Bosphorus transaction also benefits from an 18 month liquidity facility provided by the Paris head office of BNP Paribas, we do not pierce the foreign currency ceiling for this transaction because of our estimate of a relatively high LTV of about 90%.

There is \$127.892 million outstanding on the Bosphorus transaction, which is secured by three Boeing 777-300ERs delivered new to Turkish Airlines in 2015. The final scheduled payment date for this transaction is March 15, 2027. There is approximately \$20.670 million and \$0.776 million outstanding on the Class A and Class B obligations in the Anatolia financing. These amounts are the US dollar equivalents of the Japanese Yen-denominated amounts outstanding following the previous amortization payment in March 2024, using an exchange rate of 157. This transaction is secured by three Airbus A321-200s delivered new in 2015. The final scheduled payment dates for this transaction are September 15, 2024 and September 15, 2027, respectively.

## TUPRAS RATINGS RATIONALE

The upgrade of Tupras' ratings to Ba3 from B2 with a positive outlook reflects the company's close credit links to the Government of Türkiye and operational exposure to the country. The company's core assets are located in Türkiye and a majority of its cash flows are generated domestically and therefore Tupras' rating is constrained by Government of Türkiye's rating. The rating outlook on Tupras is aligned with the

positive outlook on the sovereign rating.

Tupras' rating is positioned one notch higher than the government bond rating to reflect (1) its healthy financial profile and strong liquidity position ahead of the notes maturing in October 2024; (2) the dominant position in the Turkish market as the leading refiner; and (3) exposure to a commodity business where its refined products can be readily sold in the international markets. Given that Türkiye is a net importer of diesel, we expect that the company's competitive position will endure should there be a weakening of the economic environment such that it reduces domestic demand for refined products. As of the last 12 months to 31 March 2024, Moody's-adjusted debt/EBITDA stood at 0.5x while adjusted net debt/EBITDA stood at -0.4x. During 2023, diesel demand in Türkiye grew by 6% compared to a year before, while jet fuel demand grew by 17% and gasoline grew 24%. Tupras has a strong liquidity position with TRY74 billion (\$2.3 billion) of unrestricted cash as of 31 March 2024. We also forecast funds from operations in excess of TRY52 billion (\$1.5 billion) during 2024. Additionally, the company actively manages its currency risk, and its cash flows are naturally hedged from the lira depreciation because domestic sales of petroleum products are indexed to the US dollar.

The rating positioning also takes into consideration its asset concentration in Türkiye and the company's exposure to cyclical market conditions inherent to the refining industry, an unstable domestic currency and working capital swings that historically resulted in volatile credit metrics. With the expectation of no significant geopolitical disruptions, fuel demand and refining margins are predicted to stabilize over the next 18 months.

The positive outlook mirrors that of the Government of Türkiye and reflects Tupras' exposure to the country's political, legal, fiscal and regulatory environment.

## OYAK RATINGS RATIONALE

The upgrade of OYAK's rating to B1 from B2 reflects the company's credit interlinkages with the sovereign. OYAK's rating reflects its material exposure to the country. Even though OYAK's investments are spread across different equities and other assets, there is a high concentration in Türkiye. In addition, the rating is supported by low net leverage, with market value based leverage (MVL) of around 3% as of 31 March 2024 and adequate liquidity.

The rating also incorporates high asset concentration and exposure to cyclical industries with the three largest equity investments, Erdemir, OYAK Cimento Fab A.S. and OYAK Renault accounting for around 40% of total portfolio value as of 31 March 2024. There is also limited investment transparency because the remainder of the asset portfolio is comprised of unlisted investments.

The company maintains an adequate liquidity profile. OYAK's unrestricted cash balance of TRY50.5 billion as of 31 March 2024, combined with expected dividend

income to be received in the next 18 months and cash from real estate development projects, are sufficient to meet all upcoming debt maturities of TRY48.4 billion, together with expected net member payouts and operating expenses over the same time frame.

Our assessment of OYAK's liquidity profile also incorporates significant sources of alternate liquidity in the form of listed securities which could be used to raise additional liquidity on short notice if needed. In addition, OYAK's governance allows the deferral of member payouts in the event of unexpected significant cash calls from retired members, which also helps protect its liquidity.

The positive outlook mirrors that on the Turkish government and reflects OYAK's exposure to the country's economic, political, legal, fiscal and regulatory environment.

#### SISECAM RATINGS RATIONALE

The upgrade of Sisecam's ratings to B1 from B2 and the outlook change to stable from positive reflect its exposure to the Turkish economy, with around 40% of its revenues generated in Turkiye, and an additional 20% produced and exported from the country. Sisecam's rating reflects its leading market position in Turkiye, balanced revenue and product mix derived from its architectural glass, automotive glass, glassware, glass packaging and chemicals businesses which mitigates single product line exposure. The company also benefits from an adequate financial profile and liquidity position.

The rating also takes into account the company's geographic concentration with 60% of revenues generated from Turkiye operations and an ambitious capital expenditure programme to increase its production capacity which will drive the company's negative free cash flow generation during the next 24 months in a period of depressed volume sales. Additionally, the company's rating also factors in the high levels of short-term borrowings, that represent around 41% of reported borrowings as of 31 March 2024.

The stable outlook reflects our expectation that Sisecam will maintain a stable operating performance despite the challenging macroeconomic environment while maintaining adequate credit metrics. The stable outlook also assumes that the company will maintain an adequate liquidity position despite the significant capacity growth projects.

#### LIMAK CEMENT RATINGS RATIONALE

The upgrade of Limak Cement's rating to B2 from B3 reflects the credit linkages and high exposure to Turkiye's domestic operating environment in Turkiye. The company benefits from supportive domestic cement prices which were high during the last 18 months and has allowed Limak Cement to generate positive free cash flow. Nevertheless, the company has volatile operating metrics and fluctuating profitability

that is inherent to the company's cyclical business profile and due to its exposure to coal input prices and cement output prices. Limak Cement's Moody's adjusted leverage was 2.8x as of December 2023 pro forma the recent \$575 million bond issuance (the leverage calculation excludes monetary gains and FX losses because they mostly come from the hyperinflation accounting adjustments and foreign currency losses related to debt items). We expect leverage to remain around 3.0x to 3.5x over the next two years, supported by healthy cement prices, albeit lower than in 2023 and strong cement demand in Turkiye.

The B2 CFR reflects Limak Cement's (1) healthy market position in the Turkish cement industry; (2) cost-effective operations and high margins compared to local peers as the company benefits from economies of scale; (3) barriers to entry due to relatively high capital investment requirements and close relations with key customers; and (4) favourable long term demand dynamics in Turkiye underpinned by positive societal trends and growth in the construction industry.

The rating also reflects the (1) relatively small scale of cement production when compared to global peers; (2) high cyclical nature of the business which is inherent to the construction industry; (3) the competitive nature of Limak Cement's domestic business combined with volatile coal and cement prices; (4) history of negative free cash flow except in 2023 when cement prices were elevated; and (5) its product and geographical concentration which significantly exposes the company to the domestic operating environment.

The stable outlook reflects our expectation that Limak Cement will maintain a stable operating performance with positive free cash flow generation while it benefits from a supportive Turkiye cement industry and maintain stable credit metrics over the next 12 to 18 months.

## ERDEMIR RATINGS RATIONALE

The upgrade of Erdemir ratings to B2 from B3 reflects our view that the company's solid credit metrics remain well positioned within the current rating category despite Erdemir's upcoming large capital investment programme. We expect the latter to result in negative free cash flow and higher leverage during the next 2-3 years. The upgrade also factors in our expectation that the TRY24.4 billion (\$750 million) inaugural senior unsecured debt issuance has improved the company's liquidity profile, albeit remains insufficient to cover the company's sizable short-term debt maturities and committed capital investment during the next 12-18 months. We expect the company to address the liquidity shortfall with additional debt or delay the commissioning of certain projects until most of the required funding is secured. We also forecast that similar to its financial strategy during H1-2024, Erdemir will continue to opportunistically refinance the company's sizable short-term debt maturities with longer tenor debt.

Erdemir's B2 ratings reflects (1) its leading position in Turkiye's flat steel market; (2)

some flexibility in redirecting sales to export markets if there is a decline in the domestic steel demand; (3) a relatively low fixed cost base that has historically allowed the company to remain profitable even throughout periods of declining steel prices; (4) solid credit metrics within the current rating level, with 2025 forecasted Moody's adjusted debt/EBITDA of 3.2x and EBIT interest coverage of 2.6x; and (5) manageable foreign-currency risk, because most of the company's debt, cash and revenue is denominated in or linked to the US dollar.

The B2 ratings also incorporate (1) the company's material exposure to the domestic operating environment; (2) weaknesses in liquidity with available sources insufficient to cover debt maturities and committed capital investment over the next 12 months; (3) exposure to the volatile prices of steel and feedstock; (4) cyclicality in the company's end markets, with a moderate reliance on the domestic construction and automobile industries; and (5) sizable capital investment programme, that will result in negative free cash flow and higher leverage during the next 2-3 years, despite the company reducing dividend distribution during the same period.

The stable outlook incorporates our expectation that the company will continue to work towards improving its liquidity profile during the next 12-18 months, while maintaining a strong operating and financial performance.

#### FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

#### KOC HOLDING FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

The ratings of Koc Holding could be upgraded if Turkiye's sovereign rating is upgraded. This would also require no material deterioration in the company's operating and financial performance, market positions and liquidity.

Koc Holding's ratings could be downgraded in case of a downgrade of Turkiye's sovereign rating and a lowering of the foreign-currency bond ceiling. In addition, downward rating pressure could arise if there are signs of a significant deterioration in liquidity or if government imposed measures were to have an adverse impact on corporate credit quality.

#### TURKCELL FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

Turkcell's rating is constrained by the rating of the Government of Turkiye. We would consider an upgrade if the rating of the Government of Turkiye is raised. This would also require no material deterioration in the company's operating and financial performance or its liquidity.

Turkcell's rating could come under pressure if there is downward pressure on Turkiye's sovereign rating or if there is a material deterioration in the company's



liquidity.

#### TURKISH AIRLINES FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

The ratings of Turkish Airlines are constrained at one notch above the rating of the Government of Turkiye and also by the foreign currency ceiling. We would consider an upgrade if both the rating of the Government of Turkiye and the foreign currency ceiling are raised. This would also require no material deterioration in the company's operating and financial performance and liquidity.

Turkish Airlines' ratings could be downgraded as a result of a downgrade of the Government of Turkiye's rating or of the foreign currency bond ceiling. In addition, downward rating pressure could arise if there are signs of a deterioration in liquidity or there is a sustained negative impact on earnings and cash flows from softening of demand.

Changes in EETC ratings can result from any combination of changes in our estimates of aircraft market values, which will affect estimates of loan-to-value; the underlying credit quality or ratings of the airline issuer or lessee; or our opinion of the importance of particular aircraft models to an airline's network.

#### TUPRAS FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

The ratings of Tupras could be upgraded if Turkiye's sovereign rating is upgraded. This would also require no material deterioration in the company's operating and financial performance, market positions and liquidity.

Tupras' ratings could be downgraded as a result of a downgrade of the Government of Turkiye's rating or of the foreign currency bond ceiling. In addition, downward rating pressure could arise if plant utilisation and net refining margins remain low for a sustained period of time, leading to depressed credit metrics and a weakening of the company's liquidity position.

#### OYAK FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

OYAK's rating is constrained by the rating of the Government of Turkiye. We would consider an upgrade of the rating if the rating of the Government of Turkiye is upgraded. This would also require no material deterioration in the company's liquidity profile, operating and financial performance.

OYAK's rating is likely to be downgraded in case of a downgrade of Turkiye's sovereign rating. In addition, downward rating pressure could arise if the company's liquidity profile, operating or financial performance deteriorates on sustained basis.

## SISECAM FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

Positive pressure on the ratings could arise if the company's liquidity profile significantly improves, the reliance on short term debt reduces and there is no deterioration in its operating and financial performance. An upgrade would also require the company to generate positive free cash flow, maintain a Moody's adjusted debt to EBITDA ratio below 4x and EBITA interest coverage comfortably above 3.5x, both on a sustained basis.

The ratings of Sisecam could be downgraded in case of a continued deterioration in the company's operating performance leading to a Moody's adjusted debt to EBITDA ratio above 4.5x, EBITA interest coverage ratio below 2.5x and sustained negative free cash flow over time. In addition, downward rating pressure could arise if there are signs of a deterioration in liquidity.

## LIMAK CEMENT FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

Positive pressure on the ratings could arise if the company's Moody's adjusted gross debt/EBITDA remaining sustainably below 3.5x; Moody's adjusted EBIT/interest is higher than 2.5x; and maintained positive Moody's-adjusted FCF with FCF/debt in the mid-to-high single digit range in percentage terms. An upgrade would also require a longer track record of stable operating performance and the company displaying a commitment to maintaining an adequate liquidity position at all times.

Downward rating pressure could arise if there are signs of a deterioration in liquidity, if Moody's-adjusted gross debt/EBITDA increases above 5x for a sustained period, Moody's-adjusted EBIT/interest falls below 1.5x on a sustained basis or Moody's adjusted FCF turns negative.

## ERDEMIR FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

Positive rating pressure could arise if Erdemir's liquidity profile materially strengthens with structurally lower reliance on short-term debt. This would also require no material deterioration in the company's operating and financial performance.

We would consider a downgrade of the rating, if Erdemir's liquidity profile materially weakens on a sustained basis. In addition, downward pressure could also arise if the company's operating and financial performance deteriorates on a sustained basis.

## PRINCIPAL METHODOLOGY

The principal methodologies used in rating Turkcell Iletisim Hizmetleri A.S. were Telecommunications Service Providers published in November 2023 and available at <https://ratings.moodys.com/rmc-documents/411275>, and Government-Related Issuers

methodology published in January 2024 and available at <https://ratings.moodys.com/rmc-documents/406502>. The principal methodology used in rating Ereğli Demir ve Çelik Fabrikaları T.A.S. was Steel published in November 2021 and available at <https://ratings.moodys.com/rmc-documents/356428>. The principal methodology used in rating Koc Holding A.S. and Ordu Yardımlaşma Kurumu (OYAK) was Investment Holding Companies and Conglomerates published in April 2023 and available at <https://ratings.moodys.com/rmc-documents/401316>. The principal methodology used in rating Türkiye Petrol Rafinerileri A.S. was Refining and Marketing published in August 2021 and available at <https://ratings.moodys.com/rmc-documents/74331>. The principal methodology used in rating Türkiye Sise ve Cam Fabrikaları A.S. and Sisecam UK Plc. was Manufacturing published in September 2021 and available at <https://ratings.moodys.com/rmc-documents/74970>. The principal methodologies used in rating Türk Hava Yolları Anonim Ortaklığı was Passenger Airlines published in August 2021 and available at <https://ratings.moodys.com/rmc-documents/74345> and Government-Related Issuers methodology published in January 2024 and available at <https://ratings.moodys.com/rmc-documents/406502>. The principal methodology used in rating Limak Çimento Sanayi ve Ticaret A.S. was Building Materials published in September 2021 and available at <https://ratings.moodys.com/rmc-documents/74988>. Alternatively, please see the Rating Methodologies page on <https://ratings.moodys.com> for a copy of these methodologies. The principal methodology used in rating Anatolia Pass Through Trust and Bosphorus Pass Through Trust 2015-1A was Enhanced Equipment Trust Certificates published in April 2024 and available at <https://ratings.moodys.com/rmc-documents/418385>.

Moody's National Scale Credit Ratings (NSRs) are intended as relative measures of creditworthiness among debt issues and issuers within a country, enabling market participants to better differentiate relative risks. NSRs differ from Moody's global scale credit ratings in that they are not globally comparable with the full universe of Moody's rated entities, but only with NSRs for other rated debt issues and issuers within the same country. NSRs are designated by a ".nn" country modifier signifying the relevant country, as in ".za" for South Africa. For further information on Moody's approach to national scale credit ratings, please refer to Moody's Credit Rating Methodology published in August 2022 entitled "Mapping National Scale Ratings from Global Scale Ratings Methodology". While NSRs have no inherent absolute meaning in terms of default risk or expected loss, a historical probability of default consistent with a given NSR can be inferred from the GSR to which it maps back at that particular point in time. For information on the historical default rates associated with different global scale rating categories over different investment horizons, please see [https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC\\_1280297](https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1280297).

The local market analyst for Koc Holding A.S., Türkiye Petrol Rafinerileri A.S., Türkiye Sise ve Cam Fabrikaları A.S., Sisecam UK Plc. and Limak Çimento Sanayi ve Ticaret A.S. ratings is Iker Ballesterro Barrutia, +971 (423) 795-21. The local market analyst for Turkcell İletişim Hizmetleri A.S. ratings is Lisa Jaeger, +971 (423) 796-59. The

local market analyst for Eregli Demir ve Celik Fabrikalari T.A.S. is Paul Feghaly, +971 (423) 795-31.

## REGULATORY DISCLOSURES

The List of Affected Credit Ratings announced here are a mix of solicited and unsolicited credit ratings. For additional information, please refer to Moody's Policy for Designating and Assigning Unsolicited Credit Ratings available on its website <https://ratings.moodys.com>. Additionally, the List of Affected Credit Ratings includes additional disclosures that vary with regard to some of the ratings. Please click on this link [https://www.moodys.com/viewresearchdoc.aspx?docid=PBC\\_ARFTL493504](https://www.moodys.com/viewresearchdoc.aspx?docid=PBC_ARFTL493504) for the List of Affected Credit Ratings. This list is an integral part of this Press Release and provides, for each of the credit ratings covered, Moody's disclosures on the following items:

- Rating Solicitation
- Issuer Participation
- Participation: Access to Management
- Participation: Access to Internal Documents
- UK Endorsement
- EU Endorsement
- Lead Analyst
- Releasing Office

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found on <https://ratings.moodys.com/rating-definitions>.

For any affected securities or rated entities receiving direct credit support/credit substitution from another entity or entities subject to a credit rating action (the supporting entity), and whose ratings may change as a result of a credit rating action as to the supporting entity, the associated regulatory disclosures will relate to the supporting entity. Exceptions to this approach may be applicable in certain jurisdictions.

For ratings issued on a program, series, category/class of debt or security, certain regulatory disclosures applicable to each rating of a subsequently issued bond or note of the same series, category/class of debt, or security, or pursuant to a program for which the ratings are derived exclusively from existing ratings, in accordance with

Moody's rating practices, can be found in the most recent Credit Rating Announcement related to the same class of Credit Rating.

For provisional ratings, the Credit Rating Announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating.

Moody's does not always publish a separate Credit Rating Announcement for each Credit Rating assigned in the Anticipated Ratings Process or Subsequent Ratings Process.

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

The below contact information is provided for information purposes only. For disclosures on the lead rating analyst and the Moody's legal entity that issued the rating, please see the issuer/deal page on <https://ratings.moodys.com> for each of the ratings covered.

The person who approved Turkcell Iletisim Hizmetleri A.S., Turkiye Sise ve Cam Fabrikalari A.S., Sisecam UK Plc., Turk Hava Yollari Anonim Ortakligi, Limak Cimento Sanayi ve Ticaret A.S., Eregli Demir ve Celik Fabrikalari T.A.S. and Ordu Yardimlasma Kurumu (OYAK) credit ratings is Rehan Akbar, Senior Vice President/Manager, Corporate Finance Group, Journalists Tel: 44 20 7772 5456, Client Service Tel: 44 20 7772 5454. The person who approved Turkiye Petrol Rafinerileri A.S. and Koc Holding A.S. credit ratings is David G. Staples, MD - Corporate Finance, Corporate Finance Group, Journalists Tel: 44 20 7772 5456, Client Service Tel: 44 20 7772 5454. The person who approved Anatolia Pass Through Trust and Bosphorus Pass Through Trust 2015-1A credit ratings is Jonathan Kanarek, CFA, Associate Managing Director, Corporate Finance Group, Journalists Tel: 1 212 553 0376, Client Service Tel: 1 212 553 1653.

The relevant office for each credit rating is identified in "Debt/deal box" on the Ratings tab in the Debt/Deal List section of each issuer/entity page of the website.

One or more of the above ratings is released from Moody's Investors Service Middle East Limited which is Regulated by the DFSA.

Items color coded in purple in this Press Release relate to unsolicited ratings for a rated entity which is non-participating.

Please see <https://ratings.moodys.com> for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

Please see the issuer/deal page on <https://ratings.moodys.com> for additional

regulatory disclosures for each credit rating.

Donatella Maso  
VP - Senior Credit Officer  
Corporate Finance Group  
Moody's Italia S.r.l  
Corso di Porta Romana 68  
Milan, 20122  
Italy  
JOURNALISTS: 44 20 7772 5456  
Client Service: 44 20 7772 5454

Rehan Akbar, CFA  
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Client Service: 44 20 7772 5454

Releasing Office:  
Moody's Italia S.r.l  
Corso di Porta Romana 68  
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