

Second-Party Opinion

Rumo S.A. Sustainability-Linked Finance Framework



Evaluation Summary

Sustainalytics is of the opinion that Rumo's Sustainability-Linked Finance Framework aligns with the Sustainability-Linked Bond Principles 2020 and Sustainability-Linked Loan Principles 2021. This assessment is based on the following:

- **Selection of Key Performance Indicator (KPI):** Rumo's Sustainability-Linked Finance Framework includes one KPI (see Table 1). Sustainalytics considers the KPI chosen to be strong given that it is a direct measure of Rumo's performance on a material environmental issue for the rail transportation sub-industry. The selected KPI is also based on a clear and consistent methodology.
- **Calibration of Sustainability Performance Targets (SPTs):** Rumo has established the following SPTs for its KPI: reduce GHG emissions intensity to 11.82 gtCO₂e/TKU by 2026, then further to 11.24 gtCO₂e/TKU by 2030, from a 2020 baseline. Sustainalytics considers the SPTs to be aligned with Rumo's sustainability strategy. Sustainalytics considers the SPTs to be ambitious as it is aligned with Rumo's historical emissions intensity performance, the decarbonization targets set by its peers and a 2-degree climate scenario.
- **Sustainability-Linked Instruments Characteristics:** Rumo will link the financial characteristics of its sustainability-linked instruments (which may include bonds and/or loans) to the achievement of the SPTs, namely a step-up (or potentially a step-down) in the coupon rate from the first coupon date after the target observation date. Sustainalytics positively notes that both the SPTs need to be met to avoid an increase in the coupon rate.
- **Reporting:** Rumo commits to report on an annual basis on its performance on the KPI in a dedicated report, which will be available on its website. The reporting commitments are aligned with market expectations.
- **Verification:** Rumo commits to have external limited or reasonable assurance conducted on its KPI performance at the communicated SPTs deadline, which is aligned with market expectations.

Evaluation Date	September 7, 2021
Issuer/Borrower	Curitiba,
Location	Brazil

The SPTs contribute to the following SDGs:



Overview of KPI and SPTs

KPI	Baseline	SPT	Strength of the KPI	Ambitiousness of SPT
Scope 1 and 2 GHG Emissions Intensity (gtCO ₂ e/TKU)	2020	11.82 gtCO ₂ e/TKU by 2026 and 11.24 gtCO ₂ e/TKU by 2030	Strong	Ambitious

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Scope of Work and Limitations

Rumo has engaged Sustainalytics to review the Sustainability-Linked Finance Framework and provide an opinion on the alignment of the linked instruments with the Sustainability-Linked Bond Principles (SLBP)¹ and/or Sustainability-Linked Loan Principles (SLLP).²

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent³ opinion on the alignment of the reviewed Framework with the Sustainability-Linked Bond Principles 2020, as administered by ICMA, and the Sustainability-Linked Loan Principles 2021, as administered by APLMA, LMA, and LSTA.

As part of this engagement, Sustainalytics exchanges information with various members of Rumo's management team to understand the sustainability impact of their business processes and SPTs, as well as reporting and verification processes of aspects of the Sustainability-Linked Finance Framework. Rumo's representatives have confirmed that:

- (1) They understand it is the sole responsibility of issuer to ensure that the information provided is complete, accurate or up to date;
- (2) They have provided Sustainalytics with all relevant information; and
- (3) Any provided material information has been duly disclosed in a timely manner.

Sustainalytics also reviewed relevant public documents and non-public information. This document contains Sustainalytics' opinion on the linked instruments and should be read in conjunction with the Framework. Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Rumo. Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated SPTs or KPI but does not measure the KPI's performance. The measurement and reporting of the KPI is the responsibility of the issuer. No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument either in favor or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Rumo has made available to Sustainalytics for the purpose of this Second-Party Opinion.

The Second-Party Opinion is valid for issuances aligned with the respective Framework for which the Second-Party Opinion was written and aligned with the methodology to calculate the KPI performance outlined in the Second-Party Opinion up to 24 months or until one of the following occurs:

- (1) A material change to the external benchmarks⁴ against which targets were set;
- (2) A material corporate action (such as material M&A or change in business activity) which has a bearing on the achievement of the SLBs or the materiality of the KPI.

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¹ The Sustainability Linked Bond Principles (SLBP) were launched by ICMA in June 2020. They are administered by the ICMA and are available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Sustainability-Linked-Bond-PrinciplesJune-2020-100620.pdf>

² The Sustainability-Linked Loan Principles (SLLP) were launched by LSTA in May 2021. They are administered by the LSTA and are available at: <https://www.lsta.org/content/sustainability-linked-loan-principles-sllp/#>

³ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.

⁴ Benchmarks refers to science based benchmarks

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Introduction

Rumo S.A. ("Rumo" or the "Company" or the "Issuer"), is a Brazilian transportation company with a focus on railway logistics. Founded in 1997, the Company is headquartered in Curitiba, Brazil. Rumo also provides logistics services for port elevation, warehousing and intermodal transport. The Company offers a storage capacity of around 900,000 tons through its network of distribution centers, facilities and transshipment terminals. As of August 2021, Rumo's railway infrastructure includes 13,600 kilometers of railway lines along with 1,500 locomotives and 35,000 railcars.

Rumo intends to issue Sustainability-Linked Instruments (SLI) where the coupon rate of the instrument is tied to the achievement of the Sustainability Performance Targets for one KPI related to decrease in Scope 1 and 2 GHG emissions intensity.

Rumo has engaged Sustainalytics to review the Sustainability-Linked Finance Framework and provide an opinion on the alignment of the Framework with the Sustainability-Linked Bond Principles (SLBP) and Sustainability-Linked Loan Principles (SLLP).

The KPI and SPTs used by Rumo are defined in Tables 1 and 2 below.

Table 1: KPI Definitions

KPI	Definition
Scope 1 and 2 GHG Emissions Intensity (gtCO ₂ e/TKU)	<p>The KPI measures the Scope 1 and 2 emission intensity based on the productivity of Rumo's operations.</p> <p>Emissions intensity is calculated as follows: gCO₂e/TKU, which represents grams of CO₂ equivalent per net ton-kilometer.</p> <p>Emission intensity calculation includes direct GHG emissions from diesel consumption by the locomotives owned by Rumo and its subsidiaries (Scope 1) and GHG emissions from the purchased electricity, heat or steam (Scope 2).</p> <p>Rumo follows the GHG Protocol in calculating the Company's Scope 1 and 2 emissions.⁵</p>

Table 2: SPTs and Past Performance

KPI	2015	2016	2017	2018	2019	2020 (baseline)	SPT 2026	SPT 2030
Scope 1 and 2 GHG Emissions Intensity (gtCO ₂ e/TKU)	21.33	20.31	18.59	16.99	15.82	14.34	11.82	11.24

⁵ The Greenhouse Gas Protocol, "A Corporate Accounting and Reporting Standard revised edition", (2015) at: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Alignment of Rumo's Sustainability-Linked Finance Framework with the Sustainability-Linked Bond Principles and Sustainability-Linked Loan Principles.

Sustainalytics is of the opinion that Rumo's Sustainability-Linked Finance Framework aligns with the five core components of the Sustainability-Linked Bond Principles 2020 (SLBP) and/or Sustainability-Linked Loan Principles 2021 (SLLP).



Selection of Key Performance Indicator (KPI)

Relevance and Materiality of the KPI

Sustainalytics, in its assessment of materiality and relevance, considers i) whether an indicator speaks to a material impact of the issuer's/borrower's business on environment or social issues, and ii) to what portion of impact the KPI is applicable.

Sustainalytics considers the KPI, Scope 1 and 2 GHG emissions intensity, to be material and relevant. Sustainalytics' ESG Risk Ratings identify "Carbon – Own Operations" as a material ESG issue for the rail transport sub-industry as well as the Company specifically.⁶ Additionally, the Sustainability Accounting Standard Board (SASB) identifies GHG emissions as a material topic for the rail transportation sub-industry and states that such emissions are largely a result of diesel combustion in locomotive engines.⁷ Furthermore, in 2018, Rumo conducted a materiality assessment where fuel management was identified as a material environmental issue for the Company and a focal point of Rumo's sustainability strategy.⁸

In terms of applicability, Rumo has disclosed that over 99% of its Scope 1 emissions are a result of fuel consumption from its locomotives and that Scope 1 and 2 combined represent roughly 61% of the Company's total emissions (Scopes 1, 2 and 3). On this basis, Sustainalytics considers the applicability of the KPI to the Company's overall emissions as significant and highly material.

KPI Characteristics

In its assessment of the KPI characteristics, Sustainalytics considers i) whether a clear and consistent methodology is used, ii) whether the issuer/borrower follows an externally recognized definition, iii) whether the KPI is a direct measure of the performance of the issuer/borrower on the material environmental or social issue, and iv) if applicable, whether the methodology can be benchmarked to an external contextual benchmark.⁹

Sustainalytics considers Rumo's definition and methodology to calculate the KPI performance to be clear and consistent based on its ease of interpretation and the Company's historical reporting. The methodology used to calculate the KPI is also widely utilized within the industry. Additionally, the KPI measures the grams of CO₂ equivalent emissions from its operations per net ton-kilometer and is, therefore, a direct measure of Rumo's performance regarding the material climate impact. Sustainalytics views the methodology to be supportive of benchmarking against external trajectories.

Overall Assessment

⁶ "Carbon - Own Operations" refers primarily to a company's management of risks related to its own operational energy use and GHG emissions (Scope 1 and 2).

⁷ SASB, "Rail Transportation: Sustainability Accounting Standard" (2018), at: https://www.sasb.org/wp-content/uploads/2018/11/Rail_Transportation_Standard_2018.pdf

⁸ Rumo, "2020 Sustainability Report", at: <http://ri.rumolog.com/en/about-rumo/sustainability/>

⁹ External contextual benchmarks provide guidance on the alignment with ecological system boundaries. This criterion is not applied to social KPIs or impact areas for which such contextual benchmarks are not available.

Sustainalytics considers the KPI to be strong given that it speaks to a material environmental issue for the transportation industry and is a direct measure of Rumo's performance on the issue. It has a clear and consistent methodology that is widely utilized within the rail freight sub-industry.

Scope 1 and 2 GHG Emissions Intensity (gtCO ₂ e/TKU)	Not Aligned	Adequate	Strong	Very strong
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Calibration of Sustainability Performance Targets (SPTs)

Alignment with Rumo's Sustainability Strategy

Rumo has set the following SPTs for its KPI:

- Reduce GHG emissions intensity to 11.82 gtCO₂e/TKU by 2026, then further to 11.24 gtCO₂e/TKU by 2030, representing reductions of 17.6% and 21.6% compared to the 2020 baseline.

Sustainalytics considers the SPTs to be aligned with Rumo's sustainability strategy (please refer to Section 2 for analysis of the credibility of Rumo's sustainability strategy).

Rumo has identified a reduction in carbon emissions to be a material environmental issue for the Company. Rumo started tracking its GHG emissions intensity performance in 2015 and has already achieved a 33% reduction between 2015 and 2020.⁸ The Company also began accounting for its Scope 3 emissions in 2019 and is currently in the early stages of developing its strategies and timelines for a reduction in Scope 3 emissions.

Additionally, Rumo has set up an Energy Efficiency department which is responsible for monitoring its energy consumption and emissions performance for its operations in the North and South of Brazil. The department further identifies avenues such as fleet renewal, track revitalization, leveraging technology and expanding terminal capacity to help improve the Company's performance.⁸ In this view, the Company acquired 46 new locomotives and disposed of 39 old locomotives between 2014 and 2018 to improve the energy efficiency of its southern operations. Sustainalytics is of the opinion that Rumo's overall sustainability strategy will support the achievement of the set SPTs.

Strategy to Achieve the SPTs

Rumo intends to achieve the SPTs through the following strategy:

- **Purchase and renewal of locomotive fleet:** Rumo initiated a fleet modernization plan in 2015 to purchase and renew a locomotive fleet enabled with technologies to enhance capacity and improve energy efficiency. The Company has since acquired more than 230 pieces of the new locomotive which represents around 20% of its total fleet. Rumo has communicated to Sustainalytics that the new locomotives are, on average, 20% to 30% more fuel efficient than the old locomotives. Between 2021 and 2023, Rumo intends to purchase 86 new locomotives and stop using six old locomotives. Rumo also invests in developing railway tracks to expand capacity while reducing fuel consumption and GHG emissions.
- **Use of renewable energy:** To reduce its Scope 2 emissions, Rumo is committed to achieving a more sustainable energy mix by increasing its purchase of energy from certified renewable sources and implementing projects with the use of solar power.
- **Energy efficiency measures:** In addition to investing in technologies that reduce fuel consumption in locomotives, Rumo has also undertaken other energy efficiency initiatives such as (i) the installation of Trip Optimizer technology, a semi-automatic locomotives system, that contributed to a 20% reduction in diesel consumption in its Northern operations⁹, and (ii) the installation of the 'Start/Stop device', which automatically shuts down the train's engine after a halt for ten minutes and restarts once the train starts running again, thereby conserving fuel and energy. In 2021, Rumo plans to implement the Positive Train Control (PTC) 2.0 Project, under which it intends to install technology that monitors and controls train traffic. Rumo has communicated to Sustainalytics that the project has the potential to result in an annual reduction of 20,000 tonnes of CO₂. Intending to reduce energy consumption, Rumo also intends to migrate its data center to the cloud.

Ambitiousness, Baseline and Benchmarks

To determine the ambitiousness of the SPTs, Sustainalytics considers whether the SPTs go beyond business-as-usual trajectory, ii) how the SPTs compare to targets set by peers, iii) and how the SPTs compare with science.¹⁰

Rumo has set the baseline for the SPT at 2020 to reflect the latest data available, with an ambition to achieve a 17.6% reduction by 2026 and a 21.6% reduction by 2030. Sustainalytics considers the SPT to be aligned with Rumo's historical emissions intensity performance as it represents a substantial reduction in the Company's Scope 1 and 2 emission intensity compared to the 2020 baseline.

Based on research carried out by Sustainalytics, the SPT is aligned with the decarbonization targets set by Rumo's peers in the rail transportation sub-industry.

For comparison with recognized decarbonization trajectories, Sustainalytics utilized the 2DS trajectory developed by the Science-based Targets initiative (SBTi) for the freight rail sub-industry to assess the alignment with the 2-degree climate scenarios. While the emissions intensity target set by Rumo for 2030 (11.24 gtCO₂e/TKU) exceeds the required intensity value suggested under the SBTi 2-degree pathway for the same year (at or below 8.45 gtCO₂e/t-km), Sustainalytics highlights the significant rate of improvement associated with the SPT until the observation date (2030),¹¹ which implies a long-term convergence to the required average intensity for the sector under a 2-degree trajectory.¹² While noting that the intensity-based target of Rumo does not require a decrease in absolute emissions, Sustainalytics recognizes the positive environmental impact of the avoided emissions associated with the modal shift from the road (trucks) to rail when it comes to freight transportation within the Brazilian context.

Overall Assessment

Sustainalytics considers the SPT to be ambitious as it is aligned with Rumo's historical emissions intensity performance and the Company's sustainability strategy. Additionally, the SPT is aligned with the targets set by Rumo's peers as well as the 2-degree climate scenario.

11.82 gtCO ₂ e/TKU by 2026 and 11.24 gtCO ₂ e/TKU by 2030	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious
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Sustainability-Linked Instruments Characteristics

Rumo has disclosed that bonds and/or loans pertaining to the Framework will be subject to adjustments for not achieving (or achieving) the SPTs on the target observation dates in 2026 and 2030. If Rumo is unable (or able) to achieve the SPTs, a coupon step-up (or step-down) will be applied in the interest rate from the first coupon date following the SPT observation date. The penalties will also be applicable if the Company is unable to provide the verification report or the satisfaction notice on the achievement of the SPTs on a timely basis. Rumo has confirmed that the exact value of the adjustment will be provided in the specific documentation. Sustainalytics positively notes that both SPTs need to be met to avoid an increase in the coupon rate; however, it does not opine on the adequacy of the penalty imposed for not achieving the set SPTs.



Reporting

Rumo commits to report on an annual basis on its performance on the KPI and to publish the relevant figures in an update report accessible on its website. The Company also commits to disclose other relevant information that may enable investors to monitor the progress of the SPTs. The report may also include, where feasible, an illustration of the positive impact of the performance improvement and an explanation of the key contributing

¹⁰ We refer here to contextual benchmarks, that indicate the alignment of targets with ecosystem boundaries.

¹¹ Rumo's historical performance data and targets for emissions intensity reflect an annual reduction of 2.4% between 2020 and 2030, and 4.1% between 2017 and 2030.

¹² As per the SBTi, the long-term average intensity for freight rail is at or below 2.12 gtCO₂e/t-km by 2050.

factors for the improvement in performance. Rumo's reporting commitments are aligned with the recommendations of the SLBP and SLLP.



Verification

Rumo commits to having an external verifier provide limited or reasonable assurance on the published KPI performance figures for each fiscal year. The Company will disclose the verification report on its website. This is aligned with the SLBP and SLLP on verification.

Section 2: Assessment of Rumo's Sustainability Strategy

Credibility of Rumo's Sustainability Strategy

Rumo has embedded its sustainability strategy in its corporate governance structures. The Company has set up a Strategic and Sustainability Committee¹³ that reports to the Board of Directors and ensures compliance with legal duties related to business sustainability by monitoring and implementing policies, strategies, actions, and projects. This Committee serves as the highest governance body that is responsible for managing the impact, environmental and social risks and analyzing the KPI quarterly. The Committee also receives feedback from external stakeholders, including investors, communities, government agencies and companies that promote ESG ratings.¹³

Rumo has been reporting its sustainability performance since 2016 through its annual Sustainability Reports, prepared in accordance with the Global Reporting Initiative (GRI) Standards, indicating a commitment to internationally recognized non-financial reporting standards.⁸ **Error! Bookmark not defined.** In 2020, Rumo adopted the use of the indicators and metrics from the SASB. In 2019, the Company implemented the Environmental Performance Indicator (EPI), which guides the environmental management of operating units and terminals to comply with Rumo's Environmental Policy Principles. In 2019, Rumo achieved 63 points on a scale of 100 in the EPI; then in 2020 reached 80, and it aims to reach 86 points in 2021⁸, indicating continued improvement. Aiming to attach greater weight to its ESG goals, from 2021 onwards, Rumo also made performance related to ESG aspects a part of the variable compensation for all its employees.

Furthermore, Rumo has identified risks and opportunities arising from climate change and has invested over BRL 3 billion (USD 570 million)¹⁴ in initiatives that improve energy efficiency in its operations, reduce diesel consumption, leverage artificial intelligence to prevent losses and occurrences.⁸

Sustainalytics considers Rumo to have a strong sustainability strategy and considers that the SLBs will further support Rumo's sustainability efforts.

Rumo's Environmental and Social Risk Management

According to Sustainalytics' ESG Risk Ratings, Rumo's overall management of ESG issues is average. At the same time, the Company's ESG reporting is strong. Sustainalytics' analysis is based on Rumo's overall performance in environmental, governance and social issues.¹⁵ Sustainalytics also recognizes that while Rumo's defined targets are impactful, it is acknowledged that achieving the SPTs bears environmental and social risks related to "Emissions, Effluents and Waste"¹⁶, "Human Capital"¹⁷ and "Occupational Health and Safety"¹⁸.

In the following section, Sustainalytics comments on Rumo's ability to mitigate such potential risks.

¹³ Rumo, website, "Councils, Committees and Board of Directors", accessed in August 2021, at: <http://ri.rumolog.com/governanca-corporativa/conselhos-comites-e-diretoria/>

¹⁴ Converting at: BRL 1 = USD 0.19 as on August 27, 2021

¹⁵ This assessment has been derived from Sustainalytics' ESG Risk Ratings on August 27, 2021.

¹⁶ "Emissions, Effluents and Waste" focuses on the management of emissions and releases from a company's own operations to air, water and land, excluding GHG emissions.

¹⁷ "Human Capital" refers to the management of risks related to scarcity of skilled labour as well as labour relations, such as non-discrimination, working hours and minimum wages.

¹⁸ "Occupational Health and Safety" refers to the management of workplace hazards affecting a company's own employees and on-site contractors. Where relevant, it may also include HIV/AIDS programmes.

- Identifying the environmental risks associated with its operations, Rumo has laid out an Environment Policy which aims at (i) making the Company's operations environmentally responsible, (ii) protecting biodiversity (iii) encouraging sustainable use of natural resources (iv) environmental management by reducing emissions, managing waste and reusing materials. Rumo has also set up an Environmental Risk Prevention Programme.¹⁹
- Rumo identifies that the risks inherent in the Company's operations expose its employees to workplace hazards. Hence, in 2015, Rumo established an occupational health and safety management system that ensures alignment with legal requirements and regulatory guidelines such as ISO45001, OHSAS18001 and Cosan Group programmes.²⁰ Rumo has set up an Occupational Health Medical Programme and a Safety Committee, which reports to the CEO and ensures safety at the operational and strategic levels.⁸ Rumo's suppliers are required to comply with rules related to the health and safety of workers and labor laws that commit to not employing child labor or slave labor.⁸
- Rumo has a Code of Conduct that guides its relationships with the customers, suppliers, shareholders, and the community. According to its Code of Conduct, Rumo is required to comply with contractual rules and corporate practices and keep all company communications clear, truthful, and accurate. Rumo is required to conduct its operations with related parties in a transparent manner while following best market practices.²¹ Rumo also requires all its suppliers to adhere to its Code of Conduct and comply with legislation and industry standards.
- Rumo has set up procedures for managing solid waste. These procedures lay down rules for managing hazardous and non-hazardous waste generated from its operations and provide guidelines for segregation, treatment and disposal of wastes to safeguarding human health and the environment.²²

Sustainalytics notes that it has not found evidence of significant environmental or social controversies related to Rumo. Rumo's overall ESG-related disclosure follows best practice, signalling strong accountability to investors and the public. Rumo also disclosed a strong environmental policy which Sustainalytics considers to be positive for the achievement of the SPTs.

Section 3: Impact of the SPTs Chosen

Railways have a long-standing position as one of the pillars of passenger mobility and freight transport, and today, conventional rail provides nearly one-sixth of the world's long-distance travel.²³ Globally, freight rail enables high-capacity goods movements over very long distances, allowing access to trade for resources and facilitating the operation of major industrial clusters. The demand for global transport in the coming decades is expected to increase as the global population increases, incomes rise, and demand for products increase, and the International Energy Agency (IEA) expects global transport demand to more than double by 2050²⁴, bringing with its greater energy demand and increased carbon emissions.

A report by the International Transport Forum (ITF) estimates that international trade-related freight transport currently accounts for around 30% of all transport-related carbon emissions from fuel combustion, and more than 7% of global emissions.²⁵ In the same report, the ITF projects an increase of trade-related freight transport emissions by a factor of 3.9 to 2050 from a 2010 base case. A nearly fourfold increase would seriously undermine efforts towards achieving climate goals. Rail offers an opportunity to mitigate the climate impact of increased trade-related freight transportation and the IEA estimates that total energy demand for the rail sector in 2050, after expected growth in global transportation, will account for only 4% of total transport energy demand.²⁶ Although freight rail activity has risen steadily over the past twenty years, this growth has been concentrated in the United States, China and Russia, together accounting for almost three-quarters of freight rail,²⁷ creating a need for wider adoption of freight rail in other regions. Sustainalytics notes that Investments in rail infrastructure in Brazil and the region will contribute meaningfully towards meeting the expected increase in transportation demand and the reduction of the associated carbon emissions in the transportation industry during this expected growth period, contributing to achieving the climate goals.

¹⁹ Rumo, "Environmental Policy", accessed in August 2021, at: <http://ri.rumolog.com/governanca-corporativa/estatuto-codigos-e-politicas/>

²⁰ Cosan Group is the holding company of Rumo. Cosan has implemented policies, procedures and practices for risk management and emergency response to ensure the safety of operations, customers and communities. Cosan, "Sustainability", accessed in August 2021, at: <https://www.cosan.com.br/en/about-cosan/sustainability/>

²¹ Rumo, "Code of Conduct", accessed in August 2021, at: <http://ri.rumolog.com/governanca-corporativa/estatuto-codigos-e-politicas/>

²² Rumo has shared its "Solid Waste Procedures" with Sustainalytics on a confidential basis

²³ IEA, "The future of rail: Opportunities for energy and the environment, (2019)", at: <https://www.iea.org/reports/the-future-of-rail>

²⁴ IEA, "Energy technology perspectives, (2020)", at: <https://www.iea.org/data-and-statistics/data-product/energy-technology-perspectives-2020>

²⁵ International Transport Forum, "The carbon footprint of global trade", at: <https://www.itf-oecd.org/sites/default/files/docs/cop-pdf-06.pdf>

²⁶ IEA, "The future of rail: Opportunities for energy and the environment, (2019)", at: <https://www.iea.org/reports/the-future-of-rail>

²⁷ IEA, "Energy technology perspectives, (2020)", at: <https://www.iea.org/data-and-statistics/data-product/energy-technology-perspectives-2020>

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. The sustainability-link instruments advance the following SDG goals and targets:

KPI	SDG	SDG Target
Scope 1 and 2 GHG Emissions Intensity (gtCO ₂ e/TKU)	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
	9. Industry, Innovation, and Infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
	11. Sustainable Cities and Communities	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

Conclusion

Rumo intends to issue Sustainability-Linked Instruments, which will tie the coupon rate to the achievements of the following SPTs:

- Reduce GHG emissions intensity to 11.82 gtCO₂e/TKU by 2026 and to 11.24 gtCO₂e/TKU by 2030.

Sustainalytics considers the KPI chosen - Reduction in Scope 1 and 2 GHG Emissions Intensity (gtCO₂e/TKU) - to be strong as it is a direct measure of a material environmental issue for the freight rail industry, is applicable to over 60% of Rumo's total (Scope 1, 2 and 3) emissions, and utilizes a clear and consistent methodology. The SPT is considered ambitious as it is aligned with Rumo's historical emissions intensity performance, the targets set by its peers and the 2-degree climate scenario. Furthermore, Sustainalytics considers reporting and verification commitments to be aligned with market expectations.

Based on the above, Sustainalytics considers Rumo's Sustainability-Linked Finance Framework to be in alignment with the five core components of the Sustainability-Linked Bond Principles 2020 and Sustainability-Linked Loan Principles 2021 and the prospective of achievement of the SPTs to be impactful.

Appendix 1: Sustainability-Linked Finance Framework - External Review Form

Section 1. Basic Information

Issuer name: Rumo S.A.

Sustainability-Linked Bond ISIN: not known at the time of publication

Independent External Review provider's name for second party opinion pre-issuance (sections 2 & 3): Sustainalytics

Completion date of second party opinion pre-issuance: September 7, 2021

Independent External Review provider's name for post-issuance verification (section 4): not known at the time of publication

Completion date of post issuance verification: not known at the time of publication

At the launch of the bond, the structure is:

- ☒ a step-up structure ☐ a variable redemption structure

Section 2. Pre-Issuance Review

2-1 SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarize the scope of the review.

The review:

- ☒ assessed all the following elements (complete review) ☐ only some of them (partial review):
- | | |
|--|--|
| <input checked="" type="checkbox"/> Selection of Key Performance Indicators (KPIs) | <input checked="" type="checkbox"/> Bond characteristics (acknowledgment of) |
| <input checked="" type="checkbox"/> Calibration of Sustainability Performance Targets (SPTs) | <input checked="" type="checkbox"/> Reporting |
| <input checked="" type="checkbox"/> Verification | |
- ☒ and confirmed their alignment with the SLBP.

2-2 ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER

- | | |
|--|---|
| <input checked="" type="checkbox"/> Second Party Opinion | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Scoring/Rating |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

2-3 EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)

Rumo intends to issue Sustainability-Linked Instruments, which will tie the coupon rate to the achievements of the following SPTs:

- Reduce GHG emissions intensity to 11.82 gtCO₂e/TKU by 2026, then further to 11.24 gtCO₂e/TKU by 2030, representing reductions of 17.6% and 21.6% compared to the 2020 baseline.

Sustainalytics considers the KPI chosen - Reduction in Scope 1 and 2 GHG Emissions Intensity (gtCO₂e/TKU) - to be strong as it is a direct measure of a material environmental issue for the freight rail industry, is applicable to over 60% of Rumo's total (Scope 1, 2 and 3) emissions, and utilizes a clear and consistent methodology. The SPT is considered ambitious as it is aligned with Rumo's historical emissions intensity performance, the targets set by its peers and the 2-degree climate scenario. Furthermore, Sustainalytics considers reporting and verification commitments to be aligned with market expectations. Based on the above, Sustainalytics considers Rumo's Sustainability-Linked Finance Framework to be in alignment with the five core components of the Sustainability-Linked Bond Principles 2020 and Sustainability-Linked Loan Principles 2021 and the prospective of achievement of the SPTs to be impactful.

Section 3. Detailed pre-issuance review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

3-1 SELECTION OF KEY PERFORMANCE INDICATORS (KPIs)

Overall comment on the section (if applicable): Rumo's Sustainability-Linked Finance Framework includes one KPI (see Table 1). Sustainalytics considers the KPI chosen to be strong given that it is a direct measure of Rumo's performance on a material environmental issue for the rail transportation sub-industry. The selected KPI is also based on a clear and consistent methodology.

List of selected KPIs:

- Reduction in Scope 1 and 2 GHG Emissions Intensity (gtCO₂e/TKU)

Definition, Scope, and parameters

- | | |
|--|---|
| <input checked="" type="checkbox"/> Clear definition of each selected KPIs | <input checked="" type="checkbox"/> Clear calculation methodology |
| <input type="checkbox"/> Other (please specify): | |

Relevance, robustness, and reliability of the selected KPIs

- | | |
|--|---|
| <input checked="" type="checkbox"/> Credentials that the selected KPIs are relevant, core and material to the issuer's sustainability and business strategy. | <input type="checkbox"/> Evidence that the KPIs are externally verifiable |
| <input checked="" type="checkbox"/> Credentials that the KPIs are measurable or quantifiable on a consistent methodological basis | <input type="checkbox"/> Evidence that the KPIs can be benchmarked |
| | <input type="checkbox"/> Other (please specify): |

3-2 CALIBRATION OF SUSTAINABILITY PERFORMANCE TARGETS (SPTs)

Overall comment on the section (if applicable): Sustainalytics considers the SPTs to be aligned with Rumo's sustainability strategy. Sustainalytics considers the SPT to be ambitious as it is aligned with Rumo's historical emissions intensity performance, the targets set by its peers and the 2-degree climate scenario.

Rationale and level of ambition

- | | |
|--|--|
| <input checked="" type="checkbox"/> Evidence that the SPTs represent a material improvement | <input type="checkbox"/> Credentials on the relevance and reliability of selected benchmarks and baselines |
| <input checked="" type="checkbox"/> Evidence that SPTs are consistent with the issuer's sustainability and business strategy | <input checked="" type="checkbox"/> Credentials that the SPTs are determined on a predefined timeline |
| | <input type="checkbox"/> Other (please specify): |

Benchmarking approach

- | | |
|--|--|
| <input checked="" type="checkbox"/> Issuer own performance | <input checked="" type="checkbox"/> Issuer's peers |
| <input checked="" type="checkbox"/> reference to the science | <input type="checkbox"/> Other (please specify): |

Additional disclosure

- | | |
|---|--|
| <input type="checkbox"/> potential recalculations or adjustments description | <input checked="" type="checkbox"/> issuer's strategy to achieve description |
| <input checked="" type="checkbox"/> identification of key factors that may affect the achievement of the SPTs | <input type="checkbox"/> Other (please specify): |

3-3 BOND CHARACTERISTICS

Overall comment on the section (if applicable): Rumo will link the financial characteristics of the bonds and/or loans to the achievement of the SPTs, namely a step-up (or potentially a step-down) in the coupon rate from the first coupon date after the target observation date. Sustainalytics positively notes that both the SPTs need to be met to avoid an increase in the coupon rate.

Financial impact:

- ☒ variation of the coupon
- ☐ ...
- ☐ Other (please specify):

Structural characteristic:

- ☐ ...
- ☐ ...
- ☐ Other (please specify):

3-4 REPORTING

Overall comment on the section (if applicable): Rumo commits to report on an annual basis on its performance on the KPI in a separate report, which will be available on its website. The reporting commitments are aligned with market expectations.

Information reported:

- | | |
|--|---|
| <input checked="" type="checkbox"/> performance of the selected KPIs | <input checked="" type="checkbox"/> verification assurance report |
| <input type="checkbox"/> level of ambition of the SPTs | <input type="checkbox"/> Other (please specify): |

Frequency:

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

Means of Disclosure

- | | |
|---|---|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report |
| <input checked="" type="checkbox"/> Information published in ad hoc documents | <input type="checkbox"/> Other (please specify): |
| <input type="checkbox"/> Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): | |

Where appropriate, please specify name and date of publication in the "useful links" section.

Level of Assurance on Reporting

- | | |
|--|---|
| <input type="checkbox"/> limited assurance | <input type="checkbox"/> reasonable assurance |
| | <input checked="" type="checkbox"/> Other (please specify): limited or reasonable |

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

Section 4. Post-issuance verification

Overall comment on the section (if applicable):

Information reported:

- | | |
|--|---|
| <input type="checkbox"/> limited assurance | <input type="checkbox"/> reasonable assurance |
|--|---|



☐ Other (please specify):

Frequency:

☐ Annual

☐ Semi-annual

☐ Other (please specify):

Material change:

☐ Perimeter

☐ KPI methodology

☐ SPTs calibration



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