

INDICATOR CENTRAL

2024 Annual Sustainability Report

rumo



Contents

- 1. GOVERNANCE _____ 03
- 2. SOCIAL _____ 11
- 3. ENVIRONMENTAL _____ 12

Introducing the Indicator Central of the 2024 Annual Sustainability Report.



Detailed data on the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) and Task Force on Climate-related Financial Disclosures (TCFD) indicators reported in the 2024 Annual Sustainability Report can be found throughout these pages.

The historical information is based on the data reported in the 2023 Sustainability Report.

 For questions or suggestions, please contact our team:
ir@rumolog.com



Governance

MATERIALITY GRI 3-1

Rumo's materiality review was based on an analysis of the company's internal and external contexts, learn about the details of the updating stages.

1. ANALYSIS OF ESG DRIVERS

A study of the main sectoral issues identified by capital market mechanisms such as ISEB3, DJSI, FTSE4Good, MSCI, Sustainalytics and in sustainability guidelines and frameworks such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB).

2. SECTOR BENCHMARKING

Identification of the material topics of six companies in the sector, both national and international, well positioned in international indexes and/or inserted in the national context.

3. WEIGHTING RUMO'S STRATEGY

Impacts, priorities and significance of each topic are evaluated with the internal public, through strategic and financial visions.

4. EVALUATION WITH INTERNAL AND EXTERNAL STAKEHOLDERS

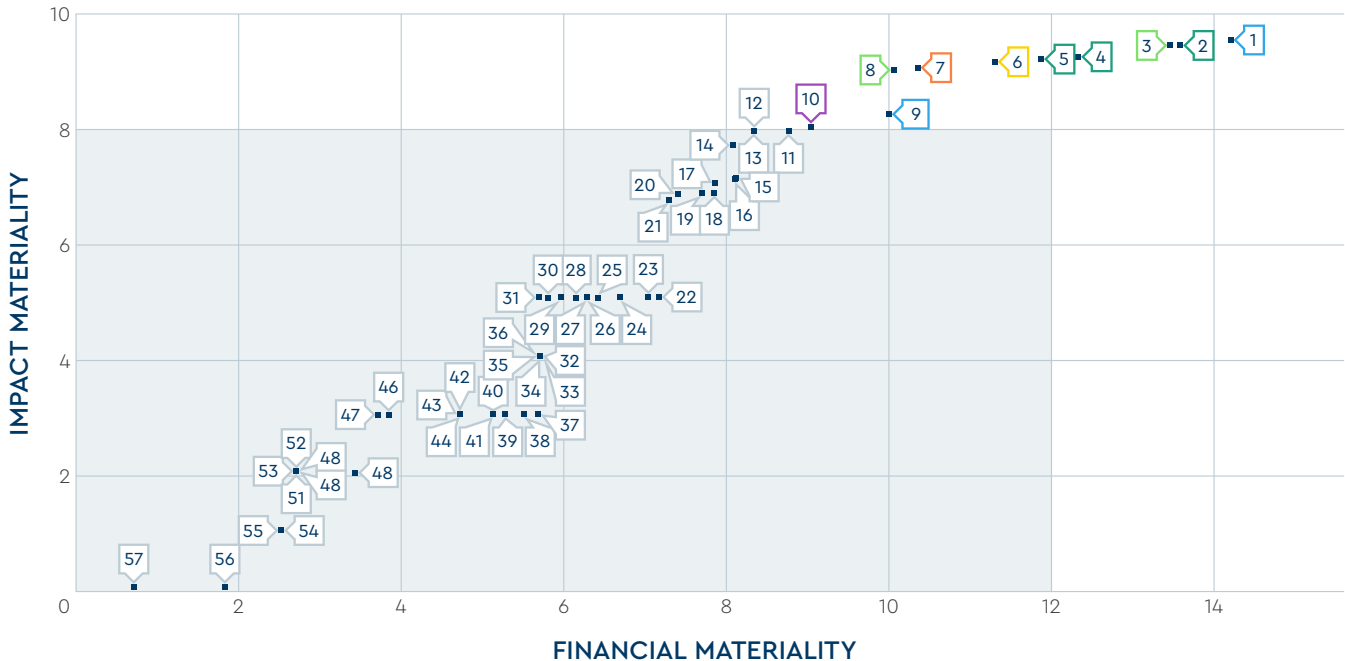
Stakeholders consultation in order to prioritize the themes according to their perceptions. The process was carried out in 2022 through an online consultation with 512 participants and qualitative interviews.

RUMO'S DUAL MATERIALITY MATRIX

We have organized the themes assessed in the preceding stages into a matrix, according to the perspectives of Financial Materiality and Impact Materiality:

GRI 3-2

- I. Climate Change and Emissions Management 1
- II. Safety and Operational Risks 2 4 5
- III. Governance 8 and Ethics 3
- IV. Community Relations 6
- V. Human Rights 7
- VI. Diversity, Equity and Inclusion 10



Discover the full list of themes mapped during the materiality process and other details on the following page.



MORE INFORMATION

- In the Financial Materiality Scale, the themes were classified as: Critical (>12), Significant (10-12), Important (8-10), Informative (5-8) or of Minimal Relevance (<5);
- On the Impact Materiality Scale, the themes were classified as: Critical (>8), Significant (6-8), Important (4-6), Informative (2-4) or of Minimal Relevance (<2);
- The themes "Best socio-environmental practices in the supply chain" and "Customer relations" are not part of Rumo's materiality, however, we continue to report on the indicators relating to these issues;
- In the materiality prioritization process, theme 9 ("Attracting and Retaining Talent") did not remain as a Material Theme for Rumo, in accordance with the company's strategy. However, we continue to report the GRI indicators on Employment, Labor Relations and Training and Education.

FULL LIST OF MATERIAL THEMES

1. Atmospheric emissions and climate change
2. Operational health and safety (management and involvement with external audiences)
3. Business ethics and the fight against corruption
4. Occupational health and safety
5. Risk and crisis management
6. Engagement with local communities
7. Human rights (impact management)
8. Corporate governance structure
9. Attracting and retaining talent (hiring, turnover, fair pay and benefits)
10. Diversity, equality and non-discrimination
11. Waste and hazardous materials management
12. Energy use management
13. Information security/cybersecurity
14. Compensation policy
15. Private social investment
16. Climate strategy
17. Best labor practices in the operation
18. Best labor practices in the supply chain
19. Transparency and reporting
20. Biodiversity
21. Water (effluent management)
22. Customer relationship management
23. Research, development and innovation
24. Customer privacy
25. Supply chain management with suppliers
26. Raw materials management (use of materials)
27. Training and education (Human Capital Development)
28. Performance/efficiency evaluation of governance bodies
29. Environmental assessment of suppliers
30. Business reliability
31. Human rights security practices
32. Combating child labor in operations and with suppliers
33. Combating slave labor
34. Decarbonizing the fleet
35. Economic performance (value generated and distributed)
36. Management of legal and regulatory environments
37. Eco-efficient operation
38. Infrastructure and accessibility
39. Engagement with stakeholders
40. Unfair competition (maintaining a competitive environment)
41. Fiscal transparency
42. Fair purchasing practices
43. Opportunities in clean technologies
44. Opportunities in clean energy
45. Freedom of association and collective bargaining
46. Environmental policy and management systems
47. Financing environmental impact
48. Corporate sustainability management/materiality
49. Responsible marketing
50. Technical and economic accessibility
51. Resource efficiency and circularity
52. Political influence (lobbying)
53. Diversity and equal opportunities
54. Opportunity in green buildings
55. Land rights management
56. Availability

MANAGEMENT

MEMBERSHIP ASSOCIATIONS GRI 2-28

2024
Associação Nacional dos Transportadores Ferroviários (ANTF)
Associação Brasileira da Infraestrutura e Indústrias de Base (Abdidi)
Associação Brasileira das Companhias Abertas (Abrasca)
CEBDS
Brazil Coalition
Grupo de Institutos, Fundações e Empresas (GIFE)
Moveinfra
Ethos Institute's Business Pact for Integrity and Against Corruption
UN Global Compact
UN Women's Women's Empowerment Principles
Na Mão Certa Program

In all the associations in which we participate, we assign different representatives, according to the theme, to keep track of discussions and contributions based on Rumo's objectives and examples. The leaders take part in closing events, decision-making meetings and presentations of results.

PROPORTION OF SENIOR MANAGEMENT HIRED FROM THE LOCAL COMMUNITY¹

GRI 202-2

	2022	2023	2024
Total senior management members	4	37	31
Senior management members hired from the local community	2	22	24
Percentage of senior management hired from the local community	50%	59%	77%

¹ For the calculation of Board members hired in the Local Community, we considered the positions of Manager Executive Manager and Director of the Southeast region, which represent 77.42% of our Board members from all operating units.

TOTAL NUMBER AND PERCENTAGE OF OPERATIONS SUBMITTED TO CORRUPTION-RELATED RISK ASSESSMENTS GRI 205-1

	2021	2022	2023	2024
Total operations	305	447	525	1,708
Percentage of operations submitted for assessment	100%	100%	100%	100%

OPERATIONAL PERFORMANCE

ACTIVITY METRICS

		2022	2023	2024
TR-RA-000.A	Number of loads transported	67,059	69,043	70,192
TR-RA-000.B	Number of intermodal units transported	106,125	109,256	117,071
TR-RA-000.C	Km traveled	13,601	13,592	13,592
TR-RA-000.D	Revenue per ton km (RTK)	74,944	77,258	79,847
TR-RA-000.E	Number of employees	8,314	7,905	7,993

COMPLIANCE

VIOLATION INCIDENTS REPORTED

	2024 ¹
Corruption or Bribery	0
Discrimination or Harassment	26
Customer privacy data	0
Conflicts of interest	135
Money laundering or insider trading	0

¹ Out of the conflict of interest cases, 134 were duly analyzed and closed, while 1 is still under investigation. Among the closed cases, only 2 were considered partially substantiated, resulting in proportionate corrective measures being applied. The other reports were closed with classifications of unfounded, inconclusive or insufficient data, reinforcing our commitment to transparency, integrity and the responsible conduct of internal processes.

OUR TEAM

EMPLOYEES BY EMPLOYMENT CONTRACT AND GENDER **GRI 2-7**

	2023		2024	
	Men	Women	Men	Women
Permanent ¹	6,293	920	6,317	1,117
Temporary ²	392	300	291	268
Total	6,685	1,220	6,608	1,385

EMPLOYEES BY RACE **GRI 405-1**

	2023			2024		
	Men	Women	Total	Men	Women	Total
Asian	50	13	63	52	13	65
White	4,013	807	4,820	3,899	863	4,762
Indigenous	28	1	29	36	1	37
Brown	2,018	311	2,329	2,053	393	2,446
Black	545	80	625	538	109	647
Not informed	31	8	39	30	6	36

EMPLOYEES BY EMPLOYMENT CONTRACT AND REGION **GRI 2-7**

	2023			2024		
	Permanent ¹	Temporary ²	Total	Permanent ¹	Temporary ²	Total
Midwest	1,267	116	1,383	1,275	122	1,397
Northeast	0	0	0	0	0	0
North	5	0	5	9	0	9
Southeast	2,660	338	2,998	2,977	236	3,213
South	3,281	238	3,519	3,173	201	3,374
Total	7,213	692	7,095	7,434	559	7,993

¹Permanent: Employment contracts for an indefinite period of time which are served on a full-time basis

²Temporary: Fixed-term employment contracts that are served on a part-time basis.

OTHER INFORMATION ON RACIAL DIVERSITY

	2024			
	Participation in the total workforce		Participation in all management positions, (including junior, middle and senior management)	
	Total	Proportion	Total	Proportion
Asian	65	0.81%	5	0.88%
White	4,762	59.58%	445	78.21%
Indigenous	37	0.46%	0	0%
Brown	2,446	30.60%	100	17.57%
Black	647	8.09%	18	3.16%
Not informed	36	0.45%	1	0.18%

EMPLOYEES BY JOB CATEGORY, GENDER AND AGE RANGE GRI 405-1

	2023					2024				
	Men	Women	Under 30 years of age	From 30 to 50 years of age	Over 50 years of age	Men	Women	Under 30 years of age	From 30 to 50 years of age	Over 50 years of age
President and Vice President	7	0	0	5	2	7	0	0	4	3
Directors	18	1	0	17	2	17	1	0	16	2
Executive Management	34	11	0	40	5	34	17	0	44	7
Management	96	43	3	131	5	98	44	2	130	10
Coordination	240	82	36	273	13	241	110	26	305	20
Other positions	6,290	1,083	1,639	5,107	627	6,211	1,213	1,626	5,167	631
Total	6,685	1,220	1,678	5,573	654	6,608	1,385	1,654	5,666	673

OTHER GENDER DIVERSITY INFORMATION

	2024	
	Proportion of women	Total women
Women's share of the total workforce	17.32%	1,385
Women in all management positions, including junior, middle and senior management	30.23%	172
Women in junior management positions, i.e. first level of management	31.24%	154
Women in senior management positions, i.e. no more than two levels away from the CEO or comparable positions	26.09%	18
Women in management positions in revenue-generating functions	27.96%	137
Women in STEM-related positions (Science, Technology, Engineering and Mathematics)	52.49%	506

TOTAL NUMBER AND RATE OF NEW HIRES AND TURNOVERS, BY GENDER GRI 401-1

	2023				2024			
	Hires		Turnovers		Hires		Turnovers	
	Total	Hiring Rate	Total	Turnover Rate	Total	Hiring Rate	Total	Turnover Rate
Men	1,294	19.35%	914	13.67%	880	13.32%	958	14.49%
Women	621	50.90%	296	24.26%	465	33.57%	287	20.72%
Total	1,915	24%	1,210	15%	1,345	16.8%	1,245	15.57%

BOARD OF DIRECTORS

PERCENTAGE OF THE BOARD OF DIRECTORS BY AGE RANGE GRI 405-1

Age Range	2023	2024
Under 30 years of age	0%	0%
From 30 to 50 years of age	30%	20%
Over 50 years of age	70%	80%
Total	100%	100%

PERCENTAGE OF THE BOARD OF DIRECTORS BY GENDER GRI 405-1

Gender	2023	2024
Men	70%	70%
Women	30%	30%
Total	100%	100%

TOTAL NUMBER AND RATE OF NEW HIRES AND TURNOVERS, BY RACE

	2024			
	Hires		Turnovers	
	Total	Hiring Rate	Total	Turnover Rate
Asian	13	20.00%	14	21.54%
White	684	14.36%	741	15.56%
Indigenous	8	21.62%	0	0.00%
Brown	135	20.87%	108	16.69%
Black	495	20.24%	376	15.37%
Not informed	10	27.78%	6	16.67%

TOTAL NUMBER AND RATE OF NEW HIRES AND TURNOVERS, BY AGE RANGE GRI 401-1

	2023				2024			
	Hires		Turnovers		Hires		Turnovers	
	Total	Hiring Rate	Total	Turnover Rate	Total	Hiring Rate	Total	Turnover Rate
Under 30 years of age	847	50.47%	421	25.09%	638	38.57%	410	24.78%
From 30 to 50 years of age	1,020	18.30%	705	12.65%	661	11.66%	722	12.74%
Over 50 years of age	48	7.34%	84	12.84%	46	6.84%	113	16.79%
Total	1,915	24%	1,210	15%	1,345	16.8%	1,245	15.57%

TURNOVER BY POSITION IN ABSOLUTE NUMBERS

Positions	2023		2024	
	Hires	Turnovers	Hires	Turnovers
Coordinator	58	41	51	47
Manager	28	19	24	19
Executive Manager	8	8	8	7
Other positions	1,818	1,140	1,262	1,167
Director	3	2	0	4
President and Vice President	0	0	0	1
Total	1,915	1,210	1,345	1,245

TOTAL NUMBER AND RATE OF NEW HIRES AND TURNOVERS, BY REGION GRI 401-1

	2023				2024			
	Hires		Turnovers		Hires		Turnovers	
	Total	Hiring Rate	Total	Turnover Rate	Total	Hiring Rate	Total	Turnover Rate
Midwest	381	27.55%	254	18.36%	258	18.47%	235	16.82%
Norte	1	20.00%	1	20.00%	2	22.22%	-	0.00%
Sudeste	841	28.05%	463	15.44%	663	20.63%	490	15.25%
Sul	692	19.66%	492	13.98%	422	12.51%	520	15.41%
Total	1,915	24%	1,210	15%	1,345	16.8%	1,245	15.57%

TOTAL VOLUNTARY RESIGNATIONS

2021	2022	2023	2024
430	438	367	351

EMPLOYEES WHO TOOK PARENTAL LEAVE GRI 401-3

	2022			2023			2024		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Number of employees who took the leave	204	95	299	251	58	309	206	45	251
Number of employees who returned to work after leave	204	95	299	251	58	309	206	45	251
Return to work rate	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of employees who completed 12 months on the job after leave	202	90	292	226	58	284	206	45	251
Employee retention rate	99%	94%	97%	90.1%	100%	91.9%	100%	100%	100%

TRAINING

AVERAGE TRAINING HOURS PER EMPLOYEE GRI 404-1

	2023	2024
by Gender		
Male	34	32.40
Female	14	30.79
Total	31	32.12
By Employee Category		
Administrative	10.50	17.67
Leadership	15.38	18.99
Operational	38.70	38.65
Total	32.08	32.12

Average training hours are calculated taking into account the Company's 7,993 active employees in 2024.

BENEFITS PROVIDED TO FULL-TIME EMPLOYEES GRI 401-2

Type of benefit		
Disability and invalidity allowance	Marriage leave	Health insurance – SulAmérica Prestige, SulAmérica Especial R2 or Plano Unimed Curitiba
Pharmacy allowance	Maternity leave for four months, with the option to extend for two additional months. Paternity leave of five days, with the option to extend for five additional days	Dental insurance – Odontoprev and Odonto Empresas
Childcare allowance for employees who have sole custody of children up to 8 years old or with special needs	Bereavement Leave	Private Pension Plan – Futura II. Available for all positions, by age contribution rule + company time, with voluntary contribution option
Christmas toys	School supplies for employees' children	Psychosocial program (PraVC)
Rumo Training – English conversation classes and over 500 courses	Reimbursement for Surgical Instrumentation	SEST SENAT for training courses
Newborn basket – for employees' newborn children	Partnerships: Allya Advantage Club and COPASTUR travel agency	Prudential Life Insurance – Coverage of up to 24 salaries
Payroll loans and investments – Barracred; Bradesco	Pingo de Gente	Food and Meal Voucher
Christmas kit and Christmas toy	Incentive & Loyalty Plan for executives	Transport voucher – card from the public transport operator
Maternity kit	Physical activity and wellness platform – Wellhub	

RATIO BETWEEN THE BASE SALARY FOR WOMEN AND MEN BY EMPLOYEE CATEGORY GRI 405-2

	2022		2023		2024	
	Ratio between the base salary for women and men	Ratio between the compensation for women and men	Ratio between the base salary for women and men	Ratio between the compensation for women and men	Ratio between the base salary for women and men	Ratio between the compensation for women and men
Executive Manager and Managers	0.90	0.89	0.91	0.85	1.02	1.02
Coordinator	0.96	0.96	1.27	1.17	1.00	1.01
Sales experts and executives	0.93	0.93	0.86	0.79	1.02	1.02
Professional	0.80	0.80	1.21	1.13	0.97	0.86
Operational	0.90	0.85	1.33	1.24	0.90	0.90

OPERATIONAL SAFETY

EMPLOYEE HEALTH AND SAFETY RATES AND FIGURES [GRI 403-9](#) | [TR-RA-320a.1](#)

	2022	2023	2024
Number of deaths resulting from work-related injuries	0	2	0
Rate of deaths resulting from work-related injuries	0	0.09	0
Number of severe work-related injuries (excluding fatalities)	1	2	7
Rate of severe work-related injuries (excluding fatalities)	0.05	0.09	0.34
Number of work-related notifiable injuries	3	8	20
Rate of work-related notifiable injuries	0.14	0.38	0.96
Total hours worked	21,319,320	21,106,580	20,846,760

EMPLOYEE HEALTH AND SAFETY RATES AND FIGURES (THIRD PARTIES) [GRI 403-9](#) | [TR-RA-320a.1](#)

	2022	2023	2024
Number of deaths resulting from work-related injuries	0	0	0
Rate of deaths resulting from work-related injuries	0	0	0
Number of severe work-related injuries (excluding fatalities)	6	4	16
Rate of severe work-related injuries (excluding fatalities)	0.42	0.19	0.69
Number of work-related notifiable injuries	9	4	35
Rate of work-related notifiable injuries	0.63	0.19	1.51
Total hours worked	14,354,095	15,532,000	23,147,281

EMPLOYEE HEALTH AND SAFETY RATES AND FIGURES (EMPLOYEES AND THIRD PARTIES) [GRI 403-9](#) | [TR-RA-320a.1](#)

	2022	2023	2024
Number of deaths resulting from work-related injuries	0	2	0
Rate of deaths resulting from work-related injuries	0	0.05	0
Number of severe work-related injuries (excluding fatalities)	7	6	23
Rate of severe work-related injuries (excluding fatalities)	0.20	0.16	0.52
Number of work-related notifiable injuries	12	12	55
Rate of work-related notifiable injuries	0.34	0.32	1.25
Total hours worked	35,673,415	36,638,580	43,994,041

Social

COMMUNITIES

OPERATIONS WITH LOCAL COMMUNITY ENGAGEMENT, IMPACT ASSESSMENTS, AND DEVELOPMENT PROGRAMS **GRI 413-1**

	2023	2024
Social impact assessments, including gender impact assessments, based on participatory processes	5%	35%
Environmental impact assessments and ongoing monitoring	100%	100%
Public disclosure of results of environmental and social impact assessments	100%	100%
Local community development programs based on local communities' needs	5%	30%
Stakeholder engagement plans based on stakeholder mapping	5%	35%
Broad based local community consultation committees and processes that include vulnerable groups	5%	26%
Works councils, occupational health and safety committees and other worker representation bodies to deal with impacts	100%	100%
Formal local community grievance processes	100%	100%

SUPPLIERS

SUPPLIERS WITH NEGATIVE SOCIAL IMPACTS **GRI 414-2**

	2022	2023	2024
Number of suppliers evaluated in terms of social impacts	1,808	1,650	1,708
Number of suppliers identified as having significant actual and potential negative social impacts	96	37	48
Number of suppliers identified as having significant actual and potential negative social impacts, with which improvements were agreed upon as a result of the assessment	96	29	38
Percentage of suppliers identified as having significant actual and potential negative social impacts for which improvements were agreed upon as a result of the assessment	100%	78.38%	79.17%
Number of suppliers identified as having significant actual and potential negative social impacts with which relationships were terminated as a result of the assessment	10	7	9
Percentage of suppliers identified as having significant actual and potential negative social impacts with which relationships were terminated as a result of the assessment	10.42%	24.14%	23.68%

Environmental

CLIMATE CHANGE AND EMISSIONS MANAGEMENT

DIRECT EMISSIONS OF GREENHOUSE GASES (TCO₂ EQUIVALENT)¹

GRI 305-1 | SASB TR-RA-110A.1 | SASB TR-RA-110A.2

	2021	2022	2023	2024
Generation of electricity, heat or steam	533.75	257.56	274.16	407.95
Physical and chemical processing	0.00	0.00	0.00	0.00
Transportation of materials, products, waste, employees and passengers	878,836.95	978,732.06	1,005,957.52	1,004,960.68
Process emissions	1,891.41	1,729.75	2,061.54	2,154.27
Fugitive emissions	159.04	395.13	568.60	418.49
Total gross CO₂ emissions	881,421.16	981,114.51	1,008,861.81	1,007,941.39

DIRECT EMISSIONS OF GREENHOUSE GASES – SCOPE 1 (TCO₂ EQUIVALENT) GRI 305-2

Total gross CO ₂ emissions	2017	2018	2019	2020	2021	2022	2023	2024
Location	2,309	2,265	2,418	2,164	7,504	2,632	2,666	3,870
Market	-	-	-	-	-	-	1,429	1,437

¹ The following gases were considered in the above calculations: Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorinated Compounds (PFCs), Sulphur Hexafluoride (SF₆), Nitrogen Trifluoride (NF₃) and Chlorodifluoromethane (R-22). The base year chosen for accounting is 2024, given the continuity of emissions accounting. In that year, total emissions were 1,007,941.36 tons CO₂ equivalent and biogenic emissions totaled 147,108.22 tons CO₂ equivalent. The methodology and emission factors are based on the GHG Protocol and audited annually by an independent third party. The consolidation chosen for emissions is operational control.

OTHER INDIRECT GREENHOUSE GAS (GHG) EMISSIONS – SCOPE 3 (TON CO₂ EQ.)

GRI 305-3

	2021	2022	2023	2024 ²
Purchased goods and services	11,767.05	6,582.39	42,787.66	58,430.78
Capital assets	603,981.23	1,076.09	316,555.26	33,140.10
Activities related to energy (not included in Scope 1 or Scope 2 emissions) and fuels	191,911.92	209,944.90	234,812.02	234,074.06
Upstream transport and distribution	6,384.01	3,783.81	4,245.80	7,658.59
Waste generated in operations	43,708.10	37,333.23	57,540.99	23,596.48
Business travel	1,224.86	1,380.89	1,642.60	2,300.48
Employee displacement	4,814.51	4,366.97	4,859.34	4,874.55
Total emissions	863,791.68	264,468.28	662,443.67	364,075.04
Biogenic emissions	4,849.17	4,709.69	12,151.78	25,561.08

² In 2024, the emissions factors used in Category 2 Capital Assets were revised, which reduced the total value of scope 3 by 45% compared to the previous year.



INTENSITY OF GREENHOUSE GAS EMISSIONS (gCO₂ eq/RTK)¹

GRI 305-4

2020	2021	2022	2023	2024
14.34	13.77	13.09	13.06	12.62

¹ The emissions intensity calculation takes into account the Company's absolute emissions (calculated in CO₂ equivalent, as it includes CO₂, CH₄, N₂O and HFCs) and is divided by the RTK (tons transported per useful km).

REDUCTIONS IN GHG EMISSIONS ACHIEVED AS A DIRECT RESULT OF EMISSION REDUCTION INITIATIVES (TCO₂ EQUIVALENT) GRI 305-5

	2021	2022	2023	2024 ²
Reductions from direct emissions (Scope 1)	13,945.00	0.00	0.00	920.42
Reductions from indirect emissions from energy acquisition (Scope 2)	0.00	4,871.43	1,202.80	0.00
Reductions from other indirect emissions (Scope 3)	0.00	0.00	0.00	298,368.63 ²
Total GHG emission reductions	13,945.00	4,871.43	1,202.80	299,289.05
Reductions from compensations	0.00	0.00	0.00	0.00

² In 2024, the emissions factors used in Category 2 Capital Assets were revised, which reduced the total value of scope 3 by 45% compared to the previous year.

GHG PROTOCOL BRAZIL REPORT³

	2021				2022				2023				2024			
	In tons of gas		In tons of CO ₂ equivalent (tCO ₂ eq)		In tons of gas		In tons of CO ₂ equivalent (tCO ₂ eq)		In tons of gas		In tons of CO ₂ equivalent (tCO ₂ eq)		In tons of gas		In tons of CO ₂ equivalent (tCO ₂ eq)	
	Scope 1	Scope 2	Scope 1	Scope 2	Scope 1	Scope 2	Scope 1	Scope 2	Scope 1	Scope 2	Scope 1	Scope 2	Scope 1	Scope 2	Scope 1	Scope 2
CO ₂	867,142.10	7,503.60	867,142.10	7,503.60	965,082.03	2,632.18	965,082.03	2,632.18	992,093.69	Location: 2,665.63 Market: 1,429,37	992,093.69	Location: 2,665.63 Market: 1,429,37	991,193.08	Location: 3,870.09 Market: 1,436,71	991,193.08	Location: 3,870.09 Market: 1,436,71
CH ₄	60.38	-	1,690.72	-	65.27	-	1,827.48	-	69.84	-	1,955.41	-	73.11	-	2,046.99	-
N ₂ O	46.93	-	12,436.19	-	52.14	-	13,816.84	-	53.77	-	14,247.73	-	53.90	-	14,283.76	-
HFCs	0.08	-	152.15	-	0.21	-	388.17	-	0.30	-	564.98	-	0.22	-	417.55	-
PFCs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SF ₆	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NF ₃	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	867,249.49	7,503.60	881,421.16	7,503.60	965,199.65	2,632.18	981,114.52	2,632.18	992,217.69	Location: 2,665.63 Market: 1,429.37	1,008,861.81	Location: 2,665.63 Market: 1,429.37	991,320.31	Location: 3,870.09 Market: 1,436.71	1,007,941.38	Location: 3,870.09 Market: 1,436.71

³ Visit the annual publication made by Rumo, since 2017 of the full inventory in the Public Registry of Emissions of the GHG Protocol Program, Gold Category: <https://registropublicodeemissoes.fgv.br/participantes/2930>.



TOTAL FUEL CONSUMPTION WITHIN THE ORGANIZATION (GJ) GRI 302-1

	2022	2023	2024
NOW-RENEWABLE SOURCES			
Diesel oil	13,121,369.68	13,479,542.48	13,473,093.84
Automotive gasoline	19,510.13	27,576.17	25,706.88
LPG	26.60	26.48	13.81
Lubricant	125,284.96	149,316.04	156,032.72
Total consumption from non-renewable sources	13,266,191.37	13,656,461.17	13,654,847.25
RENEWABLE SOURCES			
Ethanol	2,914.00	2,467.77	2,419.65
Biodiesel	1,457,929.96	1,780,892.80	2,133,408.93
Total consumption from renewable sources	1,460,843.96	1,783,360.57	2,135,828.58¹

¹ Out of the total fuel consumed, 13.53% came from renewable sources. [SASB TR-RA-110a.3](#)

TOTAL ENERGY CONSUMED (GJ) GRI 302-1

	2022	2023	2024
Fuels from non-renewable source	13,266,191.37	13,656,461.17	13,654,847.25
Fuels from renewable sources	1,460,843.96	1,783,360.57	2,135,828.58
Energy consumed	222,392.58	133,655.68	92,338.96
Electricity	222,392.57	133,655.67	92,338.95
Heating	0.00	0.00	0.00
Refrigeration	0.0121	0.0149	0.0120
Steam	0.00	0.00	0.00
Energy sold	0.00	0.00	0.00
Total	14,949,427.91	15,573,477.42	15,883,014.79

ENERGY INTENSITY (GJ) GRI 302-3

	2022	2023	2024
Energy intensity rate within the organization	0.222929	0.225560	0.226282

The metric used takes into account total energy consumption within the organization (in GJ) divided by the total number of useful tons. In 2024, the index was 0.226282, representing an increase of 0.32% compared to 2023. However, comparing 2020 and 2024, a reduction of 3.09% was recorded.

ENERGY CONSUMPTION REDUCTIONS OBTAINED DIRECTLY FROM CONSERVATION AND EFFICIENCY IMPROVEMENTS GRI 302-4

	Variation 2022 × 2023	Variation 2023 × 2024
Diesel oil	-	-0.05%
Gasoline	-	-6.78%
Ethanol	-15.31%	-1.95%
LPG	-0.45%	-47.85%
Lubricant	-	+4.49%
Biodiesel	-	+19.79%

There has been a reduction in the consumption of non-renewable fuels, with the exception of lubricants, as well as a reduction in ethanol use. On the other hand, there has been an increase in biodiesel consumption, driven by the increase in the mandatory percentage determined by legislation, resulting in an annual average of 13.67% in 2024.

With a 3.35% increase in the transported volume and a 0.05% reduction in diesel consumption, there was a gain in efficiency and a reduction in energy consumption. [GRI 305-1](#)



WATER MANAGEMENT

WATER WITHDRAWAL, BY SOURCE (ML) GRI 303-3

	2023		2024	
	All areas	Water stress areas	All areas	Water stress areas
Surface waters, including wetlands, rivers and lakes	58.68	0.00	504.41	0.00
Underground water/groundwater	477.20	0.00	921.96	0.00
Sea water	0.00	0.00	0.00	0.00
Produced water	0.00	0.00	0.00	0.00
Third-party water ¹	108.84	0.00	247.40	0.00
Total	644.72	0.00	1,673.77	0.00

¹ The "Third-Party Water" category takes into account the volume of public water supplied to the operating units and consumed on the construction sites. Management of withdrawal permits for the FMT project was incorporated in 2024.

TOTAL WATER DISCHARGE, BY DESTINATION (ML) GRI 303-4

	2023		2024	
	All areas	Water stress areas	All areas	Water stress areas
Surface waters, including wetlands, rivers and lakes	49.24	0.00	48.28	0.00
Underground water/groundwater	0.00	0.00	0.00	0.00
Sea water	0.00	0.00	0.00	0.00
Third-party water ¹	466.54	0.00	98.67	0.00
Total	515.78	0.00	146.95	0.00

TOTAL WATER CONSUMPTION (ML) GRI 303-5

	2023		2024	
	All areas	Water stress areas	All areas	Water stress areas
Total water consumption in cubic meters (m ³)	128,940.00	0.00	1,526,820.00	0.00
Total water consumption in megaliters (ML)	128.94	0.00	1,526.82	0.00



PHYSICAL RISKS GRI 201-2 | TCFD

	Extreme heat	Forest fires	Water stress/drought	Landslides due to rainfall	Rain and river flooding	Tropical cyclones
Type of risk	Chronic physical risk	Acute physical risk	Acute physical risk	Acute physical risk	Acute physical risk	Acute physical risk
Description of the operational impact	Very high temperatures can lead to rail buckling, causing the structure to deform and derail trains.	Fires can cause direct physical damage to tracks, signaling equipment and railway line track points, eventually interrupting operations.	Water stress/droughts can cause less water availability for runway maintenance and cleaning.	Landslides can cause direct physical damage to tracks, signaling equipment and railway line track points.	River floods can stop train circulation until the damage caused to the composition is repaired, impacting the transported cargo and the surrounding environment.	Cyclones can cause direct physical damage to tracks, signaling equipment and railway line track points.
Financial quantification of physical risks	After the occurrence of an accident, there is an interruption in train circulation in the stretches, directly impacting productivity, with the need to repair the rolling stock involved.	Forest fires can permanently compromise the railway line and the rolling stock, resulting in damage related to repairs.	Water stress/drought can cause less water to be available for maintenance and cleaning of the railway, as well as increasing operational or logistical costs, affecting the productivity of our customers.	Barrier collapses can cause railway incidents, with loss of productivity and damage to the permanent track and rolling stock, in addition to possible impacts on the occurrence surroundings.	Floods caused by rains can stop train circulation until the damage caused to the composition is repaired, impacting the maintenance of commercial contracts (cargoes) and the surrounding community.	Cyclones can cause direct physical damage to the tracks, signaling equipment and railway line track points, compromising contractual deadlines and putting the safety of employees and surrounding communities at risk.
Adaptation and/or mitigation measures	In order to act preventively, derailment detectors were installed at various points along the stretches and track break detectors, which allow the driver to identify the adverse event and prevent more serious occurrences.	After understanding the climate dynamics, meteorological stations were installed to predict extreme weather events at relevant points and ensure early action, thus avoiding possible damage.	After understanding the climate dynamics, meteorological stations were installed to predict extreme weather events at relevant points and ensure early action, thus avoiding possible damage.	In locations considered critical for the operation and with a history of occurrences, constant monitoring is carried out so that possible interurrences are detected preventively, such as barrier collapse detectors.	In locations considered critical for the operation and with a history of occurrences, constant monitoring is carried out so that possible interurrences are detected preventively.	Although this risk is identified as a more regional risk, weather alerts help prevent potential occurrences.



TRANSITION RISKS GRI 201-2 | TCFD

	New technologies	Market analysis	Change in consumption patterns	Greenhouse gas (GHG) pricing	Sectoral impact of climate change
Type of risk¹	Technological transition risk	Market transition risk	Market transition risk	Political and legal transition risk	Reputational transition risk
Description of the operational impact	There are growing demands for low-carbon transportation services that are more energy efficient or for the use of renewable energy.	Changes in the rainfall and temperature regime can cause changes in large crops and a drop in grain production in the region of Mato Grosso, which causes a reduction in transport flow, mainly through the Rondonópolis terminal.	We seek to adapt to the demand and supply of products affected by climate change, but there is difficulty in creating branches for short distances to transport other products.	As the topic of climate change advances globally, the identified risk refers to the existence of legislation on the subject, carbon pricing and emissions taxation, a reality that exists in some countries.	We increasingly identify the need for companies to take a stand in relation to climate change and effectively reduce its impacts and the risk of not taking a stand.
Financial quantification of physical risks	New technical specifications for equipment and new operating standards can increase operating costs.	Changes in grain productivity have a direct impact on transportation by rail, which accounts for around 80% of the total volume transported.	The unavailability of the railway network in some stretches and regions can make transportation unfeasible, leading to cargo loss to other modes or routes.	If there is a need to adapt to new laws and charges, the cost for the Company must be estimated, considering its annual emissions.	Conduct scenario assessments and analyses that can help predict potential impacts to operations from climate change and major climate-related events related to productivity.
Adaptation and/or mitigation measures	As an alternative, studies and assessments can be carried out to adjust existing assets to renewable technologies and gradually replace equipment.	We carried out a market analysis with prospecting customers to diversify the load and reduce dependence on the transport of agricultural products. An example of this is the transporting fertilizers, which involves transporting the input to the central region of the country on trains that unload agricultural products at the port of Santos and previously returned empty besides geographic diversification achieved through access to other markets via the Malha Central.	We seek to retain existing customers and carry out market analyses to establish logistics focused on raw material producers, demonstrating the competitive advantage of the railway modality.	Hiring consultants to anticipate the conduction of studies and preventive action in these cases that may result in higher operating costs.	We have conducted a study of the internal emissions scenario, production projections and energy efficiency to estimate the possible impacts generated by our operations. Based on this, we defined public targets to demonstrate the company's commitment to its impacts.

¹ Reputational risks are linked to all risks.

WASTE

WASTE BY COMPOSITION, IN METRIC TONS (t) GRI 306-3

Hazardous waste (Class I)	2023	2024	Non-hazardous waste (Class II)	2023	2024
Contaminated water	843.37	1,266.86	Rubber	5.00	-
Contaminated construction	54.51	-	Construction waste	107.84	565.22
Effluents	-	49.00	Effluents	-	5,601.95
Electronics	-	0.23	Septic tank sludge	3,460.87	-
Oily emulsion	15.63	-	Wood	795.17	772.10
Oil-contaminated grain	8.08	-	Metals and Scrap	28,836.38	-
Light bulbs	0.24	1.21	Organic	9,626.79	43,999.71
Used oil	617.18	1,539.57	Paper and Cardboard	9.71	16.80
Batteries	0.11	-	Plastic	22.34	19.12
Health care waste (RSS)	0.13	2.06	Miscellaneous recyclables	-	6.45
Miscellaneous contaminated waste	1,050.99	2,034.91	Common waste	2,271.85	8,646.01
Contaminated soil	-	539.41	Electronic scrap	0.35	-
Asbestos tiles	7.18	-	Ferrous scrap metal	-	21,177.54
Contaminated ground	43.85	-	Non-ferrous scrap metal	-	1,542.02
Ink	0.10	-	Glass	45.68	0.09
Grand Total	2,641.37	5,433.25	Grand Total	45,181.98	82,347.01

WASTE NOT INTENDED FOR FINAL DISPOSAL, IN METRIC TONS (t) GRI 306-4

		2023	2024
Hazardous waste (Class I)	Recycling	990.41	1,504.31
	Reuse	-	1,799.46
	Other disposals	278.30	386.03
	Total Hazardous	1,268.71	3,689.80
Non-hazardous waste (Class II)	Recycling	30,732.21	23,987.00
	Reuse	2,657.11	11,646.59
	Other disposals	3,089.45	5,574.29
	Total non-hazardous	36,478.77	41,207.88
Total waste recovered		37,747.48	44,897.68

WASTE INTENDED FOR FINAL DISPOSAL, IN METRIC TONS (t)² GRI 306-5

		2023	2024
Hazardous waste (Class I)	Landfill	771.79	1,325.09
	Incinerated with energy recovery	600.86	418.36
	Total Hazardous	1,372.65	1,743.45
Non-hazardous waste (Class II)	Landfill	1,384.32	22,917.31
	Incinerated with energy recovery	7,318.89	18,221.80
	Total non-hazardous	8,703.21	41,139.11
Total waste sent for final disposal		10,075.86	42,882.56

² In the 2023 Sustainability Report, waste incinerated with energy recovery was classified as 'not for final disposal'. After a methodological review and alignment with GRI 306-5 guidelines, we reclassified the waste as 'destined for final disposal', with no change in the reported figures.

GRI 2-4



BIODIVERSITY

OWNED, LEASED OR MANAGED OPERATING UNITS WITHIN OR ADJACENT TO ENVIRONMENTAL PROTECTION AREAS AND AREAS OF HIGH BIODIVERSITY VALUE LOCATED OUTSIDE ENVIRONMENTAL PROTECTION AREAS **GRI 304-1**

Land Name	Geographic location	Surface and underground areas owned, leased or managed by the organization	Position relative to the area	Type of operation	Size of operational unit in km ² (or another unit, if appropriate)	Value for biodiversity	Property type
Serra do Mar State Park (SP)	São Paulo – Santos Mountain range – Malha Paulista (SP)	Leased	Covers parts of the protected area, which the Domain Range (FD) intersects	Overnight and rail operation	0.05	Value for local biodiversity characterized by the protected area feature	Full Protection Conservation Unit (physical and biotic ecosystems).
Pico do Marumbi State Park (PR)	Curitiba -Paranaguá Mountain range – Malha Sul (PR)	Leased	Covers parts of the protected area, which the Domain Range (FD) intersects	Overnight and rail operation	0.01	Value for local biodiversity characterized by the protected area feature	Full Protection Conservation Unit (physical and biotic ecosystems).
Araguaia River (MT) APA	Alto Araguaia Terminal (MT)	Owned	All activities are of superficial use within the domain range	Railway terminal operation	1.00	Value for local biodiversity characterized by the protected area feature	Sustainable Use Conservation Unit (physical and biotic ecosystems)
Corumbataí Botucatu (SP) APA	Itirapina Terminal (SP)	Owned	All activities are of superficial use within the domain range	Railway terminal operation	2.94	Value for local biodiversity characterized by the protected area feature	Sustainable Use Conservation Unit (physical and biotic ecosystems)

Credits

RUMO S.A. HEADQUARTERS

Rua Emílio Bertolini, 100, Bairro Cajuru

Curitiba (PR) – Brazil

CEP 82920-030

COORDINATION

Rumo – Sustainability

Rumo – Investor Relations

Rumo – Corporate Communication

CONTACT

ir@rumolog.com

EDITORIAL PROJECT, CONSULTANCY, WRITING AND TRANSLATION

Ricca Sustentabilidade

<https://www.linkedin.com/company/riccasustentabilidade/>

GRAPHIC PROJECT, LAYOUT, DESIGN AND TRANSLATION

Ricca Sustentabilidade

<https://www.linkedin.com/company/riccasustentabilidade/>

PHOTOS AND ILLUSTRATIONS

Rumo's image database

rumo