

GRI Index 2023

The table below includes responses to some of the GRI disclosure items for the reporting cycle of January 2022 to December 2022. Many of these items are covered in our [Sustainability Impact Report 2022](#) on the pages indicated as a part of responses. We realize that we can continually increase the number of GRI disclosures we include in this index as we expand our data monitoring and collection. In our next reporting cycle, we shall aim to respond to disclosure items other than the ones responded to below.

General Disclosures: 1. The organization and its reporting practices

2-2	Entities included in the organization’s sustainability reporting	Sustainability Impact Report 2022, p 3
2-3	Reporting period, frequency and contact point	Sustainability Impact Report 2022, p 3
2-4	Restatements of information	Sustainability Impact Report 2022, p 3
2-5	External assurance	Sustainability Impact Report 2022, p 3

General Disclosures: 2. Activities and workers

2-6	Activities, value chain and other business relationships	Sustainability Impact Report 2022, p 8, 18, and 46
2-7	Employees	Sustainability Impact Report 2022, p 26

General Disclosures: 3. Governance

2-9	Governance structure and composition	Sustainability Impact Report 2022, p 41 and 50
2-10	Nomination and selection of the highest governance body	Members of the highest governance body are selected by the Nomination Committee, which includes Junichi Sugahara (Director and Executive Officer) and four External Directors including Carlyle’s representative on the Spiber Board of Directors. The Nomination Committee discusses topics such as competencies, independence, diversity, and stakeholder views. Final decisions are then made at the Shareholders Meeting.

2-11	Chair of the highest governance body	Please refer to this part of our website.
2-12	Role of the highest governance body in overseeing the management of impacts	Sustainability Impact Report 2022, p 41
2-13	Delegation of responsibility for managing impacts	Sustainability Impact Report 2022, p 41 and 43
2-14	Role of the highest governance body in sustainability reporting	The Board of Directors and co-founder contributed to the materiality assessment and reviewed and signed off on Spiber's sustainability strategy and Sustainability Impact Report.
2-15	Conflicts of interest	None
		<p>The Board of Directors receives reports of critical concern that have been recognized by the Managing Committee, Compliance & Risk Management Committee, and Internal Reporting Desk.</p> <p>The Managing Committee reports matters related to production, sales, R&D, and concerns about changes in the business environment. The Compliance & Risk Management Committee reports concerns related to compliance and risk management. The Internal Reporting Desk reports on the content of reports and the results of investigations.</p> <p>Other reporting channels include the Audit Committee's report to the Board of Directors on concerns detected by the Audit Committee and the Internal Audit Office.</p> <p>The number of concerns identified by the Compliance & Risk Management Committee was 5 in FY2022. The number of whistle-blowing incidents was 0 in FY2022.</p>
2-16	Communication of critical concerns	

2-18	Evaluation of the performance of the highest governance body	We are determining this now and plan to make this information public in the coming years.
2-19	Remuneration policies	Remuneration of the board and senior managers is managed by the Remuneration Committee and verified by the Audit Committee with reference to Executive Officers. Spiber operates a transparent salary system, with office employees setting their own pay levels, and this ethos of transparency is applied to senior executives too.
2-21	Annual total compensation ratio	<p>Ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees (excluding the highest-paid individual) :</p> <p>Spiber Inc. (Japan) – 2.5:1 Spiber (Thailand) Ltd. – 2.8:1 Spiber America LLC – 1.89:1</p> <p>We also aim to report on the percentage increase ratios as required by GRI in our next reporting period.</p>

General Disclosures: 4. Strategy, policies and practices

2-22	Statement on sustainable development strategy	Sustainability Impact Report 2022, p 13
2-23	Policy commitments	Sustainability Impact Report 2022, p 13
2-24	Embedding policy commitments	Our Sustainable Sourcing Policy
2-25	Processes to remediate negative impacts	Sustainability Impact Report 2022, p 41
2-26	Mechanisms for seeking advice and raising concerns	Sustainability Impact Report 2022, p 41 and SpeakUp Grievance Mechanism
2-27	Compliance with laws and regulations	Sustainability Impact Report 2022, p 42
2-28	Membership associations	Spiber is a member of the BonSucro global sugarcane platform.

General Disclosures: 5. Stakeholder engagement

2-29	Approach to stakeholder engagement	Sustainability Impact Report 2022, p 46
2-30	Collective bargaining agreements	None

Material Topics

3-1	Process to determine material topics	Sustainability Impact Report 2022, p 45
3-2	List of material topics	Sustainability Impact Report 2022, p 45
3-3	Management of material topics	Sustainability Impact Report 2022, p 45 and throughout the report

GHG Emissions and energy

302-1	Energy consumption within the organization	
a.	Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used.	Total: 36,330 GJ LNG: 27,234 GJ Municipal gas: 9,096 GJ Gasoline/diesel for vehicles: 940 GJ
b.	Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used.	Please see the 'Integrity' section of our Sustainability Progress Report 2023.
c.	In joules, watt-hours or multiples, the total: i. electricity consumption ii. heating consumption iii. cooling consumption iv. steam consumption	i. Electricity consumption-13,644 MWh ii. Heating consumption-Not Applicable iii. Cooling consumption-Not Applicable iv. Steam consumption-Not Applicable
e.	Total energy consumption within the organization, in joules or multiples	85,448 GJ
305-1	Direct (Scope 1) GHG emissions	
a.	Gross direct (Scope 1) GHG emissions in metric tons of CO ₂ equivalent.	1,881 tonnes CO ₂ equivalent
b.	b. Gases included in the calculation; whether CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , NF ₃ , or all.	All

<p>c. Biogenic CO₂ emissions in metric tons of CO₂ equivalent.</p>	<p>We have biogenic emissions. We have not yet been able to measure or calculate them in a satisfactory way. This is something we are working on. We expect to be able to disclose this data in our next cycle of reporting.</p>
<p>d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.</p>	<p>2022 is Spiber's base year for reporting Scope 1 and Scope 2 emissions. The emissions were a total of 2,529 CO₂ equivalent tonnes. It was selected because it is our first year of commercial operations, thus no recalculations have been carried out.</p>
<p>e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</p>	<p>For natural gas that is consumed for stationary combustion, we assumed 100% combustion of gas. The % carbon was provided by the gas utility companies directly per unit of gas provided. For car fuel, mobile combustion calculation tools provided by the World Resources Institute were used to calculate the impact of fuel for company vehicles using the Environmental Protection Agency's average emissions factors for gasoline.</p>

Sourcing

308-1	New suppliers that were screened using environmental criteria	
a.	Percentage of new suppliers that were screened using environmental criteria.	We have an initial screening process for supplier selection based on past/ongoing ESG-related incidents, but no current suppliers have been screened using clear criteria. We look to improve this process for social and environmental criteria in the near future once we have fully defined and implemented our sourcing strategy and process for screening new suppliers.
414-1	New suppliers that were screened using social criteria	
a.	Percentage of new suppliers that were screened using social criteria.	Same as the response for 308-1 (a) .

Talent Attraction and Retention

414-1	New suppliers that were screened using social criteria	
a.	Total number and rate of new employee hires during the reporting period, by age group, gender and region.	Refer below to tables 401-1.1, 401-1.2, 401-1.3 for data from the Spiber Group companies in Japan, Thailand, and America.
b.	Total number and rate of employee turnover during the reporting period, by age group, gender and region.	Same as the response for 401-1 (a) .

Table 401-1.1

Spiber Inc. (Japan)	Number and % of women	Number and % of men	Number and % of employees below 30 years of age	Number and % of employees between 30-50 years of age	Number and % of employees above 50 years of age	Percentage of employees from overseas
Number of new employees hired between Jan 2022- December 2022	23 (50%)	23 (50%)	9 (20%)	31 (67%)	6 (13%)	7 (15%)
Number of new employees that left the company between Jan 2022- December 2022	4 (80%)	1 (20%)	2 (40%)	2 (40%)	1 (20%)	2 (40%)

Table 401-1.2

Spiber (Thailand) Ltd.	Number and % of women	Number and % of men	Number and % of employees below 30 years of age	Number and % of employees between 30-50 years of age	Number and % of employees above 50 years of age	Percentage of employees from overseas
Number of new employees hired between Jan 2022- December 2022	3 (27%)	8 (73%)	3 (27%)	8 (73%)	0	0
Number of new employees that left the company between Jan 2022- December 2022	2 (50%)	2 (50%)	0	4 (100%)	0	0

Table 401-1.3

Spiber America LLC	Number and % of women	Number and % of men	Number and % of employees below 30 years of age	Number and % of employees between 30-50 years of age	Number and % of employees above 50 years of age	Percentage of employees from overseas
Number of new employees hired between Jan 2022-December 2022	1 (33%)	2 (66%)	0	3 (100%)	0	0
Number of new employees that left the company between Jan 2022-December 2022	0	0	0	0	0	0
405-1	Diversity of governance bodies and employees					
a.	Percentage of individuals within the organization's governance bodies in each of the following diversity categories: i. Gender; ii. Age group: under 30 years old, 30-50 years old, over 50 years old; iii. Other indicators of diversity where relevant (such as minority or vulnerable groups) .			Refer below to tables 405-1.1, 405-1.2, and 405-1.3 for data from the Spiber Group companies in Japan, Thailand, and America respectively. We have considered various indicators used in DEI-related reporting, looking into best practices by global entities. However, given the reality of the demographics within Japan, we have based our current DEI initiatives on the categories of gender and age group. We will continue to collect data for other indicators like nationality (Japanese and non-Japanese) and report it in our next reporting cycle.		

Table 405-1.1

Spiber Inc. (Japan)

	Percentage of women	Percentage of men	Percentage of employees below 30 years of age	Percentage of employees between 30-50 years of age	Percentage of employees above 50 years of age
Governance structure					
Governance body	13%	87%	0	38%	62%
Senior management	14%	86%	0	100%	0
Middle management	33%	67%	18%	74%	8%
Non-management	48%	52%	26%	64%	10%
Employee category					
R&D	29%	71%	32%	59%	9%
Others	58%	42%	15%	76%	9%
Board and Executive Officers	13%	87%	0	38%	62%

Table 405-1.2

Spiber (Thailand) Ltd.

	Percentage of women	Percentage of men	Percentage of employees below 30 years of age	Percentage of employees between 30–50 years of age	Percentage of employees above 50 years of age
Governance structure					
Governance body	0	100%	0	100%	0
Senior management	0	100%	0	100%	0
Middle management	0	100%	0	100%	0
Non-management	28%	72%	24%	76%	0
Employee category					
R&D	28%	72%	33.3%	66.6%	0
Others	60%	40%	14.28%	85.7%	0
Board and Executive Officers	0	100%	0	100%	0

*Spiber Thailand's Governance body (Board and Executive Officers) are employees of Spiber Japan and are shared between the two companies.

Refer to our website to see our [corporate information](#).

Table 405-1.2

Spiber America LLC*

	Percentage of women	Percentage of men	Percentage of employees below 30 years of age	Percentage of employees between 30-50 years of age	Percentage of employees above 50 years of age
Governance structure					
Governance body	0	100%	0	100%	0
Senior management	25%	75%	0	50%	50%
Middle management	0	0	0	0	0
Non-management	50%	50%	0	100%	0
Employee category					
R&D	0	100%	0	0	100%
Others	33.3%	66.6%	0	83.3%	16.7%
Board and Executive Officers	0	100%	0	100%	0

* Spiber America LLC is currently a company with 7 employees in total.

405-2	Ratio of basic salary and remuneration of women to men	<p>Refer below to tables 405-2.1 and 405-2.2 for data from the Spiber Group companies in Japan and Thailand respectively. In order to maintain employee anonymity, Spiber America LLC is not included in this disclosure. However, we are monitoring this data and shall disclose it once employee anonymity can be preserved.</p> <p>The main difference between salary and remuneration for Spiber employees is due to overtime pay.</p>
a.	Ratio of the basic salary and remuneration (basic salary and all other direct payments for example overtime pay) of women to men for each employee category, by significant locations of operation.	<p>We define our significant locations of operation based on whether or not we have a registered company in that location. Hence, our significant locations of operation are Japan, Thailand, and the USA. However, since Spiber America LLC was established in the USA to pursue a partnership with ADM for further scaling, we currently only have 7 employees in that location. Hence, diversity indicators such as equity in pay and governance are being monitored but will become more significant as we expand our operations.</p>
b.	The definition used for 'significant locations of operation'.	

Table 405-2.1

Spiber Inc. (Japan)

	Percentage of their male counterparts' average salary for women in each category	Percentage of their male counterparts' remuneration for women in each category
Governance structure		
Governance body	97.67%	97.67%
Senior management	87.20%	80.76%
Middle management	91.04%	97.09%
Non-management	90.75%	85.11%
Employee category		
R&D	72.92%	73.97%
Others	95.51%	86.74%
Board and Executive Officers	97.67%	97.67%

Table 405-2.2

Spiber (Thailand) Ltd.

	Percentage of their male counterparts' average salary for women in each category	Percentage of their male counterparts' remuneration for women in each category
Governance structure		
Governance body	–	–
Senior management	–	–
Middle management	–	–
Non-management	103.27%	95%
Employee category		
R&D	91.36%	103%
Others	91.08%	74%
Board and Executive Officers	–	–