

GRI Index 2024

The table below includes responses to some of the GRI disclosure items for the reporting cycle of January 2023 to December 2023. Many of these items are covered in our [Sustainability Impact Report 2022](#) and [Sustainability Progress Report 2023](#) on the pages indicated in the responses. We are aware 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 will aim to respond to disclosure items other than the ones responded to below.

General Disclosures: 1. The organization and its reporting practices

		Spiber Inc. ('Spiber Japan' in this Index) Spiber (Thailand) Ltd. ('Spiber Thailand' in this Index) Spiber America LLC ('Spiber America' in this Index)
2-2	Entities included in the organization's sustainability reporting	Other than our entities in Japan, Thailand, and the USA (as reported in GRI Index 2023), we have recently begun operating an overseas branch (Spiber Europe) in Paris, France primarily for the promotion of material sales in Europe. This branch is an integral part of Spiber Japan, and all operations undertaken at this branch are included in Spiber Japan's reporting data.
2-3	Reporting period, frequency and contact point	Reporting period: 1 January, 2023 to 31 December, 2023 Frequency: We aim to publish this index along with a progress update annually Contact point: Shota Inoue Email: shota_inoue@spiber.inc
2-5	External assurance	The information reported in this reporting cycle has been reviewed by an external advisor, but is not assured.

General Disclosures: 2. Activities and workers

2-6	Activities, value chain and other business relationships	
a	report the sector(s) in which it is active;	Textile and apparel (according to the GRI Sector Standards), as Spiber's primary products at present are staple fibers to be used in the textile and apparel industry. Sustainability Impact Report 2022, p.8

b	describe its value chain, including: i. the organization's activities, products, services, and markets served; ii. the organization's supply chain; iii. the entities downstream from the organization and their activities;	Sustainability Impact Report 2022, p.18
c	report other relevant business relationships;	Spiber is also a key shareholder for the couture brand YUIMA NAKAZATO, an eponymous label known for using concepts of sustainability and cutting-edge innovation in its collections. Spiber IP Management LLC is a Spiber Group subsidiary created by Spiber in 2023 to manage a portion of the intellectual property owned by Spiber. Please see here for our corporate information.
2-7	Employees	Sustainability Impact Report 2022, p.26

General Disclosures: 3. Governance

2-6	Governance structure and composition	Sustainability Impact Report 2022, pp.41 & 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) in addition to four External Directors—including Carlyle's representative—on the Spiber Board of Directors. The Nomination Committee addresses 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 section 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, pp.41 & 43
2-14	Role of the highest governance body in sustainability reporting	The Board of Directors contributed to the materiality assessment and reviewed and signed off on Spiber's sustainability strategy and Sustainability Impact Report in 2022. In 2024, the Executive Officers reviewed the contents of the disclosures and a final sign off from the Board of Directors was obtained.
2-15	Conflicts of interest	None
2-16	Communication of critical concerns	The Board of Directors receives reports of critical concerns that have been recognized by the Managing Committee, Compliance & Risk Management Committee, and the company's contacts for whistleblowing. The Management 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 contacts for whistleblowing report on the content of whistleblowing allegations and the results of investigations. 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. The number of concerns identified by the Compliance & Risk Management Committee was 17 in FY2023. The number of whistle-blowing incidents was 0 (two whistle-blowing consultations were held but neither were identified as applicable) in FY2023.

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 employees setting their own pay levels. This ethos of transparency is applied to senior executives as well.
2-21	Annual total compensation ratio	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): Spiber Japan: 2.5 Spiber Thailand: 2.8 Spiber America: 1.89 Ratio of the percentage increase from 2022 to 2023 in annual total compensation for the organization's highest-paid individual to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual): Spiber Japan: -3.30%* : 5.96% Spiber Thailand: 0% : -15%** Spiber America: No change *This decrease was due to the highest-paid individual doing less overtime hours as compared to the previous year. **This negative value is not a decrease in the compensation of the employee whose salary was the median value but is due to the retirement of an existing employee. The employee with the median value salary was replaced by another employee who happened to have a lower total compensation.

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 Bonsucro, a global sustainable sugarcane platform • Spiber Japan is also a regular member of the Japan Sustainable Fashion Alliance and reserves voting rights on its activities and policies

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: 58,480GJ LNG: 43,485GJ Municipal gas: 14,397GJ Gasoline/diesel for vehicles: 598GJ
b	Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used.	N/A
c	In joules, watt-hours or multiples, the total: i. electricity consumption ii. heating consumption iii. cooling consumption iv. steam consumption	Electricity consumption: 20.6GWh
e	Total energy consumption within the organization, in joules or multiples	132,752GJ

305-1	Direct (Scope 1) GHG emissions		
a	Gross direct (Scope 1) GHG emissions in metric tons of CO ₂ equivalent.	2022: 1,881t CO ₂ equivalent 2023: 3,119t CO ₂ equivalent	
b	Gasses included in the calculation; whether CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , NF ₃ , or all.	CO ₂ , CH ₄ , N ₂ O and HFCs are the relevant gasses and are included.	
c	Biogenic CO ₂ emissions in metric tons of CO ₂ equivalent.	3,941t CO ₂ e	
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.	2022 is Spiber's base year for reporting Scope 1 and Scope 2 emissions. The emissions were a total of 1,881t CO ₂ equivalent (no recalculation). It was selected because it was our first year of commercial operations.	
e	Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.	See table 305-1.1	

Table 305-1.1

Emissions source	Source of activity data	2023 emissions factor	Source of emissions factor
LNG - Spiber Thailand	Invoices	2.70kg CO ₂ /kg gas	Ministry of Environment, Government of Japan
City gas - Spiber Japan	Invoices	2.23kg CO ₂ /m ³	Ministry of Environment, Government of Japan

Emissions source	Source of activity data	2023 emissions factor	Source of emissions factor
Mobile combustion - Spiber Thailand	Fuel spending + average fuel cost	Gasoline: 2.32kg CO ₂ /l Diesel: 2.58kg CO ₂ /l	Ministry of Environment, Government of Japan
Mobile combustion - Spiber Japan	Fuel spending + miles driven from paper logs for company cars		
Mobile combustion - Spiber America	Distance driven from tax records + vehicle make, model, and typical gas mileage		
Electricity - Spiber Thailand	Invoices	0.440kg CO ₂ equivalent/kWh	Ministry of Energy, Government of Thailand
Electricity - Spiber Japan	Invoices	0.434kg CO ₂ equivalent/kWh	Ministry of Economy, Trade and Industry, Government of Japan
Fugitive emissions	Refrigerant leaks in operations tracked by each group company's Environmental Compliance point-of-contact. For 2023, quarterly inspections at Spiber Japan of equipment containing refrigerants identified a leak in a chiller. Assumed loss of 100% of refrigerant in absence of data on refilled amount.	Methane: 25kg CO ₂ equivalent HFC(R134a): 1,430kg CO ₂ equivalent	Intergovernmental Panel on Climate Change AR4
Biogenic carbon	Estimated based on assumption of 100% conversion of carbon in purchased feedstock sugar to biogenic CO ₂ less the carbon sequestered in sold Brewed Protein™ goods.	0	Intergovernmental Panel on Climate Change AR4

f	Consolidation approach for emissions; whether equity share, financial control, or operational control.	Operational control
g	Standards, methodologies, assumptions, and/or calculation tools used.	See table 305-1.1 for methodologies/assumptions. No calculation tool was used. GHG emissions were calculated in accordance with the GHG Protocol and any deviations are noted.
305-2	Energy indirect (Scope 2) GHG emissions	
a	Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO ₂ equivalent.	Scope 2 location-based GHG emission for Spiber facilities in Japan, Thailand, and USA is 9,059t CO ₂ equivalent
b	If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO ₂ equivalent.	Scope 2 market based GHG emission for Spiber facilities in Japan, Thailand, and USA is 0t CO ₂ equivalent
c	If available, the gasses included in the calculation; whether CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , NF ₃ , or all.	CO ₂ , CH ₄ , N ₂ O
d	Base year for the calculation, if applicable, including: i. the rationale for choosing it;	2022 is Spiber's base year for reporting Scope 1 and Scope 2 emissions. It was selected because it is our first year of commercial operations, thus no recalculations have been carried out.
	ii. emissions in the base year;	See table 305-1.1 above
	iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.	None

e	Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.	See table 305-1.1 above
f	Consolidation approach for emissions; whether equity share, financial control, or operational control.	Operational control
g	Standards, methodologies, assumptions, and/or calculation tools used.	See table 305-1.1 for methodologies/assumptions. No calculation tool was used. GHG emissions were calculated in accordance with the GHG Protocol and any deviations are noted.
305-3	Other indirect (Scope 3) GHG emissions	
a	Gross Other indirect (Scope 3) GHG emissions in metric tons of CO ₂ equivalent.	21,435t CO ₂ equivalent Purchased goods and services (only production raw materials and process chemicals): 4,406t CO ₂ e Capital goods: 12,794t CO ₂ e Fuel and energy related activities: 2,209t CO ₂ e Upstream transportation and distribution (excluding transportation of sold goods between Spiber Japan and buyers of Spiber's products): 425t CO ₂ e Waste generation: 1,092t CO ₂ e Business travel: 358t CO ₂ e Employee commuting: 151t CO ₂ e
b	If available, the gasses included in the calculation;	All Kyoto Protocol gasses were included in the inventory.
c	Biogenic CO ₂ emissions in metric tons of CO ₂ equivalent.	Biogenic CO ₂ emissions were not calculated for Scope 3.

d	Other indirect (Scope 3) GHG emissions categories and activities included in the calculation	Spiber Japan, Spiber Thailand and Spiber America are the primary entities of the Spiber Group included in this inventory. The activities of all Other entities were small enough to fall under cut-off criteria for inclusion. Scope 3, Categories 1 through 7 were calculated for these entities with the exceptions noted below: Category 1: production raw materials and associated process materials and packaging were included; goods and services unrelated to production were excluded Category 4: transportation of goods sold to customers is excluded
e	Base year for the calculation, if applicable, including:	Scope 3 calculations are still in a preliminary phase, so a base year for scope 3 emissions has not yet been established.
f	Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.	https://www.env.go.jp/earth/ondanka/supply_chain/gvc/estimate_05.html Data referenced from the Emission intensity database published by Green Value Chain Platform, Ministry of the Environment of Japan; referenced for all categories except for Purchased Goods and Services and Waste in Thailand, for which Ecoinvent 3.10 was used.

Waste

306-1	Waste generation and significant waste-related impacts	R&D activities, pilot-scale protein production and commercial fiber spinning in Japan, and commercial protein production in Thailand, are the main activities related to waste generation and associated impacts. As a company working in the material production space and selling to the textile and apparel industry, the end-of-life of products using our materials is of importance due to the lack of recycling/reuse infrastructure for textile waste. Spiber sees an opportunity in its biomanufacturing methods to close the loop. We are planning to share more information on this soon in the Sustainability section of our website.
	For the organization's significant actual and potential waste-related impacts, a description of: i. the inputs, activities, and outputs that lead or could lead to these impacts; ii. whether these impacts relate to waste generated in the organization's own activities or to waste generated upstream or downstream in its value chain.	These impacts relate to waste generated in the organization's own activities.
306-2	Management of significant waste-related impacts	The biosphere circulation project is a measure for Spiber to use textile waste as a part of its future feedstocks for fermentation. We have also implemented a Process to recover chemicals and recirculate them in our fiber spinning production line to decrease water consumption and use of virgin chemicals.
	a Actions, including circularity measures, taken to prevent waste generation in the organization's own activities and upstream and downstream in its value chain, and to manage significant impacts from waste generated.	

b	If the waste generated by the organization in its own activities is managed by a third party, a description of the processes used to determine whether the third party manages the waste in line with contractual or legislative obligations.	In both Thailand and Japan, the countries in which Spiber has significant waste generation, government authorities manage permitting of industrial waste generators, transporters and disposers using a centralized manifest system. Spiber evaluates the ability of waste service providers to take appropriate measures through verifying the companys' documents and in some cases making site visits before entering disposal contracts.
c	The processes used to collect and monitor waste-related data.	A waste disposal manifest is implemented in line with Japanese law at Spiber Japan. Japan's waste disposal laws require businesses that produce industrial waste to issue a manifest to the party they commission to transport the waste. The manifest must include details such as the type and quantity of waste, and the producer must also keep a copy of the manifest for at least five years after it has been received to show that the waste has been disposed of. Spiber Thailand's Environment, Health and Safety committee tracks waste generation, disposal, and costs.
306-3	Waste generated	
a	Total weight of waste generated in metric tons, and a breakdown of this total by composition of the waste.	Spiber Thailand: 19,784t (industrial waste) Spiber Japan: 307t (including industrial, general, and hazardous wastes)

b	Contextual information necessary to understand the data and how the data has been compiled.	Spiber Japan's Environmental Protection Committee adheres to Japanese laws requiring careful tracking and reporting of industrial wastes to the Japanese government. General waste includes office-type waste not related to production. This is tracked through invoice records. We define hazardous waste as per the European Union's Waste Framework Directive, Directives 2008/98/EC. Spiber Thailand's Environment, Health and Safety committee tracks waste generation amounts and disposal destinations for both production-related and general waste. The primary points of contacts for each location report on their entity's wastes for the year.
306-4	Waste diverted from disposal	
a	Total weight of waste diverted from disposal in metric tons, and a breakdown of this total by composition of the waste	Recovery: 132t of waste are diverted from disposal as described below Recycling: 15.9t of off-site recycling
b	Total weight of hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations	Recovery: 132t of hazardous waste are recovered in Spiber Japan's fiber spinning process through on-site material recovery operations Recycling: 0.34t recycled off-site
c	Total weight of non-hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations	Recovery: While non-hazardous waste is recovered in Spiber Japan's fiber spinning process, a full record of the recovered amount was not kept for 2023; see 306-4 (e) for additional context. Recycling: 15.6t of off-site recycling

d	For each recovery operation listed in Disclosures 306-4-b and 306-4-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste diverted from disposal		On-site	Off-site
		Hazardous	132t	0.34t
		Non-hazardous	Unavailable	15.6t
e	Contextual information necessary to understand the data and how the data has been compiled	Data reported for on-site hazardous material recovery operations is only for April to December 2023. Data was unavailable for the first quarter. The on-site material recovery system also performs non-hazardous waste recovery; however, the amount is not reported due to poor data quality for 2023. Recycling here only includes sales of valuables directly to recycling companies and does not include any recovery operations done by waste disposal companies paid to responsibly discard wastes.		
306-5	Waste directed to disposal			
a	Total weight of waste directed to disposal in metric tons, and a breakdown of this total by composition of the waste.	Composition	Spiber Japan	Spiber Thailand
		Hazardous	180.9t	5.2t
		Non-hazardous	108.5t	19,776t
		Total	289.4t	19,782t
b	Total weight of hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following recovery operations:	186.1t		
	i. Incineration (with energy recovery);	5.2t		
	ii. Incineration (without energy recovery);	6.4t		
	iii. Landfilling	0		

	iv. Other disposal operations.	Neutralization and wastewater treatment: 174.5t
c	Total weight of non-hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following recovery operations:	19,884t
	i. Incineration (with energy recovery);	3,366t
	ii. Incineration (without energy recovery);	68.4t
	iii. Landfilling	1,975t
	iv. Other disposal operations.	14,475t
d	For each disposal operation listed in Disclosures 306-5-b and 306-5-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste directed to disposal:	
	i. on-site	N/A
	ii. off-site	All amounts listed are directed to off-site disposal.
e	Contextual information necessary to understand the data and how the data has been compiled.	Please see 306-3c above.
301-1	Materials used by weight or volume	
a	Total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period, by:	The materials accounted for are production materials sourced from external suppliers. The data is from inventory tracking or invoice data and no estimates have been made.
	i. non-renewable materials used;	Raw materials: 144t Associated process materials: 1,022t

	ii. renewable materials used.	Raw materials: 3,802t Associated process materials: 2,353t
301-2	Recycled input materials used	
a	Percentage of recycled input materials used to manufacture the organization's primary products and services.	We are not aware of any recycled input materials used in 2023.

Sourcing

308-1	New suppliers that were screened using environmental criteria	
a	Percentage of new suppliers that were screened using social criteria	From 2024, all new suppliers that we work with are required to comply with our Sustainable Sourcing Policy which defines the fundamental environmental and social criteria that are essential to conduct business with us. Additionally, we have been requesting each of our existing suppliers to provide written commitment to the same policy, and as of July 2024 we have received such commitment from 96.8% of our upstream suppliers (by price of materials purchased). We have also developed a set of social and environmental assessment questions in 2024, which we will use in our supplier screening and evaluation process to identify current and potential environmental and social risks.
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

401-1	New employee hires and employee turnover	
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, and 401-1.3 for data from the Spiber Group companies in Japan, Thailand, and the USA.
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 January 2023–December 2023	5 (25%)	15 (75%)	8 (40%)	12 (60%)	0 (0%)	6 (30%)
Number of new employees that left the company between January 2023–December 2023	11 (50%)	11 (50%)	7 (32%)	15 (68%)	0 (0%)	6 (27%)

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
Number of new employees hired between Jan 2022- December 2022	2 (28%)	5 (72%)	2 (28%)	5 (72%)	0 (0%)
Number of new employees that left the company between Jan 2022- December 2022	1 (17%)	5 (83%)	0 (0%)	1 (17%)	5 (83%)

Table 401-1.2

Spiber America	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
Number of new employees hired between Jan 2022- December 2022	1 (33%)	2 (66%)	0 (0%)	3 (100%)	0 (0%)
Number of new employees that left the company between Jan 2022- December 2022	0 (0%)	0 (0%)	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, referencing best practices used 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 are also sharing data for other indicators like the number of non-Japanese speakers who joined and left the company, as we consider it a relevant diversity indicator for Spiber Japan. We will continue to assess other indicators for Spiber Thailand and Spiber America.

Table 405-1.1

Spiber Inc. (Japan)

Diversity indicators	Gender		Age			Nationality
Diversity metric	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	Percentage of employees who are not Japanese by nationality
Governance structure						
Governance body	8%	92%	0%	54%	46%	0%
Senior management	18%	82%	0%	82%	9%	18%
Middle management	28%	72%	9%	85%	6%	11%
Non-management	49%	51%	23%	66%	11%	9%
Employee category						
R&D	57%	43%	12%	76%	12%	8%
Others	30%	70%	27%	64%	9%	11%
Board and Executive Officers	8%	92%	0%	54%	46%	0%

Table 405-1.2

Spiber Thailand

Diversity indicators	Gender		Age			Nationality
	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	Percentage of employees who are not Japanese by nationality
Governance structure						
Governance body	0%	100%	0%	80%	20%	0%
Senior management	–	–	–	–	–	–
Middle management	57%	43%	0%	100%	0%	100%
Non-management	34%	66%	24%	74%	2%	91%
Employee category						
R&D	50%	50%	20%	75%	5%	62%
Others	50%	50%	20%	75%	5%	100%
Board and Executive Officers	0%	100%	0%	80%	20%	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 for details regarding our [corporate information](#).

Table 405-1.2

Spiber America

	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%	67%	0%	83%	17%
Board and Executive Officers	0%	100%	0%	100%	0%

*Spiber America currently has 7 employees in total.

405-2	Ratio of basic salary and remuneration of women to men	
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.	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 is not included in this disclosure. However, we are monitoring this data and shall disclose it once employee anonymity can be preserved. The main difference between salary and remuneration for Spiber employees is due to overtime pay.
b	The definition used for 'significant locations of operation'.	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 was established in the USA to pursue a partnership with ADM for fur ther 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 there.

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	104%	104%
Senior management	68%	67%
Middle management	92%	102%
Non-management	85%	81%
Employee category		
R&D	87%	82%
Others	72%	74%
Board and Executive Officers	105%	105%

Table 405-2.2

Spiber Thailand

	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	N/A	N/A
Senior management	N/A	N/A
Middle management	81%	128%
Non-management	102%	92%
Employee category		
R&D	88%	95%
Others	92%	114%
Board and Executive Officers	N/A	N/A