

# SUSTAINABLE SOLUTIONS FOR A BRIGHTER PLANET



SUSTAINABILITY REPORT 2023  
SCG PACKAGING  
PUBLIC COMPANY LIMITED



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# About This Report

SCGP has published the sustainability report on a yearly basis since 2019 to disseminate the business' sustainability performance in the environmental (E), social (S), and governance (G) dimensions (ESG). This report aims to present transparent and accountable information to all internal and external stakeholders, covering the period from January 1<sup>st</sup> to December 31<sup>st</sup>, 2023.

## Notable Changes and Developments in 2023

Details are provided in the section "Notable Changes and Developments in 2023" on page 38-39 of the annual report 2023.



## Scope of the Report

The data presented in this report consists of the results of sustainable development performance in SCGP's 3 main business units: integrated packaging business, fibrous business, and recycling business.

The sustainable development performance presented in this report is under the responsibility of SCGP, and the SCGP management considers it relevant and valuable to all stakeholders. There have been changes to the data reported in the Sustainability Report 2022 as follows:

- ❏ On page 91 (PDF page 92) of Economic Performance Data, the topic "Top 7 Corporate Sponsorship" has been changed from 1,208,770 to 1,643,770 baht.
- ❏ On page 78 (PDF page 79) of the Sustainability Performance Data of SCGP 2022, the word '(Thailand)' has been removed. The reported data now covers operations in both Thailand and abroad.
- ❏ On page 92 (PDF page 93) of Subsidiaries Included in Sustainability Report 2022, the name of company No. 29 has been changed from Day Tom Plastic to PT Dayasa Aria Prima.
- ❏ On page 78-79 (PDF pages 79-80) Environmental Performance Results on Greenhouse Gas Emissions and Energy Consumption:
  - Changed the reporting unit from million tons of CO<sub>2</sub>e to tons of CO<sub>2</sub>e.

- Since 2020, the report has covered operational results from both Thailand and abroad.
- Added reporting on other indirect greenhouse gas emissions (Scope 3) for 2022 and 2023 certified by an external third party.
- Began reporting data on carbon sequestration in economic forest areas in 2023.

The reporting approach aligns with the Global Reporting Initiative (GRI) Standards 2021, the modified GRI Topics Standards shown on pages 61-63. This includes actions following the Sustainability Accounting Standards Board (SASB) applicable for container and packaging sector on pages 64.

## Sustainability Management System

In 2023, SCGP and its subsidiaries within the scope of this report have been certified with the following management standards:

- ☑ ISO 9001-Quality Management System: 91%
- 🌿 ISO 14001-Environmental Management System: 89%
- 🛡️ OHSAS/TIS 18001/ISO 45001-Occupational Health and Safety System: 77%
- 🌳 FSC™-Forest Stewardship Council™: 97%

## Report Assurance

The economic performance data in this report are retrieved from the accounting data system, similar to those presented in the SCGP annual report, and have been verified by an external third party. The ESG performance data have been verified for accuracy and compliance with GRI Standards by an external audit firm, namely SGS (Thailand) Limited, as detailed on page 60.

You can download an electronic copy of this report as well as previous versions from the SCGP website

### FSC™ License Code of SCGP, its Subsidiaries and Joint Ventures

Company	FSC™ License Code
SCG Packaging Public Company Limited	FSC-C135609
Fiber Packaging Product Group (Thailand & Abroad)	
Packaging Paper Product Group (Thailand & Abroad)	
Siam Nippon Industrial Paper Company Limited	
Thai Paper Company Limited	FSC-C014429
The Siam Forestry Company Limited	FSC-C105470
	FSC-C133879
	FSC-C012207
Phoenix Pulp & Paper Public Company Limited	FSC-C015565
Interpress Printer Sdn.Bhd.	FSC-C127941



## Sustainability Reporting Approach

This report presents a concise overview and data of sustainable development approach and ESG performance throughout 2023, in line with our commitments and goals.



Stakeholders of SCGP can access other data sets of interest on our website <https://sustainability.scgpacaging.com/th/home>, as follows:

1. Oversight of Sustainable Development, which includes:
  - Policies and guidelines for sustainable development
  - Operational structure for sustainability
  - Business value chain
  - Stakeholder analysis and engagement in the business value chain
  - Issues in sustainable development
2. Strategies for preventing and addressing key human rights issues
3. Task Force on Climate-related Financial Disclosures (TCFD) Report 2023
4. Certification of management systems



# Message from the CEO



**“SCGP strives to be an integrated packaging solutions provider in the region, offering a diverse array of innovative products and services, coupled with sustainable business practices.”**

SCGP strives to be an integrated packaging solutions provider in the region, offering a diverse array of innovative products and services, coupled with sustainable business practices. We aim to provide services and innovations tailored to customer needs and consumers worldwide. Recognizing the critical importance of sustainability in our operations, SCGP dedicates significant efforts towards developing and delivering sustainable packaging solutions to mitigate environmental impact by incorporating sustainability innovations at every stage of the product life cycle. We foster collaboration with all stakeholders, covering customers, employees, shareholders, and the surrounding communities. We believe that by offering innovative and sustainable packaging solutions, we can contribute to building a better future for society.

SCGP is committed to conducting its business in alignment with the ESG 4 Plus approach, encompassing Net Zero, Go Green, Reduce Inequality, Enhance Collaboration, Plus Trust through Transparency in all operations. In 2023, SCGP established an ESG Committee for overseas businesses to enhance environmental, social, and governance management efficiency. In the environmental dimension, SCGP aims to achieve the net zero target by 2050 by increasing the use of renewable energy to replace fossil fuels, thereby reducing greenhouse gas emissions. We have successfully increased the proportion of renewable energy used to 28.6% and have promoted tree planting for carbon dioxide absorption following the Natural Climate Solution (NCS) approach. To date, we have planted over 2 million trees and have undergone verifications by an external third party to certify the amount of carbon dioxide removal compared to the base year, achieving a 19.5% reduction in greenhouse gas emissions from the base year. SCGP continues registering the Carbon Footprint of Product (CFP) with relevant agencies. As of 2023, 59 products have been certified with the CFP mark. In the social dimension, SCGP actively promoted social diversity and inclusion by

engaging the group of LGBTQI+, fostering creativity and stronger engagements among all employee groups. We also supported the appointment of women to management positions and have achieved the goal of having 24% of our management positions occupied by women. In the governance dimension, SCGP has been certified with ISO 27001 for the information security management system, which ensures customer confidence by protecting all stakeholders from data breaches. Additionally, we promoted knowledge sharing and development of our suppliers' capabilities through the annual SCGP Supplier Day event.

With unwavering commitment and continuous development, SCGP has been widely recognized by ESG raters, both domestically and internationally. In 2023, SCGP achieved the highest score (Top 1%) in the Container and Packaging category from S&P Global and was included in the Dow Jones Sustainability Index (DJSI) in the Emerging Market for two consecutive years. Additionally, SCGP received an ESG assessment from the Stock Exchange of Thailand (SET ESG Ratings) at the AAA level for industrial product groups with a market capitalization exceeding one hundred billion baht.

SCGP will continue to operate in accordance with the ESG 4 Plus approach, supporting the involvement of relevant stakeholders. We aim to minimize environmental impact throughout the product life cycle while promoting activities that create sustainable value for society through transparent, accountable, and good governance practices. This is to deliver innovative products and services that are valuable and sustainable to consumers and society at large.

**(Wichan Jitpukdee)**

CEO and Chairman of ESG Committee

# OUR BUSINESS



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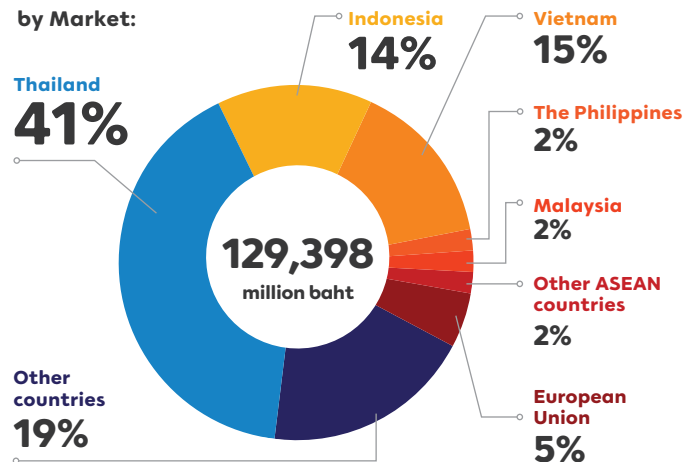
# SCGP Business Overview

SCGP envisions becoming a leader in integrated packaging solutions in the region, offering diverse product innovations and services and sustainable business practices. Our mission aligns with the vision of proactively pursuing sustainability and pioneering the circular economy principle in ASEAN under aligned strategies. This involves operating within the ESG framework with the long-term goal of fostering growth for stakeholder and improving the well-being of everyone around the globe.

SCGP comprises three main businesses: Integrated Packaging Business, Fibrous Business, and Recycling Business & others.

**Sales Revenue: 129,398 million baht**

Revenue Breakdown  
by Market:



<b>Pulp and Paper Products and Foodservice Packaging</b> 9 plants 4 countries	<b>Packaging Paper</b> 8 plants 4 countries	<b>Fiber Packaging</b> 32 plants 3 countries	<b>Consumer and Performance Packaging (Rigid/Flexible Packaging)</b> 14 plants 3 countries	<b>Medical Supplies and Labware</b> 5 plants 2 countries	<b>Packaging Material Recycling</b> 2 plants 2 countries	<b>Recycling Center</b> 86 plants 4 countries
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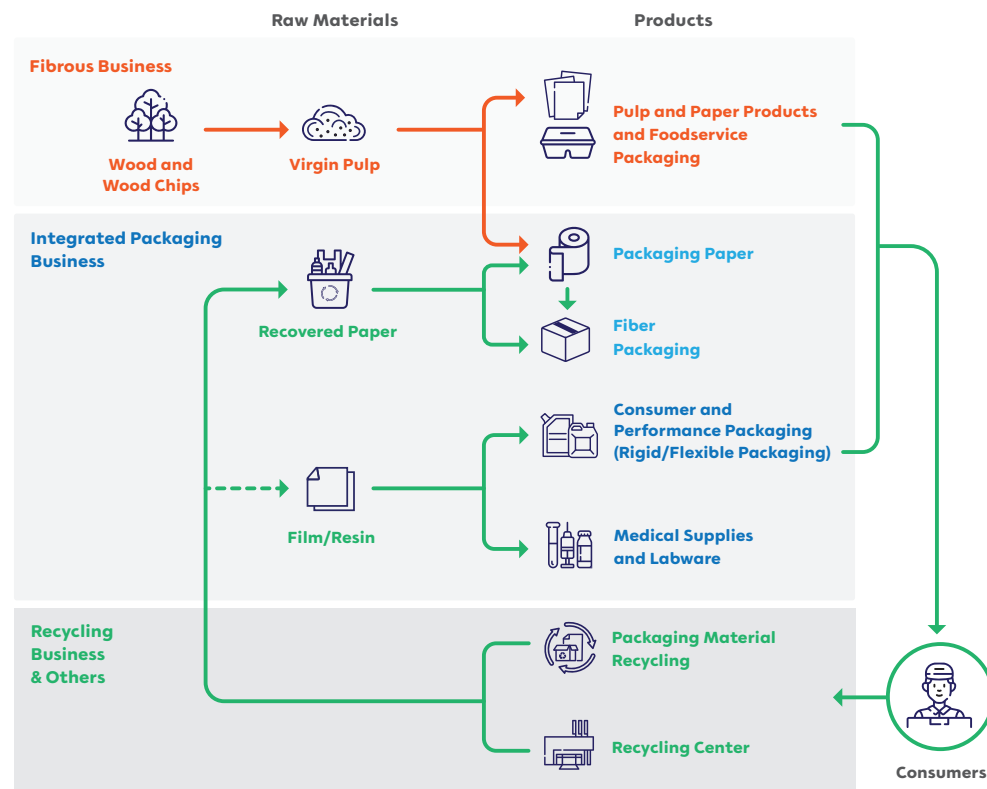
**EBITDA 17,769 million baht**

**Number of business operations: 70 in 10 countries**  
**(65 production facilities 5 Sale offices)**

**Number of employees 21,882 employees**

# Integrated Packaging Solutions Business Model

SCGP places great emphasis on operations throughout the entire value chain of packaging. The diagram below illustrates the value chain of our comprehensive production process.



## Packaging Solutions

SCGP offers a diverse range of products and services, covering customer needs throughout the value chain. We provide innovative solutions that promote sustainable business operations, as shown in the diagram.



Furthermore, we have the SCGP Inspired Solutions Studio, an end-to-end design and product development center. This center offers product design services, point-of-sale systems, and other marketing objectives that have won numerous awards.





# Key Performance Highlights in 2023

## Environmental

### Energy Management and Climate Resilience

#### GHG Emissions Reduction

0.97 million tons of carbon dioxide equivalent

19.5% reduction compared with the base year of 2020

#### Reduced Energy Consumption

4.99 petajoules

7.8% reduction compared with business as usual (BAU) at the base year of 2007

#### Proportion of Renewable Energy Usage

28.6% 0.15 million tons of carbon dioxide equivalent

#### Carbon Sequestration from Economic Tree Plantation

## Social

### Water Management

#### Reduced Water Withdrawal

29.8 million cubic meters

28.6% compared with business as usual (BAU) at the base year of 2014

#### Proportion of Recycled Water

17.0%

### Waste Management

#### Waste from production processes in Thailand to landfill

0 ton

#### Reduction of waste disposal by incineration without energy recovery in Thailand

100% compared to the base year of 2014

### Biodiversity and Ecosystem

NO Gross Deforestation

#### Biodiversity conservation areas

13.7% agroforestry areas certified by FSC™ standards

### Environmental-related expenses and investments

1,216 million baht

### Health and Safety

#### Total number of work-related fatalities of employees and contractors

3 cases

#### Lost Time Injury Frequency Rate (employees : contractors)

0.417:0.454 cases per 1,000,000 working hours

#### Occupational Illness and Disease Frequency Rate of employees

0 cases per 1,000,000 working hours

### Human Rights

#### Human rights violations

1 case

#### Proportion of female employees in all management positions

23.8%

### Employee Care and Human Capital Development

#### Total employee engagement rate in Thailand and abroad is above 4.20 out of 5.00

4.10

#### Employees in Thailand assessed for competency and Individual Development Plan (IDP) on the Learning Management System (LMS)

100%

### Community Engagement and Development

#### Scale up SCGP Zero Waste Community Project

143 communities

#### Community satisfaction index

95%

#### Contribution to society

49 million baht

Employees passed  
Ethics & Human Rights  
Learning and Testing  
and Ethics e-Testing

100%



NO

Complaints Related to  
Violations of the Code of  
Conduct, Anti-Corruption  
Policies, and Personal  
Data Protection



### Product Stewardship

Sales revenue from  
SCG Green Choice  
products, services,  
and solutions



57%

of the total  
sales revenue

Sales revenue from  
SCG Green Choice products,  
services, and solutions  
that provide direct benefits  
to customers

7%

of the total  
sales revenue

### SCGP's subsidiaries

100%

complying with  
the requirements  
of REACH Regulation  
(Annex XVII and Substances  
of Very High Concern (SVHC)  
for Authorization)

NO

Complaints regarding  
non-compliance  
with the laws  
and product safety

### Customer & Consumer Centricity

Customer  
Experience  
Score

87%



### Investment and Expense in Research & Development and Innovation

998

million baht

### Sustainable Value Towards Suppliers

Green procurement value

5,474

million baht

21

products

55%

of the total  
procurement  
value



100%

Proportion of  
procurement value  
from suppliers with  
a commitment to  
comply with  
SCGP Supplier  
Code of Conduct

100%

Proportion of  
procurement value  
from suppliers passed the  
annual  
Environmental, Social,  
and Governance (ESG)  
risk assessment

### Circular Economy

Recyclable, Reusable,  
or Compostable Packaging  
from the volume of total  
packaging

99.7%



# Awards and Achievements in 2023

Member of  
**Dow Jones  
Sustainability Indices**

Powered by the S&P Global CSA



- **Dow Jones Sustainability Index (DJSI) Assessment** for 2023 in the Packaging Industry, by S&P Global. As of February 7<sup>th</sup>, 2024 SCGP achieved a total score of 85 points, equating to the Top 1% and became a member of the Dow Jones Sustainability Index.
- **Sustainability Assessment by CDP (Carbon Disclosure Project)** for the year of 2023 in the category Climate Change, SCGP was assessed for the first time and received an A- rating for the company in the Light Manufacturing (Other Containers & Packaging) industry group.
- **Sustainable Stock (SET ESG Rating)** for 2023, SCGP achieved an AAA level and was listed in the SET ESG Index and received 2 SET Awards: **Best Sustainability Awards** from the Sustainability Excellence group and **Best Innovative Company Awards** from the Business Excellence group for the 2<sup>nd</sup> consecutive year. Additionally, it is one of the top 25 listed companies in the Stock Exchange of Thailand that scored the highest across all four criteria: the 5-star rating by the Thai Institute of Directors (IOD), the SET ESG Ratings by the Stock Exchange of Thailand, the SET Awards by the Stock Exchange of Thailand, and the AGM Checklist by the Thai Investors Association.



- **The Outstanding in Corporate Governance Award and Appreciation Award: Thai Investor in the Netherlands** from the Netherlands-Thai Chamber of Commerce (NTCC).
- **The Gold-level Climate Action Leading Organization (CALO) award** in two categories: Measure and Reduce, from the Thailand Carbon Neutral Network (TCNN), a network member under the Thailand Greenhouse Gas Management Organization (Public Organization).
- **Certification in ISO 27001:2013** for Information Security Management System from BS1.
- **SCGP secured a Green Loan** from Bank of Ayudhya totaling 3,000 million baht for 5-year tenor to invest in environmental projects, reinforcing the commitment to ESG principles.



# ESG Metrics and Targets

SCGP recognizes the importance of driving and promoting actions aligned with the ESG 4 Plus approach to yield tangible and measurable results and meet the United Nations' Sustainable Development Goals (SDGs). In 2023, SCGP addressed 15 SDGs.

Materiality Issues	SDGs	ESG Targets
Climate Resilience	   	<ul style="list-style-type: none"> <li>Achieve Net Zero emissions by 2050.</li> <li>Reduce greenhouse gas emissions by 25% by 2030, compared with the base year of 2020.</li> <li>Reduce energy consumption by 13% by 2025, compared with business as usual (BAU) at the base year of 2007.</li> </ul>
Biodiversity and Ecosystems		<ul style="list-style-type: none"> <li>Biodiversity conservation area certified by FSC™ standards at least 10% of agroforestry area.</li> <li>No gross deforestation.</li> </ul>
Water Management	    	<ul style="list-style-type: none"> <li>Reduce water withdrawal by 35% by 2025, compared with business as usual (BAU) at the base year of 2014.</li> </ul>
Industrial Waste Management	 	<ul style="list-style-type: none"> <li>Zero waste from the production process in Thailand is sent to landfill.</li> <li>Reduce the amount of waste per ton of product disposed of in Thailand by incineration without energy recovery by 100% by 2025, compared with the base year of 2014.</li> </ul>
Air Quality Management	 	<ul style="list-style-type: none"> <li>Reduce the intensity of emission of air pollution [Particulate Matter, Sulfur Oxides (SO<sub>x</sub>), Nitrogen Oxides (NO<sub>x</sub>)] per ton of production by 5% by 2025 and 10% by 2030 (compared with the base year of 2020).</li> <li>No official odor complaint.</li> </ul>
Health and Safety	 	<ul style="list-style-type: none"> <li>Zero work-related fatalities of employees and contractors in the workplace every year.</li> <li>Zero Occupational Illness and Disease Frequency Rate among employees per 1,000,000 hours worked every year.</li> <li>Zero Lost Time Injury Frequency Rate of employees and contractors per 1,000,000 hours worked in 2024.</li> </ul>
Employee Care and Human Capital Development	  	<ul style="list-style-type: none"> <li>Total employee engagement score for employees in Thailand and abroad is above 4.20 out of 5.00</li> <li>Employees in Thailand received a performance assessment and employee development plan on the Learning Management System (LMS) with 100% participation every year.</li> </ul>

Materiality Issues	SDGs	ESG Targets
Human Rights	    	<ul style="list-style-type: none"> <li>Zero cases of human rights violations.</li> <li>100% of employees complete Ethics e-Testing on human rights.</li> <li>24% of female employees in all management positions in the year of 2025.</li> </ul>
Community Engagement and Development	     	<ul style="list-style-type: none"> <li>Community satisfaction index is 90%.</li> <li>Scale up SCGP Zero Waste Community Project to 183 communities by 2030.</li> <li>SCGP Open House 12 times, with 1,000 participants per year.</li> </ul>
Corporate Governance	  	<ul style="list-style-type: none"> <li>Zero violations of the anti-corruption policy.</li> <li>100% of employees learn and test ethics through Ethics e-Testing.</li> </ul>
Information Technology Security and Cybersecurity	 	<ul style="list-style-type: none"> <li>Information systems operate continuously at no less than 99.5% availability or have issues for no more than 1.83 days per year.</li> <li>No complaints on customer data breach.</li> </ul>
Sustainable Products and Services	   	<ul style="list-style-type: none"> <li>sales revenue from SCG Green Choice products, services, and solutions is 66.7% of the total sales revenue by 2030.</li> <li>sales revenue from SCG Green Choice products, services, and solutions that provide direct benefits to customers is 33.3% of the total sales revenue by 2030.</li> <li>100% of SCGP' subsidiaries must comply with the requirements of REACH Regulation (Annex XVII and Substances of Very High Concern (SVHC) for Authorization).</li> <li>No complaints on non-compliance with laws and product safety.</li> </ul>
Circular Economy	   	<ul style="list-style-type: none"> <li>SCGP is committed to engineer packaging products through co-creation with customers, aspiring to achieve 100% recyclable, reuseable, or compostable packaging by 2030.</li> </ul>
Customer & Consumer Centricity		<ul style="list-style-type: none"> <li>Customer experience score of 85% (Fibrous Business, Packaging Paper, and Fiber Packaging).</li> </ul>
Sustainable Value Towards Suppliers	  	<ul style="list-style-type: none"> <li>100% of the suppliers in procurement value are committed to comply with the SCGP Supplier Code of Conduct.</li> <li>100% of the suppliers in procurement value passed the annual Environmental, Social, and Governance (ESG) risk assessment.</li> <li>100% of the operation contractors are certified SCG Contractor Certification (SCS).</li> <li>100% of the transportation contractors are certified as main logistics partners.</li> </ul>



# Sustainability Management

Following the review of SCGP's material sustainability issues in 2023 through a Double Materiality assessment, four key issues were identified:

1. Circular Economy
2. Climate Action
3. Customer & Consumer Centricity
4. Risk & Disruption Management

For these four issues, the risks, opportunities, and management strategies are as follows:

Materiality Issues	Risks	Opportunities	Management Strategies
<b>1. Circular Economy</b>	<ol style="list-style-type: none"> <li>1. Scarcity of resources due to changes of environmental and climate conditions.</li> <li>2. Consumer demand for reducing natural resource consumption and utilizing recycled materials is increasing as consumers become more aware of the importance of sustainability.</li> <li>3. Strict government regulations on waste management to promote a circular economy.</li> </ol>	<ol style="list-style-type: none"> <li>1. Leveraging waste and diverse raw materials due to a variety of industries.</li> <li>2. Collaborating with customers to recycle waste into new products, in line with circular economy principles.</li> </ol>	<ol style="list-style-type: none"> <li>1. Efficiently managing existing limited resources to maximize utilization.</li> <li>2. Adopting the circular economy principles to manage limited resources such as water, energy, and raw materials for maximum benefit.</li> </ol> <p>See more details on page 15-16</p>
<b>2. Climate Action</b>	<ol style="list-style-type: none"> <li>1. Changes in policy and regulatory measures related to greenhouse gas emissions control, such as carbon taxes, Carbon Border Adjustment Mechanism, and more stringent targets like SBTi.</li> <li>2. Technological risks, fuel price volatility, and limitations of energy sources.</li> <li>3. Changing customer demands towards a low-carbon economy.</li> <li>4. Natural disasters, such as floods, droughts, storms, and pandemics, that affect business operations.</li> </ol>	<ol style="list-style-type: none"> <li>1. Investing in research and development of Carbon Capture, Utilization and Storage (CCUS) technologies and renewable energy.</li> <li>2. Designing and developing products and services based on circular economy principles, promoting and increasing the use of recycled materials.</li> <li>3. Implementing Internal Carbon Pricing (ICP) as a tool for investment consideration.</li> <li>4. Collaborating with government, private sectors, industries, and global organizations to continuously monitor situations, assess risks, and develop response and business continuity plans in case of disasters.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reducing greenhouse gas emissions with 3 measures: <ul style="list-style-type: none"> <li>• Improving energy efficiency through the adoption of best available technologies.</li> <li>• Increasing the use of renewable energy and clean energy sources.</li> <li>• Developing low-carbon products based on circular economy principles.</li> </ul> </li> <li>2. Absorbing and sequestering greenhouse gases with 2 measures: <ul style="list-style-type: none"> <li>• Exploring Carbon Capture, Utilization, and Storage (CCUS) technologies.</li> <li>• Supporting and participating in forest conservation and ecosystem restoration for biodiversity and as carbon dioxide sinks.</li> </ul> </li> <li>3. Utilizing economic tools such as Internal Carbon Pricing (ICP).</li> </ol> <p>See more details on page 17-20</p>

## Materiality Issues

### Risks

### Opportunities

### Management Strategies

#### 3. Customer & Consumer Centricity

1. Customer behavior has shifted towards a greater demand for diverse, specific, and tailored products that cater to their daily needs.
2. The need for faster and more convenient access to product and service information.

1. Delivering innovative products, services, and solutions that meet customer needs sustainably.
2. Expanding electronic channels to facilitate customer convenience in ordering, payment, and tracking product status.
3. Developing systems for receiving and managing customer data to enhance efficiency and speed of service.

1. Analyzing and monitoring customer experiences from understanding problems and needs, behaviors, product and service selection, to the use of solutions. This involves engaging with customers across all business segments to improve products and services and launching surveys to gauge satisfaction with products, services, and solutions.

See more details on page 22

#### 4. Risk & Disruption Management

Inherent risks in business operations include operational risks, water management risks, production process risks, financial risks, risks of business disruptions, and natural disaster risks.

Managing risk and disruption systematically in line with international standards and integrating them within the business framework under acceptable risk levels to ensure business continuity.

1. Managing risks across the organization according to the Committee of Sponsoring Organization (COSO) and ISO31000 to minimize the likelihood and impact of potential risks.
2. Analyzing the severity and prioritizing risk items using tools, such as WRI AQUEDUCT, satellite imaging, and Risk Map.
3. Continuously managing business risks according to the Business Continuity Management (BCM) framework for sustainability, in line with the approaches of the United Nations Office for Disaster Risk Reduction (UNDRR)

See more details (on water management) on page 26.



# OUR MATERIALITY



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## 17 Climate Resilience

Climate Action  
Sustainable Products and Services

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Human Rights  
Employee Caring and Development  
Customer & Consumer Centricity  
Health and Safety  
Community and Social Development

## 25 Environmental Stewardship

Biodiversity and Ecosystems  
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Corporate Governance  
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Collaborative Network: Fostering Power Towards Sustainability

# Circular Economy



SCGP places a high priority on reducing waste production, managing and utilizing waste, and selecting recycled materials in accordance with circular economy principles. This approach aims to maximize resource efficiency, with a mindful consideration of environmental impact and climate change. SCGP is therefore committed to researching and innovating solutions that add value from waste, developing sustainable packaging, and creating collaborations with organizations at all levels to ensure sustainable resource use in the future.

## Targets

Performance in 2023

- Zero waste from the production process in Thailand is sent to landfill.
- 100% Reduction of the amount of waste disposal by incineration without energy recovery in Thailand by 2025, compared with the base year 2014.
- SCGP is committed to engineer packaging products through co-creation with customers, aspiring to achieve 100% recyclable, reusable, or compostable packaging by 2030.

0

100%

99.7%

## Strategies

- Aim to reduce and eliminate waste at the source and establish it as a key performance indicator for continuous assessment and monitoring of outcomes.
- Manage industrial waste efficiently according to the 3R principles and circular economy principles for both hazardous and non-hazardous waste within SCGP. This is done by referencing standards set by government agencies or global standard organizations as a benchmark, aiming to operate beyond compliance.
- Research and develop innovations to reuse raw materials and waste or transform waste into value-added products. Extend the lifespan of products and components while preserving the maximum value of materials, and promote the use of biodegradable or recyclable substitute materials.
- Utilize a sharing platform to maximize resource utilization and collaborate with customers, suppliers, and other stakeholders throughout the supply chain for efficient resource management. Participate in national and international networks and organizations to drive actions towards achieving shared goals in line with circular economy principles.

In 2023, The volume of recyclable, reusable, or compostable packaging equals 99.7% of total volume of packaging. Therefore, SCGP is committed to engineer packaging products through co-creation with customers, aspiring to achieve 100% recyclable, reusable, or compostable packaging by 2030.

## Reducing Waste in Production Processes

- Reduce hazardous chemicals in printing inks:** Thai Containers Group Company Limited, in collaboration with Innovation and Product Development Center, has researched the extraction of copper from printing inks on cardboard boxes and has opted to use inks with lower copper content. This initiative reduces waste generated from the production process that contains copper. This effort is currently being expanded to all plants in Thai Containers Group Company Limited.
- Recycling paper cores to minimize waste:** Thai Cane Paper Public Company Limited reuses paper cores in good condition from rolls in its affiliated plants. This practice has helped reduce waste from paper core scraps by up to 20 tons per year.

## Sustainable Packaging from Recycled and Renewable Materials

SCGP has developed packaging solutions based on circular economy principles, utilizing recyclable materials as components.

- FiBbot (Fiber-Based Bottle) Packaging:** Manufactured from 100% paper fiber, with up to 65% eucalyptus pulp. It is coated to enhance resistance to liquid and gas permeation, making it recyclable and easily compostable.



- Packaging from PCR (Post-Consumer Recycled) and PIR (Post-Industrial Recycled) Plastic Pellets:** Rigid packaging uses 10-100% PCR and PIR, depending on the application, and is recyclable. Flexible Packaging is made from PIR and uses mono-material, simplifying the recycling process.

- Flexible Packaging Mono-Material (R1, R1+):**

Conventional multi-material film in flexible packaging makes recycling challenging. SCGP utilizes mono-material plastic films, facilitating easier recycling while maintaining quality and strength standards.

“Shell supports the transition to a low-carbon society, so we collaborated with SCGP to develop packaging that incorporates PCR pellets and has increased the proportion to 100% currently. The packaging remains strong and durable, meeting the standards for containing lubricant oils.”

Kamolpat Baholyodhin

Executive Director, Shell Company of Thailand Limited.



- Khu Din Organic Compost Bins:** Developed to process food waste, these bins ensure thorough air circulation and maintain appropriate temperatures for microorganisms to decompose the food waste. They are currently used in several SCGP plants. The compost produced is utilized to improve the soil in the plant lawns within SCGP.



## New Materials and Products from Waste



- **Recycled Plastic Pellets:** This process involves segregating plastic waste in the paper packaging production process and then melting it into recycled plastic pellets to be used as raw materials in product manufacturing. This method helps reduce disposal through incineration as fuel and lowers greenhouse gas emissions. Initially trialed at FajarPaper plant in Indonesia, this process has been expanded to Siam Kraft Industry Company Limited (Wang Sala plant) in Thailand.
- **Processing Fly Ash and Bottom Ash:** Developing products from fly ash and bottom ash, which are by-products of coal combustion.



- **SCGP PROBLOCK-ECO Brick:** In collaboration with SCG's Cement-Building Materials Business and SCG Technology Office, fly ash and bottom ash have been converted into building materials, known as PROBLOCK-ECO Brick. In 2023, a new innovation, Miracle Block, was developed for constructing temporary and permanent walls or partitions with a Lego-like interlocking system. Both PROBLOCK and Miracle Block help eliminate approximately 4,500 tons of bottom ash per year.
- **Soil Improvement Admixture:** Developed a soil improvement admixture from fly ash and bottom ash for agriculture. This helps to loosen soil and correct soil acidity. This initiative aids in disposing of approximately 4,000 tons of fly ash and bottom ash per year.

## Paper Recycling Project

SCGP promotes the recycling of paper waste by establishing drop points in collaboration with partners across various sectors to connect the recycling cycle efficiently.



## Recycling 64 Tons of Paper

### The reBOX campaign #reBOX

The reBOX campaign, now in its 4<sup>th</sup> consecutive year, is a joint effort by SCGP and Thailand Post. In 2023, they accepted used boxes and envelopes from the public and recycled them into paper boxes, which were then distributed to organizations related to people with disabilities for their activities. This campaign recycled 64 tons of paper and delivered 12,500 boxes.

## Reducing Greenhouse Gas Emissions 244.5 Tons of Carbon Dioxide Equivalent Per Year

### The SCGP Old Paper for New Paper Project

SCGP, in partnership with Sino-Thai Engineering and Construction Public Company Limited, has recycled the company's used paper and promoted the sorting of used paper from the source. In 2023, 84 tons of paper were recycled, reducing greenhouse gas emissions by 244.5 tons of carbon dioxide equivalent per year.

## Collaboration in Circular Economy

SCGP is committed to forging collaborations with various partners to support the circular economy through a series of projects.



### • PackBack Project for Sustainable Packaging:

SCGP, in collaboration with over 90 organizations, promotes waste management from packaging, starting from design to facilitate easier collection, separation, reuse, or recycling. This project operates in collaboration with Thailand Institute of Packaging and Recycling Management for Sustainable Environment (TIPMSE) and drives Thailand's Extended Producer Responsibility (EPR) policy.



• **Circularity in Action Seminar:** SCGP organized the SCGP Circularity in Action: Pursuit of Packaging Sustainability seminar to build connections and exchange experiences in developing sustainable packaging with over 40 Thai and international partners.

• **CHOICE IS YOURS:** SCGP, in partnership with SCG and 7 leading organizations, organized a competition for university students to present projects under the circular economy concept, focusing on long-term benefits to the community. This initiative provides an opportunity for young generation to showcase their potential and creativity. SCGP supported researchers in advising teams on creating packaging from natural, biodegradable materials.

# Climate Resilience



ESG 4 Plus



## Targets

Performance in 2023

### Climate Resilience

- Achieve Net-Zero emissions by 2050.
- Reduce greenhouse gas emissions by 25% by 2030 compared with the base year of 2020.
- Reduce energy consumption by 13% by 2025 compared with business as usual (BAU) at the base year of 2007.

4.02 million tons

19.5%

7.8%

### Sustainable Products and Services

- Sales revenue from SCG Green Choice products, services, and solutions is 66.7% of the total sales revenue by 2030.
- Sales revenue from SCG Green Choice products, services, and solutions that provide direct benefits to customers is 33.3% of the total sales revenue by 2030.
- 100% of subsidiary companies must comply with the requirements of REACH Regulation (Annex XVII and Substances of Very High Concern (SVHC) for Authorization).
- No complaints on non-compliance with laws and product safety.

57%

7%

100%

0 cases

## Climate Action

In 2023, SCGP set a new target to increase its greenhouse gas emission reduction from 20% to 25% by 2030, align with Science Based Target (SBTi). This demonstrates a commitment to reducing greenhouse gas emissions. Additionally, the Risk Management Committee has monitored and assessed risks at the organizational level and reported to the ESG Committee to strategize and implement action plans. Furthermore, SCGP adheres to the Task Force on Climate-related Financial Disclosures (TCFD) framework to analyze risks and opportunities arising from climate change and have set a target to achieve Net-Zero emissions by 2050.

The TCFD Report can be read in more detail at:  
<https://sustainability.scgpacaging.com/storage/documents/climate-resilience/tcf-report-2023.pdf>



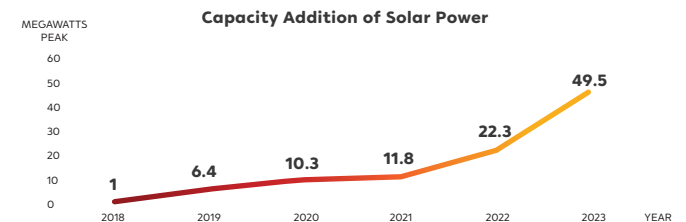
### Strategies

- Improve energy efficiency using the best available technologies at the time.
- Increase the use of renewable energy, such as biomass energy, biogas and solar power.
- Explore carbon capture and storage technologies.
- Support climate change mitigation approaches relying on Natural Climate Solution, such as forest conservation and ecosystem restoration.
- Promote economic mechanisms such as Internal Carbon Pricing (ICP) to manage risks and create opportunities in green financing to achieve greenhouse gas emission reduction targets.

## Increasing Renewable Energy Usage

### 49.5 Megawatts Peak

**Solar Energy:** Since 2018, SCGP has installed a total of 49.5 megawatts peak of solar energy. In 2023, the expansion included installations in Thailand and abroad, adding up to 9.7 megawatts peak, which helped reduce greenhouse gases by 9,228 tons of carbon dioxide equivalent per year.



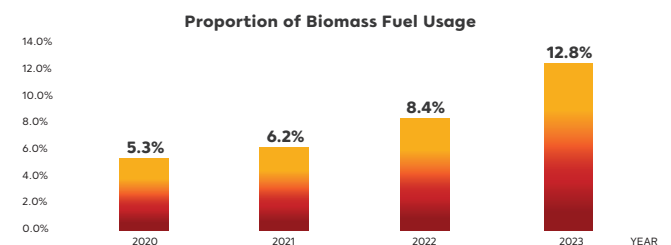
### 13,759 tons of carbon dioxide equivalent per year

**Biogas:** Installation of anaerobic wastewater treatment systems in Paper Packaging manufacturing plants in Thailand and the Philippines has been added. This captures methane generated from the decomposition of organic matter in the wastewater treatment process, using it as a substitute for fossil fuels in Power boiler. This reduces greenhouse gas emissions by 13,759 tons of carbon dioxide equivalent per year and saves 17.16 million baht annually in fossil fuel costs.



### Increasing Biomass Fuel Usage by 12.8%

**Biomass Fuel:** SCGP aims to increase biomass fuel use by exploring and experimenting with new alternative fuels, such as cashew husks. This also includes improvements in boiler systems for greater use of biomass fuel and continuous fuel feeding. The use of biomass energy ratio increased from 8.4% to 12.8%, reducing greenhouse gas emissions by 696,275 tons of carbon dioxide equivalent per year.





## Enhancing Energy Efficiency

**Soot Blower Optimization:** SCGP improved the efficiency of Boiler Soot Blower system in 5 plants in Thailand. This was achieved by calculating the optimal frequency and duration for using high-pressure steam to clean ash and soot accumulated on the walls of boiler tubes. The effort helped save approximately 28,306 gigajoules per year, reducing greenhouse gas emissions by 2,682 tons of carbon dioxide equivalent per year and saving 4.8 million baht annually in coal purchasing costs.

**Improving Boiler Feedwater Efficiency:** SCGP installed an automated control system, changed the size of the water pumps, improved piping, and optimized water pump operation to reduce heat loss at various points in the system. This effort helped save approximately 40,918 gigajoules per year in steam energy usage, reduced greenhouse gas emissions by 3,297 tons of carbon dioxide equivalent per year, and saved 13.2 million baht annually.



### Enhancing Energy Efficiency in Paper Production Machinery:

Siam Kraft Industry Co., Ltd (Ban Pong plant) installed a new conical pulp refiner to replace the 3 older machines. The newly installed machine has improved energy efficiency. Additionally, the plant extended the pipeline from the Central Air Compressor System (CACs) to the paper machines and improved the CACs control system. These improvements helped save 2,922 megawatt-hours per year (10,519 gigajoules per year) in electrical energy, reducing greenhouse gas emissions by 2,167 tons of carbon dioxide equivalent per year and saving 6.5 million baht annually.



## Natural Climate Solution Planting 2.28 Million Trees

SCGP, in collaboration with government agencies and communities, has continuously planted trees since 2020. In 2023, 1,154,609 trees were planted, bringing the total to 2,283,284 trees. The "SCGP Plant the Trees to Beat the Heat" project alone contributed 62,549 trees.



## 152,181 Tons of Carbon Dioxide Equivalent per Year

**Carbon Storage Certification:** Siam Forestry Co., Ltd. collected data and was certified for carbon sequestration of 31,770 rais of economic tree plantation, amounting to 152,181 tons of carbon dioxide equivalent per year, certified by SGS (Thailand) Limited.



## Disclosure of Greenhouse Gas Scope 3 and Cooperation with Business Partners

Disclosing Scope 3 greenhouse gases from the company's supply chain is crucial for achieving the net-zero emissions goal. Since 2022, SCGP has begun calculating Scope 3 greenhouse gases, sought third-party certification, and collaborated with customers, such as:

- Conducting training for suppliers on all 3 Scopes of greenhouse gas emissions and the carbon footprint of products, with a total of 160 participants.
- Organizing SCGP Supplier Day 2023 to help suppliers understand SCGP's ESG actions and initiatives to reduce greenhouse gas emissions, with a total of 598 participants from 400 companies.

## Climate Action Leading Organization (CALO)

SCGP has been honored with the Climate Action Leading Organization (CALO) award by the Thailand Carbon Neutral Network (TCNN). SCGP achieved the Gold level for two key assessment criteria: Measure and Reduce.



## Sustainable Products and Services:

SCGP is committed to producing safe and environmentally friendly products, services, and solutions, especially in reducing greenhouse gas emissions. This commitment involves developing production processes such as using renewable energy, utilizing recycled materials, and conducting Life Cycle Assessments to evaluate environmental impacts throughout a product's lifecycle. These efforts cater to the needs of consumers and suppliers across the supply chain while adhering to relevant measures and legal requirements.

### Strategies

- Promote innovative approaches in product, service, and solution development that meet consumer needs, enhance well-being, and take climate change, environmental, and health impacts into account by leveraging circular economy principles to create business opportunities.
- Consider the environmental impact and safety of products, services, and solutions throughout their lifecycle and promote certified and green-labeled products aligned with sustainability guidelines.
- Foster and develop business processes across the value chain to international standards to raise awareness of environmentally friendly product use among stakeholders.



## Certified Green Products, Services, and Solutions in 2023



## Promoting Carbon Footprint of Product (CFP) Registration



In 2023, SCGP registered 59 products for the Carbon Footprint of Product (CFP) label with the Thailand Greenhouse Gas Management Organization (Public Organization) (TGO), covering the scope from raw material acquisition, transportation, to product manufacturing (Business to Business, B2B). This includes 4 types of pulp products and 55 types of kraft paper products. Kraft paper products also received the Carbon Footprint of Circular Economy Products label.



SCGP plans to develop low carbon products and proceed to register for the Carbon Reduction Label in the future. Additionally, SCGP is developing a program to collect and calculate the carbon footprint of products as a tool to develop green products further.

## Green Choice for Reducing Greenhouse Gas Emissions

In 2023, SCGP offered products certified with the SCG Green Choice label for reducing greenhouse gas emissions and electric energy consumption. Examples include:



### > 5,983 tons of carbon dioxide equivalent per year

**Fiber Packaging:** Over 13 SCGP subsidiaries producing Fiber packaging installed solar energy systems in their plants. The effort increased the proportion of renewable energy used in the production process to at least 15%, reducing greenhouse gas emissions by over 5,983 tons of carbon dioxide equivalent per year.



### > 8 kilograms of carbon dioxide equivalent per ton

**SCGP Glassine Paper:** SCGP developed enzymes to enhance the efficiency of pulp grinding, reducing electricity consumption by at least 2% per ton. This led to a decrease in greenhouse gas emissions by approximately 8 kilograms of carbon dioxide equivalent per ton while maintaining the standard product properties.



## Developing Products Based on Circular Economy Principles:



### • Using 100% Recycled Fibers

The kraft liner of KLB boxes, produced by SCGP's plants in Indonesia, is made from 100% recycled fiber. This approach helps reduce the use of virgin pulp while maintaining the product's performance. The product has received the Eco Label certification from the Indonesian standard certification agency.



### • 100% Recyclable Packaging

Flexible packaging produced from mono-material film offers equivalent functional properties to multi-material packaging. After use, it can be fully recyclable, simplifying the sorting process and reducing waste that would otherwise be landfilled, thereby also decreasing greenhouse gas emissions.

### • Include At Least 21% by Weight of Recycled Plastic Resins Content in Food & Beverage Packaging

Long-shelf life, retort-able and recyclable plastic packaging for food and beverage quality at ambient condition (temperature at 20-25 degree Celsius) for at least one year. The packaging can prevent the food and beverage inside from the oxygen and gas. It has undergone quality testing and validation to ensure the compliance with food safety standards.



## Collaborating with Customers to Promote Recycled Products

- In partnership with Betagro Group, a **Fest Fresh Pak** has been developed, allowing for at least 80% of the tray's weight to be made from recycled materials, compared to conventional polypropylene polymer trays. The packaging remains durable and preserves the freshness of food for up to 7 days. It is produced from eucalyptus pulp paper certified by FSC™ across the whole value chain.



- In partnership with the PatPat store of the Chaipattana Foundation, a unique design of **recycled paper bags** and various other types of packaging has been developed to promote the brand's identity. This initiative supports the growth of community products throughout the country under the royal initiative projects of King Rama IX, fostering sustainable development.

## Awards and Standard Certifications

### Cheewajit Award 2023

The food supplement product, HOLIS by SCGP PROBIO ACTIVE PLUS, earned the GURU's PIC award for the second consecutive year, reflecting a commitment to developing innovations that meet the needs of health-conscious consumers and are environmentally friendly.



### RecyClass (Class A):

The mono-material plastic packaging in the R1-PE Mono-layer Pouch/PE Flexible-Pouch category by Prepack, a subsidiary of SCGP, has been certified for its recyclability and traceability of recycled materials by RecyClass (Class A). This reinforces the confidence in SCGP's green packaging standards.



### ISCC Plus Standard:

The Duy Tan group, operating in the Consumer and Performance Packaging Business of SCGP, has been certified with the global ISCC PLUS standard by the International Sustainability and Carbon Certification (ISCC). This certification acknowledges organizations that manage carbon and sustainable development throughout the supply chain. Duy Tan is the first rigid plastic packaging and houseware manufacturer in Vietnam and the third business within the SCGP group to receive this certification (following Vexcel Pack Co., Ltd. and Prepack Thailand Co., Ltd.)



# People and Community Care



## Targets

Performance in 2023

### Human Rights

- Zero cases of human rights violations.
- 100% of employees complete Ethics e-Testing on human rights.
- 24% of female employees in all management positions in 2025.

1 case  
100%  
23.8%

### Employee Caring and Development

- Total employee engagement score for employees in Thailand and abroad is above 4.20 out of 5.00
- Employees in Thailand received a performance assessment and employee development plan on the Learning Management System (LMS) with 100% participation every year.

4.10  
100%

### Customer & Consumer Centricity

- Customer experience score is 85%. (Fibrous Business, Packaging Paper and Fiber Packaging)

87%

## Human Rights

SCGP recognizes the increased human rights risks associated with international business expansion and mergers and acquisitions. It has implemented good practices from domestic operations in its international ventures while committing to overseeing and ensuring human rights across its value chain, covering all of SCGP's business activities.

## Targets

Performance in 2023

### Health and Safety

- Zero work-related fatalities of employees and contractors in the workplace every year.
- Zero Occupational Illness and Disease Frequency Rate per working hours among employees (cases/1,000,000 hours worked) every year.
- Zero Lost Time Injury Frequency Rate of employees and contractors (cases/1,000,000 hours worked) by 2024

3 cases  
0  
Employee 0.417  
Contractor 0.454

### Community Engagement and Development

- Community satisfaction index is 90%.
- Scale up the Zero Waste Community Project to 183 communities by 2030.
- SCGP Open House 12 times, with 1,000 participants per year

95%  
143 communities  
42 times,  
960 participants

## Strategies

- Integrate human rights actions and manage diversity, equity and inclusion as integral parts of the business across domestic and international value chains.
- Enhance and develop participation projects that extend the principles of human rights respect to all stakeholders throughout the value chain and society.
- Set a model and share experiences on human rights with other organizations.

## Salient Human Rights Issue in 2023

There was one salient human rights issue as follows:

- Health and Safety



## Human Rights Programs/Initiatives

- **Your Career, Your Choice:** Develop a system for managing and transferring employee positions based on competence, ensuring transparency and equality.
- **Foreign Labor Care:** Provide care encompassing quality of life and welfare, local language communication, and access to complaint mechanisms.
- **Communicate with managerial staff** to raise awareness and knowledge of good human rights practices, emphasizing the importance of setting an example for their subordinates in adhering to human rights principles.

See more details at SCGP website/human right

## Employee Caring and Development

SCGP is committed to conducting business in line with sustainable development guidelines and the ESG 4 Plus approach. It has developed employees at all levels in ESG matters. This involves creating and updating courses to integrate ESG content into employee learning and fostering organizational commitment, especially among talent employees.

### Strategies

- Use competency as a tool for the recruitment and development of the Global People Pool, aiming to elevate and bridge the gap in functional and leadership competency through project assignments and job rotation to develop capabilities in various dimensions.
- Foster career ownership among employees by highlighting growth opportunities aligned with their career planning through diverse learning and development programs. This also includes gathering internal knowledge through a knowledge management system and promoting knowledge sharing between existing and new business units.
- Provide comprehensive and fair employee care to build organizational commitment, including designing appropriate welfare programs, such as support for mental health and well-being.

## Customer & Consumer Centricity

SCGP has developed a Customer Relationship Management (CRM) system to enhance the efficiency of marketing and sales services to customers. Additionally, the SCGP E-Ordering system has been improved to facilitate quick order placement and status checks of customer orders, aiming to increase customer satisfaction and improve their experience.

### Strategies

- Engage in co-creation with business customer groups to create customer-oriented B2B2 services.
- Engage in co-creation with consumer customer groups to create B2C services.



### Next Targets

- In 2024, enhance the Smart Agent Chatbot to include features for checking order and delivery status.
- By 2025, expand the SCGP Customer Order Management system to cover all products.

## Developing Contact and Service Systems to Facilitate Customer Convenience

- **Installing the SCGP Customer Services Center 02-586-5555** to offer services via a single phone number. Service channels have been expanded through Line OA @SCGPContact, along with a Smart Agent Chatbot, providing easy access to product information for customers.
- **Installing the SCGP Customer Order Management** for the initial phase for Kraft paper and finished goods, enabling customers to track order status and receive updates on delivery dates promptly, even out of business hours.
- **Adding online payment channels through the Payment Gateway program**, enabling immediate verification of shipping documents and ordered items via computer, mobile phone, or tablet, for convenience and to minimize payment errors.

### Employee Development

- **Talent Learning and Development Program:** This program identifies key talent and successors and creates Individual Development Plan (IDP). The focus is enhancing knowledge, skills, and leadership qualities in roles aligned with business policies and strategies.
- **Career Aspiration Program:** This program surveys the opinions of supervisory-level employees to provide insights into their career paths and work goals. It also offers additional development opportunities, enabling the company to better meet diverse needs.
- **ESG Courses:** These courses aim to raise awareness among employees, targeting both specific groups and the general workforce.

### Employee Caring

- **Employee Well-Being:** Providing knowledge and counseling to employees in all aspects, including physical, mental, financial, and social well-being.
- **Employee Benefits:** Improving annual leave policies to promote happiness and work-life balance and upgrading regular health check-ups to foster a culture of good health from the start.
- **Employee Engagement Survey:** Conducting surveys in collaboration with Gallup on organizational engagement using the Q12 Inner Drive Model to foster employee engagement. The average engagement score for the company is 4.10 out of 5.00.

## Developing Products in Response to Sustainability Trends



To meet the needs of customers and manufacturers seeking sustainable solutions, SCGP has developed green solutions such as:

- **Multipack Packaging Solutions:** An alternative to shrink film for wrapping beverage packaging.
- **Redi Pak:** Ready-to-eat chilled food packaging made from natural materials, compostable within 60 days, and featuring a recyclable film that can be peeled off.



## Health and Safety

Aiming to be an "Injury and Illness Free" organization, SCGP manages an actionable occupational health and safety management system by using the "SCG Safety Framework" in Thailand and abroad operations. This includes utilizing digital technologies to enhance safety management efficiency, including promoting and advocating a safety culture that everyone must adhere to in their personal lives and work time.

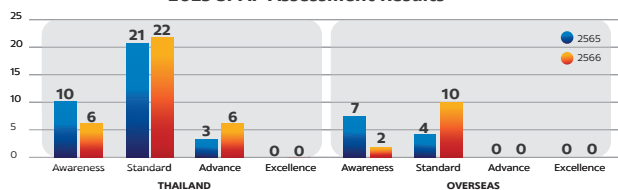
### Strategies

- Encourage employees at all levels and contractors to be safety leaders, raise safety awareness, and promote behavior change towards a safety culture.
- Commit to upgrading the Occupational Health and Safety Management system compliance to the local and international standards towards excellence in Occupational Health and Safety.
- Develop digital technology to support Occupational Health and Safety operations to be easier for implementation and higher efficient.

## Elevating the Safety System and Performance of SCG Safety Framework and Safety Performance Assessment Program (SPAP)

SCGP has continuously implemented Occupational Health and Safety management according to the "SCG Safety Framework," with an annual self-declaration based on SPAP in Thailand and abroad operations. In 2023, the assessment results enhanced from the Awareness to the Standard, Advance, and Excellence levels accordingly.

2023 SPAP Assessment Results



## Strengthen Safety Management in Vietnam

A safety network has been established to drive occupational health and safety operations. It also fosters relationships that facilitate mutual assistance and the exchange of best practices among plants in Vietnam.

### Promoting Safety Culture

- SCGP drives safe operating behaviors of employees and contractors in alignment with the Bradley Curve Model to promote proactive action for raising worker's awareness, attentiveness, and self-cared.
- In 2023, SCGP conducted a Safety Climate Questionnaire Survey to assess the state of safety culture and occupational health and safety's perceptions of employees and routine contractors across all SCGP operations. The aim was to develop strategies to advance toward the "Interdependent stage" of behavior, which involves caring for and ensuring the safety of others in the team.
- Safety Site Visits were planned and carried out throughout the year to promote "Safety Observation" at plants. These visits were part of an effort to bolster commitment to self-regulated safety management at each site.

## Safety Digital "SAFEsave": Feel Safe with Us

SAFEsave is SCGP's innovative Safety Management — digital platform, to support the fast and convenient operation of occupational health and safety. It reduces complicated work processes and errors made by personnel. In 2023, SCGP further developed and upgraded modules, such as Near Miss, and Transportation Safety.

### Transportation Safety

The standards of Goods Transportation and Road Safety were expended to implement abroad business operations. Additionally, the Operational Discipline Program has been promoted to alter behaviors to reduce the risk of accidents involving drivers and other personnel.

## Safety Recognition

A safety contest was organized to promote self-regulation and participation in achieving the "Injury and Illness Free" goal. The award categories were divided into Platinum, Gold, Silver, and Bronze levels.

### Results of SCGP Safety Award 2023

In 2023, 18 Companies in SCGP receiving awards:

	Platinum	5 plants
	Gold	2 plants
	Silver	5 plants
	Bronze	6 plants

### Contractor Safety Recognition

In 2023, 67 contractors participated, with 29 companies receiving awards:

	Platinum	4 companies
	Gold	1 company
	Silver	11 companies
	Bronze	13 companies

## Contractor Safety Management

Safety management for contractors was overseen through directives and plans set by the CSM Committee. 96.97% of contractors passed the SCG Contractor Safety Certification System (SCS), meeting the established target criteria.

**The 'Lift Confidently, Drive Safely' training program was sponsored by SCGP, providing forklift, training space in the plant, and theoretical and practical knowledge. Following a 3-month follow-up, we found no accidents from using forklifts for machinery parts in the plant."**

**Ronnarong Ruangkhumnerd**

Manager, West Coast Engineering Co., Ltd.



## Community and Social Development

SCGP has collaborated with all sectors to improve the quality of life in communities and society sustainably. This was achieved by promoting the restoration of natural ecosystems as water supply sources for livelihoods and professions. Additionally, SCGP has fostered systematic community waste management, recycling waste back into the production process or transforming it into new products following circular economy principles to generate income for communities.

### Supporting Community Forests

SCGP is committed to supporting communities surrounding its plants, aiming to improve their quality of life along with care and preserve the environment through various projects.



- **"SCGP Plant the Trees to Beat the Heat Project"**

In 2023, planted 62,549 trees in the community forest areas of Ban Nong Hin-Khao Sung, Tha Maka District, Ban Huai Saphan Samakkee Community Forest, and Wat Huay Saphan School in Phanom Thuan District, Kanchanaburi Province, bringing the total to 238,559 trees.

- **"SCGP Conserving Environments from the Mountain through the Sea Project"**

to restore the watershed forest by constructing check dams. In 2023, facilitated the construction of 627 check dams, cumulatively reaching 3,399 check dams in upstream forests. This initiative has been instrumental in reviving arid areas, making them lush again, and enabling the community to utilize natural resources and water supply for agriculture.

**"I would like to thank SCGP "Plant Beats Heat Project", for adding trees and creating water sources in our community's upstream forest areas. It has helped many lives benefit from the forest and water, allowing the community to engage in agriculture and improve their quality of life."**

Dr. Rahas Saengpong, Chief of Community Forestry Ban Nong Hin-Khao Sung

### Strategies

- Utilize specialized expertise from internal and external units to support and care for society.
- Engage employees and all stakeholders in creating sustainable value for society.
- Innovate to meet community needs, address societal issues, develop model communities, and expand to communities in the network.

#### Next Targets

- By 2030, construct a cumulative total of 10,000 check dams.
- By 2030, scale up Zero Waste Community Project to 183 communities.

### Generating Community Income from Waste Paper Tapes

SCGP initiated the **"The Weaving Handicrafts of Paper Band Project"** based on the circular economy principles. The project provides paper tapes, so called paper bands from paper-making process to communities in Ratchaburi, Kanchanaburi, and Prachinburi Provinces. The communities creatively transformed this material into woven handicraft products. The initiative also supports product development and value adding, market expansion, online distribution channels, and exports.

- **6.73 million baht:** In 2023, the communities generated a total income of 2.38 million baht, with a cumulative income since 2022 of over 5.5 million baht.

- **The Paper Band Project won UNIDO's Second Prize:**

The Paper Band Project, represented by the weaving enterprises of Ban Tha Khro and the agricultural product enterprise of Ban Ao E Khiao, won the second prize award in the "Ploy Dai..PaSuk" business model competition. This competition was organized by the Department of Industrial Works in collaboration with the United Nations Industrial Development Organization (UNIDO)



### Promoting Waste Management and Recycling

#### 250 Tons, 135 Paper Drop Points



##### "Bring Paper Home Project"

in collaboration with community organizations, established drop points for used paper. This paper can be exchanged for new paper at various locations, such as schools, hospitals, and government agencies. The used paper is then recycled into raw material for new paper production. In 2023, 504 tons of used paper were collected, with 265 organizations participating.



#### 1,193 Tons, 143 Communities, 2 Million Baht

The "SCGP Zero Waste Community Project, in collaboration with Ban Pong District and 17 local administrative organizations, expanded waste management to 143 communities in Ratchaburi, Kanchanaburi, Prachinburi, and Khon Kaen Provinces from 2019 to 2023. This initiative reduced 2,269 tons of waste and generated a total income of 2.45 million baht for the communities. The project also successfully expanded to its first urban community, the C.K.2 Community in Ban Pong Municipality.



# Environmental Stewardship



## Targets

Performance in 2023

### Biodiversity and Ecosystems

- Biodiversity conservation area certified by FSC™ standards at least 10% of agroforestry area.
- No gross deforestation

13.7% coverage, 4,660 rais

100%

### Air Quality Management

- Reduce the intensity emission of air pollution per ton of production by 5% by 2025 compared with the base year of 2020.
- No official odor complaint.

Particulate matter 24.2%

Sulfur oxides (SOx) -11.9%

Nitrogen oxides (NOx) -5.4%

Air pollution emission pass the legal standard

0 cases

### Water Management

- Reduce water withdrawal by 35% by 2025 compared with business as usual (BAU) at the base year of 2014.

28.6%

## Biodiversity and Ecosystems

SCGP is committed to the continuous conservation of forests and biodiversity. The FSC™ Management Committee oversees and monitors sustainable forest management according to Forest Stewardship Council™ (FSC™) standards and has increased the forest area to comply with Thailand's T-VER standards, aiming for a "Net Positive Impact: NPI".

Biodiversity Risk Assessment can be read in more detail at: <https://sustainability.scgpackaging.com/en/environmental/forestry-and-biodiversity>



## Strategies

- Manage biodiversity sustainably with universal indicators and serve as a model for biodiversity conservation to be expanded in other areas.
- Engage with communities and stakeholders to enhance understanding and knowledge of biodiversity conservation.
- Manage the utilization of community forest areas through participatory community forestry principles.

## The 10-Year Project for Reviving Neglected Land

The project to restore 447 rais of degraded forest in Pak Tho District, Ratchaburi Province, began with a focus on planting local species in canopy gaps and native pioneer trees to increase species diversity and restore forest structure. This project is planned for a total duration of 10 years, from 2023 to 2033.

## Restoration and Expansion of Forest Areas

- Siam Forestry Company Limited, a subsidiary within the SCGP group, has accelerated the restoration of biodiversity in conservation areas. This is achieved by cultivating native tree species and implementing appropriate reforestation practices, covering an area of 447 rais.
- SCGP leased of neglected forest land with private land deeds to maintain biodiversity and ecosystems. In 2023, an increased conservation areas 896 rais, totaling 4,660 rais, which accounts for 13.7% of the agroforestry forest area. Plans are underway to expand this conservation model to other areas in the future.
- Eucalyptus trees were planted in operational areas outside the boundaries and not adjacent to biodiversity conservation areas, with no impact on the land use of the community, covering a total of 92,099 rais.

## Insect Species Survey

SCGP has enhanced data collection on insect species as part of monitoring biodiversity in areas post-restoration. Due to the short life cycle of insects and their rapid response to ecological changes, this data is vital for developing long-term ecological management and restoration plans. Surveys have identified 144 insect species in the conservation area.

## Management According to FSC™ Standards

- The proportion of SCGP's wood products certified by FSC™ standards:**

- FSC™-CW/COC: FSC-C133879, 100% of the total amount of wood used.
- FSC™-FW/COC: FSC-C012207, 100% of the wood volume from SCGP's timber plantations entering the production process.
- FSC™-FM (SLIMF): FSC-C105470, covering an area of 12,863 rais with 83 farmer members.

- The Small or Low-Intensity Managed Forest (FSC™-SLIMF)** project promotes the management of small forests, not exceeding 625 rais. It regularly provides training and guidance for sustainable forest cultivation according to FSC™ standards to communities. Currently, 83 farmers have participated as members.



## Air Quality Management

SCGP is committed to developing production process management to reduce atmospheric pollution, recognizing the potential impacts on the health of employees, communities, and the surrounding environment and adhering to increasingly stringent legal requirements.

### Strategies

- Set air pollution emission targets in line with global standards of similar business groups and ensure compliance with legal limits.
- Employ the best available technology for air pollution management, including source and emission control, and continuously monitor air quality.
- Regularly engage with the community and stakeholders in air pollution management.

## Expansion of the CEMs Installation

Following SCGP's completion of the Continuous Emissions Monitoring Systems (CEMs) installation across 100% of its packaging paper manufacturing plants in Thailand, in 2023, the pulp and paper production plants began installing equipment to measure Total Reduced Sulfur (TRS). This is to monitor and mitigate the impact of sulfur-containing pollutants as per legal requirements. Completion is planned for 2024, with an expansion of CEMs installation to the packaging paper manufacturing plants in Indonesia and the Philippines.



## Water Management

SCGP assesses water-related risks using global tools such as WRI AQUEDUCT and satellite imagery. SCGP has collaborated with all relevant stakeholders to monitor situations and utilized Early Warning Systems (EWS). It also enhances water usage efficiency through wastewater treatment for reuse and natural ecosystem restoration, aiming to achieve a water neutrality balance.

### Strategies

- Reduce water-related risks and improve water usage efficiency through integrated water management. Develop the capabilities of personnel involved in water management to ensure maximum efficiency in both knowledge and operational aspects.
- Treat wastewater to meet established quality standards. Monitor the volume and quality, report incidents, investigate causes, and reduce wastewater discharge.
- Restore ecosystems related to water sources and support water supply for communities and agricultural use.



## Development of the DOM System

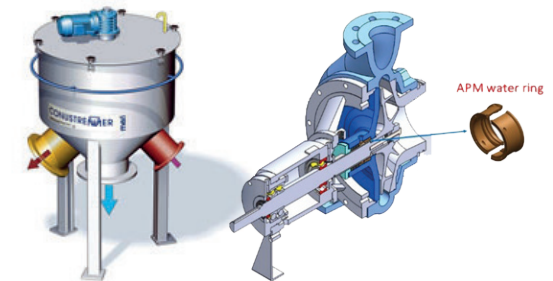
Since 2022, SCGP has developed and installed a comprehensive Detect Odor Monitoring (DOM) across 100% of its pulp and paper manufacturing plants. In 2023, the DOM was further enhanced to identify the sources of odors in the production process and provide real-time alerts via the website to monitor impacts on the community promptly.

### Next Targets

- Survey and monitor the diversity of the Kamphaeng Phet conservation forest every two years and assess new areas for High Conservation Value (HCV).
- Monitor the reforestation project in the degraded forests of Ratchaburi province.
- Reduce air pollution emissions per product by 10% by 2030, compared to the base year of 2020, in both Thailand and abroad.

## 2.2 Million Cubic Meters per Year

SCGP reuses treated wastewater in internal seal systems of equipment such as water pumps and propellers, saving 1.4 million cubic meters of water annually. The installation of filtration systems for reused water in the production process saves an additional 0.8 million cubic meters per year. SCGP also continuously expands the use of the APM Water Ring innovation to prevent coolant water leakage around the shaft seals of pumps in SCGP plants.



## Early Warning System (EWS)

SCGP has established an Early Warning System to prepare businesses, stakeholders, and community members for imminent hazards. This comprehensive and timely alert system aims to limit impacts within an acceptable range and monitor risks that could escalate into disasters. The system includes impact analysis and performance measurement to develop better prevention systems.

# Corporate Governance



## Targets

Performance in 2023

### Corporate Governance

- Zero violations of the anti-corruption policy
- 100% of employees learn and test ethics through Ethics e-Testing

0 cases

100%

### Information Technology Security and Cybersecurity

- Information systems operate continuously at no less than 99.5% availability or have issues for no more than 1.83 days per year.
- No complaints on customer data breach.

99.5%

0 cases

## Corporate Governance

SCGP places great importance on conducting business transparently and ethically to build trust among all stakeholders. SCGP continually raises awareness among employees at all levels, both in domestic and international operations, by promoting adherence to SCGP's morals, philosophies, code of conduct, and anti-corruption policies. It also encourages suppliers to adopt good corporate governance practices that align with SCGP's policies.

## Strategies

- Communicate with and support employees and suppliers to understand, be aware of, and seriously comply with SCGP's corporate governance, SCGP Code of Conduct, and SCG Supplier Code of Conduct.
- Assess and monitor risks related to anti-corruption through a preventative system, which includes ethics testing, risk management, three-level internal control by the unit, and an accessible complaint system for stakeholders.

## Targets

Performance in 2023

### Sustainable Value Towards Suppliers

- 100% of procurement value from suppliers with a commitment to comply with the SCGP Supplier Code of Conduct.
- 100% of the supplier in procurement value passed the annual Environmental, Social, and Governance (ESG) risk assessment.
- 100% of operation contractors are certified SCG Contractor Safety Certification System (SCS).
- 100% of transportation contractors are certified as main logistics partners.

100%

100%

99%

100%

## Ethics Education and Testing for Employees

In 2023, SCGP conducted Ethics e-Testing for employees, a practice that has continued for the 9th consecutive year. 100% of the employees passed the test, and SCGP analyzed the test responses to address key issues to ensure employees understand correctly. Additionally, the SCGP Code of Conduct was translated into Vietnamese to support business expansion in international markets.



## Whistleblowing

SCGP has a complaint system that allows employees and external individuals to report misconduct. In 2023, the reported violations were as follows:

Report of Violations	The Total Number of Complaints			
	2020	2021	2022	2023
Total Complaints <sup>(1)</sup>	11	8	6	15
Investigated and Completed Complaints	11 (including 1 complaint from 2019)	7	5	12
Number of Complaints Under Investigation	0	1	1	3
Classification of Complaints				
1. Unethical or Improper Conduct	0	1	0	0
1.1 Conflict of Interest <sup>(2)</sup>	0	0	0	2
1.2 Corruption	0	0	0	0
1.3 Violation of Human Rights	0	0	0	0
1.3.1 Sexual Harrasment	0	0	0	1
1.3.2 Non-Sexual Harrasment	0	0	0	0
1.3.3 Discrimination	0	0	0	0
1.4 Antitrust	0	0	0	0
1.5 Personal Data Protection	0	0	0	0
1.6 Use of Insider Information	0	0	0	0
1.7 Others	0	0	0	0
2. Non-Compliance with Company Regulations	1	2	1	4
3. Unsubstantiated Complaints	10	4	4	5

### Remark

(1) There was no public legal case during 2020-2023.

(2) This is inclusive of Conflict of Interest with business partners.

## Information Security and Cybersecurity

SCGP prioritizes supervising information security and cybersecurity to prevent cyber threats and ensure comprehensive legal protection of personal data. In 2023, a Cybersecurity Governance Committee was established to direct effective and secure management practices.

### Strategies

- Integrate information and cybersecurity risks into the organization's overall risk management, continuously adjusting operational strategies to promptly and effectively address evolving cyber threats.
- Establish IT security management processes aligned with information technology security policies.
- Enhance employee awareness and understanding at all levels through training, ensuring appropriate responses to cyber threats.
- Assess the business partners to ensure its compliance with the requirements

### e-Policy Testing

e-Policy testing training and testing of employees regarding information security and cybersecurity were conducted, requiring all employees to answer correctly. The test achieved a 100% success rate among participants.

### ISO/IEC 27001:2013 Standard

In 2023, SCGP received the ISO/IEC 27001:2013 certification, a standard for Information Security Management Systems, from the British Standards Institution (BSI), a globally recognized standardization body.

## Sustainable Value Towards Suppliers

Business partners throughout SCGP's supply chain play a crucial role in fostering economic growth and shared responsibility for the environment and society. Therefore, SCGP prioritizes the selection of capable suppliers and assesses their operations, covering environmental, social, and governance (ESG) aspects, and fosters collaboration for mutual sustainable growth.

### Strategies

- Select and assess potential suppliers for sustainable operation.
- Evaluate risks and categorize suppliers to define strategies and plan business development in line with associated risks.
- Conduct assessments to ensure suppliers comply with requirements.
- Develop and enhance the capabilities of suppliers towards sustainability.
- Raise awareness and build employees' skills in efficient procurement and purchasing.

### Improvement of Suppliers' Work Quality

SCGP is committed to elevating local suppliers by encouraging them to initiate projects to improve and develop their operations, with SCGP supporting training and knowledge. Examples of such projects include the collection of residual refrigerants in containers for reuse and a communication campaign on behaviors posing safety risks.

### Preparation and Response to Cyber Threats

- Conducted one training session on Mobile Device Security Awareness.
- Organized Email Phishing tests for employees and Spear Phishing tests for targeted employee groups twice.
- Simulated scenarios of cyber-attack threats and personal data breach situations twice.
- Created internal company documents to raise awareness about the risks of cyber extortion and protection against ransomware attacks.

## Utilization of EV Clamp Forklifts Powered by Electricity

To reduce greenhouse gas emissions, SCGP collaborated with suppliers to transition to EV clamp forklifts at Khon Kaen Paper Baling Station, replacing diesel fuel forklifts. After initiating studies in 2021, the transition began in 2023. Currently, five paper baling plants have adopted EV clamp forklifts, including those in Phetchaburi, Rangsit, Rayong, Phan Thong, and Bowin. Future plans include expanding this initiative to other plants.



## Promoting ESG Understanding and Collaboration with Suppliers

SCGP organized the SCGP Supplier Day 2023 to communicate and jointly address global issues according to the ESG 4 Plus approach and the revised Supplier Code of Conduct, which now includes important issues such as environmental concerns and climate change response. The event facilitated the exchange of ideas to develop collaboration, held in Bangkok and at various provincial plants, with a total participation of 400 suppliers (598 individuals).

## Moving Towards Greenhouse Gas Management (GHG Scope 3)

SCGP conducted online training for 10 high-potential suppliers to raise awareness of climate change response. Following this, suppliers interested in reducing greenhouse gas emissions were selected for training on CFO and CFP registration processes per the procedures of the Greenhouse Gas Management Organization (Public Organization), or TGO. Two businesses, Thai Wah Public Company Limited and Golden Lime Public Company Limited, showed interest in this training. Plans are underway to expand this training to other suppliers.



## Collaborative Network: Fostering Power Towards Sustainability



### ESG Symposium 2023: Accelerating Changes towards a Low Carbon Society

SCGP played a principal role in organizing the pre-session titled "Circular Economy Acceleration" at the ESG Symposium 2023, hosted by SCG, inviting over 231 partners to participate to exchange their thoughts for contributing to the drive of ESG approaches at a national level. This led to three key conclusions:

1. The proposal "Accelerating Thailand Towards a Low Carbon Society" was presented to the Prime Minister.
2. A summary of four strategic directions under the theme "Accelerating Thailand Towards a Low Carbon Society".
3. A Mind Map of ESG Symposium 2023.



## MCOT Cares: 'Paper-Cycle Sort, Exchange, Renew' Project in Collaboration with MCOT



SCGP, in collaboration with MCOT, has initiated a project to educate and promote the sorting of used paper among MCOT employees for exchange with new paper. In this effort, SCGP recycled three types of office waste paper: black and white paper, brown box paper, and mixed paper. In 2023, the project successfully collected a total of 1,340 kilograms of paper for recycling, which was exchanged for 30 reams of new paper. This initiative also expanded SCGP Recycle's sustainability partners by instilling the habit of sorting waste materials at the source among consumers, in line with circular economy principles.

**MCOT aims to encourage employees to become more environmentally conscious by adjusting their everyday behaviors. Therefore, we collaborated with SCGP to recycle used paper, which led to increased understanding of sustainability among employees and management members. Furthermore, MCOT is looking forward to extending our collaboration with SCGP, such as co-producing souvenirs from recycled materials and managing waste within the organization."**

**Natthamon Termvorakul,**  
Manager of Social Enterprise Affairs,  
MCOT Public Company Limited.



## SCGP Collaboration with the 9<sup>th</sup> Infantry Division to Develop S.E.R.T Team

Recognizing the importance of disaster relief collaboration between the state and citizens, SCGP partnered with the 9<sup>th</sup> Infantry Division to provide training that enhances the skills of 80 members of the S.E.R.T (Special Emergency Response Team) SCGP team. The training is designed to effectively handle emergencies and accidents affecting the plant and the surrounding communities. This includes responding to public disasters such as fires, lifesaving and rescue operations, particularly addressing new hazards emerging in the post-COVID-19 era, such as electric vehicle (EV) and solar cell accidents. This initiative has been ongoing for 10 years.

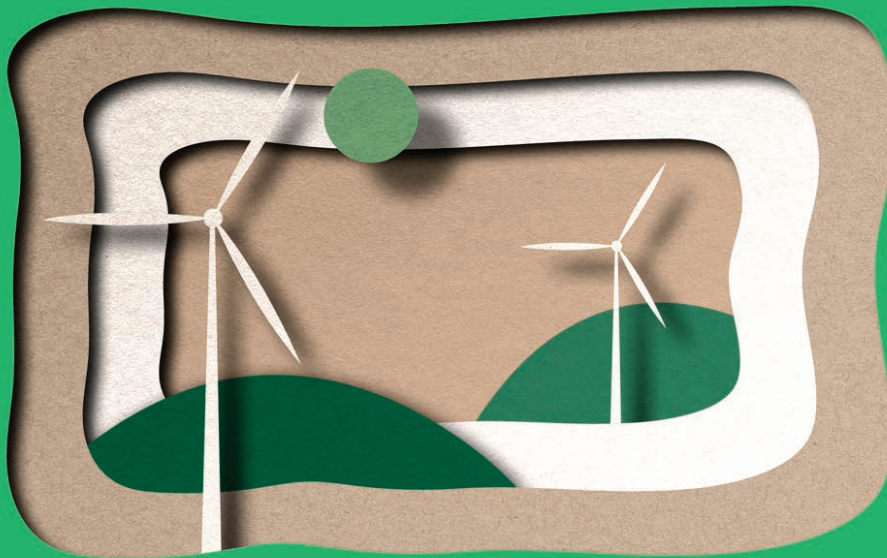
The Emergency Response Team (S.E.R.T) of Wang Sala Plant deserves commendation for their successful efforts in wildfire extinguishing and creating firebreaks in the community forest in Ban Khao Sung. Their utilization of techniques and drone technology, in collaboration with the provincial authorities, aims to minimize losses to the community and society while contributing to long-term sustainability.



## GCNT Forum 2023: "Partnership for Human Capital 5.0 towards Sustainable Intenigence- Based Society"

SCGP participated in the UN Global Compact Network Thailand Forum (GCNT Forum) 2023, organized by UN Global Compact Network Thailand and the United Nations in Thailand. SCGP contributed to the discussion on "Building Supply Chain Resilience" and declared its commitment as a member to protect the interests of the younger generation and business organizations. The focus is on supporting a just transition and developing an ecosystem conducive to equality and equity, as well as evolving grassroots economics and social security systems in line with global changes.

# APPENDICES



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# Environmental Performance

## Production and Raw Materials

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Production (Thousand Tons) *	3,442	3,359	5,700	5,548	5,526		RT-CP-000.A
Total Raw Materials (Thousand Tons) <sup>EN0.1</sup>	5,177	6,405	7,219	8,649	6,828	GRI 301-1	
Recycled Materials (Thousand Tons) <sup>EN0.1</sup>	2,597	4,003	4,420	3,916	3,649	GRI 301-2	RT-CP-410a.1
Renewable Materials (Thousand Tons) <sup>EN0.1</sup>	N/A	N/A	2,750	4,691	3,117	GRI 301-1	RT-CP-410a.1

## Greenhouse Gas Emissions and Sequestration

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
GHG Scope 1 and 2 emissions (Tons CO <sub>2</sub> equivalent) <sup>EN1,*</sup>	2,911,991	4,990,348	4,872,474	4,357,603	4,015,834		
GHG Scope 1 emissions (Tons CO <sub>2</sub> equivalent) <sup>EN1,*</sup>	2,534,285	4,486,157	4,365,669	3,778,126	3,447,684	GRI 305-1	RT-CP-110a.1.
CO <sub>2</sub> emissions from biomass/biogenic (Tons CO <sub>2</sub> equivalent) <sup>EN1</sup>	N/A	N/A	1,399,131	1,540,860	1,786,776	GRI 305-1	
GHG Scope 2 emissions (Tons CO <sub>2</sub> equivalent) <sup>EN1,*</sup>	377,706	504,191	506,806	579,477	568,150	GRI 305-2	
- Market Based (Tons CO <sub>2</sub> equivalent)	377,706	504,191	506,806	579,477	568,150		
- Location Based (Tons CO <sub>2</sub> equivalent)	408,906	520,732	508,118	631,788	586,057		
GHG Scope 3 emissions (Tons CO <sub>2</sub> equivalent) <sup>EN1,*</sup>	N/A	N/A	N/A	1,459,010	2,059,696	GRI 305-3	
Intensity GHG Scope 1 and 2 emissions (Tons CO <sub>2</sub> equivalent per Ton of Production)	0.85	0.90	0.85	0.79	0.73	GRI 305-4	
Intensity GHG Scope 1 (Tons CO <sub>2</sub> equivalent per Ton of Production)	0.74	0.80	0.77	0.68	0.62	GRI 305-4	
Intensity GHG Scope 2 (Tons CO <sub>2</sub> equivalent per Ton of Production)	0.11	0.09	0.09	0.10	0.10	GRI 305-4	
GHG Emission Reduction compared with the base year of 2020 (Tons CO <sub>2</sub> equivalent) <sup>EN1</sup>	491,796	428,281	117,874	632,745	974,515	GRI 305-5	
GHG Emission Reduction compared with the base year of 2020 (%)	14.45	12.79	2.36	12.68	19.53	GRI 305-5	
- GHG Emission Reduction from activities within organization (Tons CO <sub>2</sub> equivalent)	N/A	N/A	N/A	632,745	974,515		
- GHG Emission Reduction from carbon offset activities (Tons CO <sub>2</sub> equivalent)	N/A	N/A	N/A	0.00	0.00		
Carbon Sequestration in Economic tree plantation (Tons CO <sub>2</sub> equivalent) <sup>EN1,*</sup>	N/A	N/A	N/A	N/A	152,181	GRI 305-5	

\* Within SGS (Thailand) limited assurance scope (page 60)

## Energy Consumption

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Fuel Consumption from Non-Renewable Sources (Petajoules) <sup>EN2,*</sup>	26.6	36.2	47.5	41.5	38.1	GRI 302-1	
Fuel Consumption from Renewable Sources (Petajoules) <sup>EN2,*</sup>	11.2	28.5	13.4	14.6	16.8	GRI 302-1	RT-CP-130a.1.
Heating and Steam Consumption (Petajoules) <sup>EN2,*</sup>	1.73	1.70	1.47	1.43	1.47	GRI 302-1	RT-CP-130a.1.
Electricity Consumption (Petajoules)	1.39	1.37	2.66	3.48	3.31	GRI 302-1	RT-CP-130a.1.
Electricity Sold (Petajoules)	0.15	0.45	0.35	0.26	0.25	GRI 302-1	
Energy Consumption outside of the organization (Petajoules)	0.00	0.00	0.00	0.40	0.34	GRI 302-2	
Total Energy Consumption within the organization (Petajoules) <sup>EN2,*</sup>	40.8	67.3	64.7	60.4	59.1	GRI 302-1	RT-CP-130a.1.
Intensity Total Energy Consumption (Gigajoules per Ton of Production)	11.9	12.1	11.3	10.9	10.7	GRI 302-3	
Energy Consumption Reduction compared with the base year of 2007 (Petajoules)	3.76	2.31	4.00	4.43	4.99	GRI 302-4	
Energy Consumption Reduction compared with the base year of 2007 (%)	8.40	5.40	5.80	6.80	7.78	GRI 302-4	

\* Within SGS (Thailand) limited assurance scope (page 60)

## Air Emissions

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Oxides of Nitrogen (Thousand Tons) <sup>EN5,*</sup>	2.48	2.97	3.83	3.79	4.09	GRI 305-7	RT-CP-120a.1.
Oxides of Sulfur (Thousand Tons) <sup>EN5,*</sup>	1.81	2.57	3.80	3.67	4.30	GRI 305-7	RT-CP-120a.1.
Particulate Matter (Thousand Tons) <sup>EN5,*</sup>	0.34	0.31	0.95	0.90	0.75	GRI 305-7	RT-CP-120a.1.

\* Within SGS (Thailand) limited assurance scope (page 60)



## Water Withdrawal and Effluent Quality

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Total water withdrawal (Million Cubic Meter) <sup>EN3,*</sup>	61.3	54.8	78.8	72.8	71.6	GRI 303-3	RT-CP-140a.1.
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) (Million Cubic Meter) <sup>EN3,*</sup>						GRI 303-3	RT-CP-140a.1.
- Surface Water	19.5	17.1	34.2	32.0	34.0		
- Groundwater	41.4	30.6	39.8	36.5	33.4	GRI 303-3	RT-CP-140a.1.
- Seawater	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Tap water or Third-party	0.41	0.42	4.80	4.30	4.11	GRI 303-3	RT-CP-140a.1.
Water withdrawal from freshwater (TDS > 1,000 mg/L) (Million Cubic Meter) <sup>EN3,*</sup>	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Surface Water							
- Groundwater	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Seawater	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Tap water or Third-party	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) in water stress area (Million Cubic Meter) <sup>EN3,*</sup>							
- Surface Water	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Groundwater	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Seawater	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Tap water or Third-party	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
Water withdrawal from freshwater (TDS > 1,000 mg/L) in water stress area (Million Cubic Meter) <sup>EN3,*</sup>							
- Surface Water	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Groundwater	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Seawater	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
- Tap water or Third-party	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CP-140a.1.
Water Withdrawal Reduction compared with business as usual at base year of 2014 (Million Cubic Meter)	7.1	11.1	28.1	28.4	29.8	GRI 303-3	RT-CP-140a.1.
Water Withdrawal Reduction compared with business as usual at base year of 2014 (%)	10.4	16.8	26.3	28.0	28.6	GRI 303-3	RT-CP-140a.1.
Recycle Water (Million Cubic Meter) *	8.4	9.0	15.9	14.2	14.6		RT-CP-140a.2.
Portion of Recycled Water (%)	12.0	14.1	14.2	16.3	17.0		RT-CP-140a.2.

\* Within SGS (Thailand) limited assurance scope (page 60)

## Water Withdrawal and Effluent Quality

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Water Withdrawal Intensity (Cubic Meter per Ton of Production)	17.8	16.3	13.8	13.1	13.0		RT-CP-140a.2.
Water Withdrawal Target compared with business as usual at base year of 2014 (Million Cubic Meter)	68.4	65.8	106.9	101.1	99.3		RT-CP-140a.2.
Water Withdrawal Target (Million Cubic Meter per Ton of Production)	19.9	19.6	18.8	18.2	18.0		RT-CP-140a.2.
Water discharge to any sources (Million Cubic Meter) <sup>EN3,*</sup>							
- Surface Water	43.8	30.8	58.1	58.3	58.6	GRI 303-4	
- Groundwater	N/A	1.16	0.00	0.00	0.00	GRI 303-4	
- Seawater	N/A	0.00	0.00	0.00	0.00	GRI 303-4	
- third-party water (total)	N/A	4.69	3.94	3.06	1.81	GRI 303-4	
- Third-party water sent for use to other organizations	N/A	4.62	3.81	2.91	1.67	GRI 303-4	
Total Water Discharge (Million Cubic Meter) <sup>EN3,*</sup>	43.8	36.7	62.1	61.4	60.4	GRI 303-4	
Water discharge by freshwater (TDS ≤ 1,000 mg/L) (Million Cubic Meter) <sup>EN3,*</sup>	N/A	4.3	19.1	14.6	21.7	GRI 303-4	
Water discharge by other water (TDS > 1,000 mg/L) (Million Cubic Meter) <sup>EN3,*</sup>	N/A	32.4	42.9	46.8	38.8	GRI 303-4	
Water discharge by freshwater (TDS ≤ 1,000 mg/L) in Water Stress Area (Million Cubic Meter) <sup>EN3,*</sup>	N/A	0.0	0.0	0.0	0.0	GRI 303-4	
Water discharge by other water (TDS > 1,000 mg/L) in Water Stress Area (Million Cubic Meter) <sup>EN3,*</sup>	N/A	0.0	0.0	0.0	0.0	GRI 303-4	
BOD (Tons) <sup>EN3,*</sup>	147	153	1,460	666	531		
COD (Tons) <sup>EN3,*</sup>	4,224	3,623	8,093	6,020	5,768		
TSS (Tons) <sup>EN3,*</sup>	572	505	1,155	999	777		

\* Within SGS (Thailand) limited assurance scope (page 60)

## Industrial Waste Management

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Hazardous Waste Generation (Thousand Tons) <sup>EN4,*</sup>	2.00	2.66	64.0	48.4	87.7	GRI 306-3	RT-CP-150a.1.
Hazardous Waste Generation intensity (Kilograms per Ton of Production)	0.58	0.79	11.20	8.72	15.9		
Hazardous Waste Management (Thousand Tons) <sup>EN4</sup>							
-Reuse / Recycled / Other Recovery / Incineration with Energy Recovery (Thousand Tons)	1.8	2.7	50.2	39.5	80.5		RT-CP-150a.1.
-Incinerated without energy recovery (Thousand Tons)	0.06	0.02	0.06	0.21	0.03	GRI 306-5	RT-CP-150a.1.
-Landfilled (Tons)	0.00	0.77	14,804	8,731	7,208	GRI 306-5	RT-CP-150a.1.
Hazardous Waste in the storage at the end of year (Thousand Tons) <sup>EN4</sup>	0.13	0.11	0.18	1.18	0.95		RT-CP-150a.1.
Non Hazardous Waste Generation (Thousand Tons) <sup>EN4,*</sup>	1,053.91	1,042.74	1,488.86	1,467.01	1,358.73	GRI 306-3	
Non Hazardous Waste Generation intensity (Kilograms per Ton of Production)	306.19	310.40	261.20	264.43	245.88		
Non Hazardous Waste Management (Thousand Tons) <sup>EN4</sup>							
-Reuse / Recycled / Other Recovery / Incineration with Energy Recovery (Thousand Tons)	1,074	1,064	1,470	1,429	1,279		
-Incinerated without energy recovery (Thousand Tons)	0.28	0.00	36.1	36.0	32.4	GRI 306-5	
-Landfilled (Tons)	0.00	0.00	2,946	3,505	312	GRI 306-5	
Non Hazardous Waste in the storage at the end of year (Thousand Tons) <sup>EN4</sup>	145	124	103	105	152		

\* Within SGS (Thailand) limited assurance scope (page 60)

## Environmental Expenditures and Benefits/Violations of Legal Obligations and Regulations

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Operating Expenses-Environment (Million Baht)	681	742	739	1,005	871		
Capital Investments-Environment (Million Baht)	383	330	512	310	345		
Tax Incentives linked to environment investment (Million Baht) <sup>EN6</sup>	17	8	70	56	10		
Number of violations of legal obligations/regulations (Number of Cases) <sup>EN7</sup>	0	0	0	0	0	GRI 2-27	
Amount of fines/penalties related to the above (Baht) <sup>EN7</sup>	0	0	0	0	0	GRI 2-27	
Environmental liability accrued at year end (Baht) <sup>EN7</sup>	0	0	0	0	0	GRI 2-27	

## Waste diverted form disposal, GRI 306-4\*

Waste	2023 (Tons)				
	In SCGP		Out SCGP		Total
	Factory	In SCGP	In SCG	Out SCG	
Hazardous Waste					
Preparation for reuse	0.00	0.00	0.00	393.11	393.11
Recycling	37,820.07	0.00	1,223.66	38,152.07	77,195.79
Other recovery operations	0.00	0.00	0.00	324.86	324.86
Treatment	0.00	0.00	0.00	0.00	0.00
Total	37,820.07	0.00	1,223.66	38,870.04	77,913.76
Non Hazardous Waste					
Preparation for reuse	338.00	0.00	0.00	12,827.63	13,165.63
Recycling	61,049.45	441,309.20	23,317.48	365,783.12	891,459.24
Other recovery operations	0.00	0.00	0.00	10.52	10.52
Treatment	0.00	0.00	0.00	0.00	0.00
Total	61,387.45	441,309.20	23,317.48	378,621.27	904,635.40

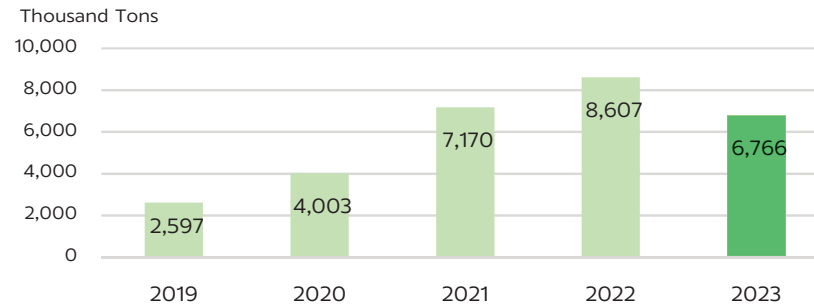
## Waste directed to disposal, GRI 306-5\*

Waste	2023 (Tons)				
	In SCGP		Out SCGP		Total
	Factory	In SCGP	In SCG	Out SCG	
Hazardous Waste					
Incineration (with energy recovery)	812.38	0.00	24.51	1,790.69	2,627.58
Incineration (without energy recovery)	0.00	0.00	0.00	32.82	32.82
Landfilling	0.00	0.00	0.00	7,207.58	7,207.58
Other disposal operations	0.00	0.00	0.00	142.99	142.99
Total	812.38	0.00	24.51	9,174.08	10,010.96
Non Hazardous Waste					
Incineration (with energy recovery)	258,401.74	4,324.37	805.56	110,999.10	374,530.76
Incineration (without energy recovery)	0.00	0.00	0.00	32,373.26	32,373.26
Landfilling	0.00	0.00	0.00	311.52	311.52
Other disposal operations	0.00	0.00	0.00	399.12	399.12
Total	258,401.74	4,324.37	805.56	144,083.00	407,614.66

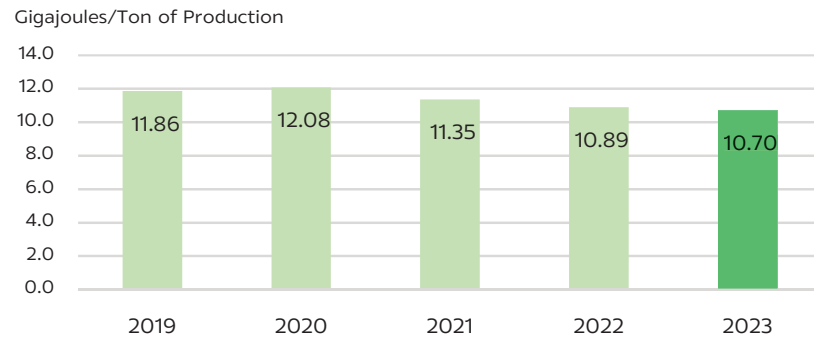
\* Within SGS (Thailand) limited assurance scope (page 60)



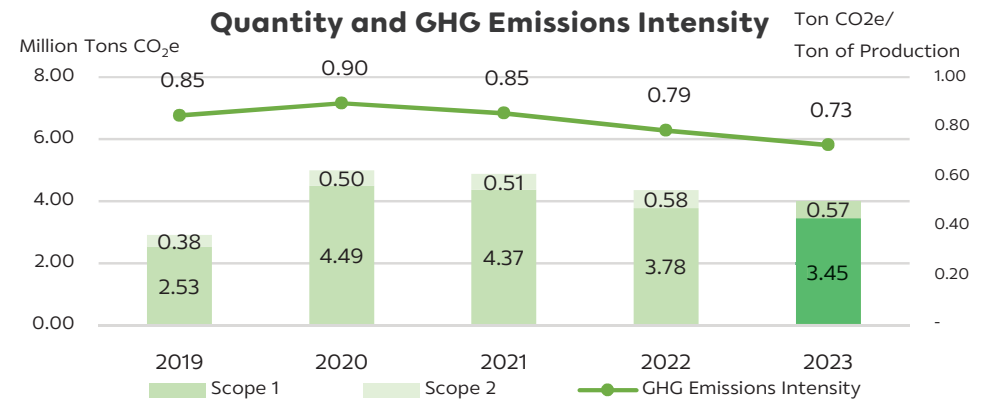
## Recycled Materials and Renewable Materials



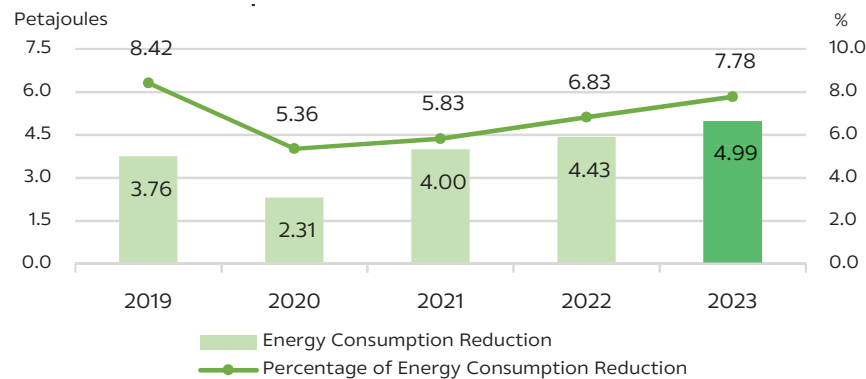
## Total Energy Consumption Intensity



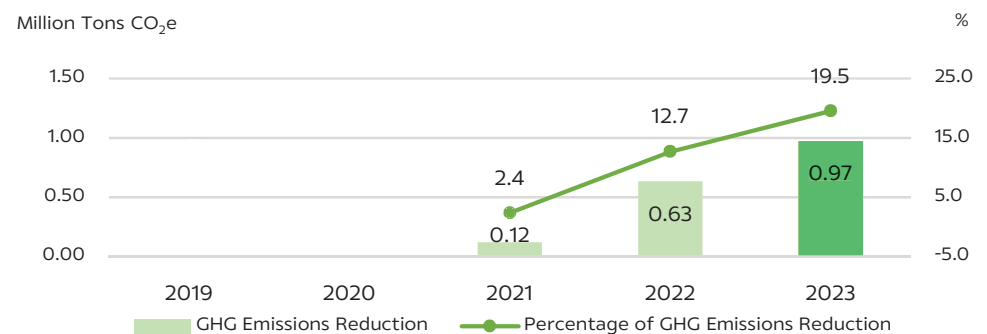
## Quantity and GHG Emissions Intensity



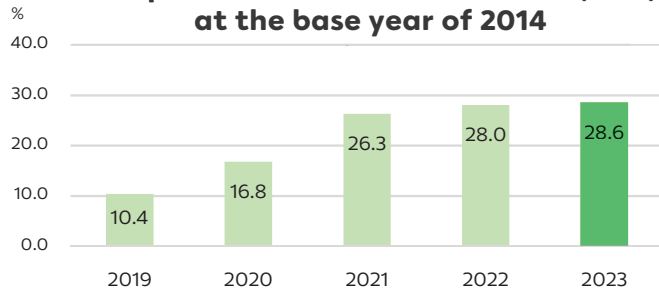
## Energy Consumption Reduction Compared with the Base Year of 2007



## Quantity of GHG Emissions Reduction Compared with the Base Year of 2020

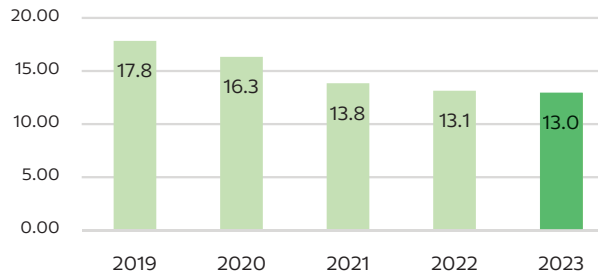


### Water Withdrawal Reduction Compared with Business As Usual (BAU) at the base year of 2014



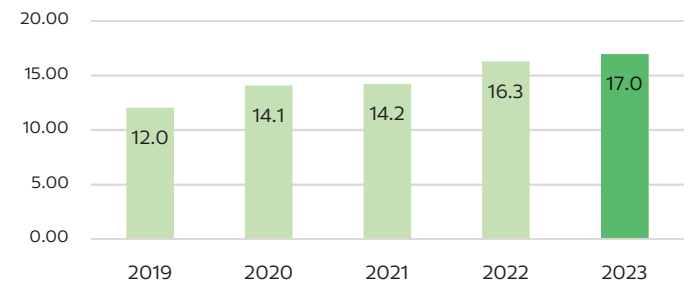
### Quantity of Water Withdrawal

Cubic Meters per Ton of Production



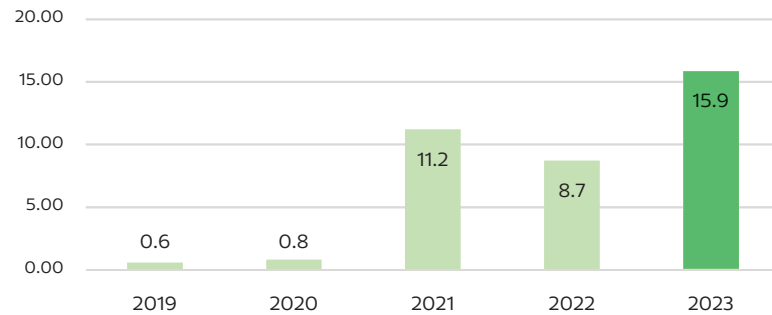
### Proportion of Recycled Water

%



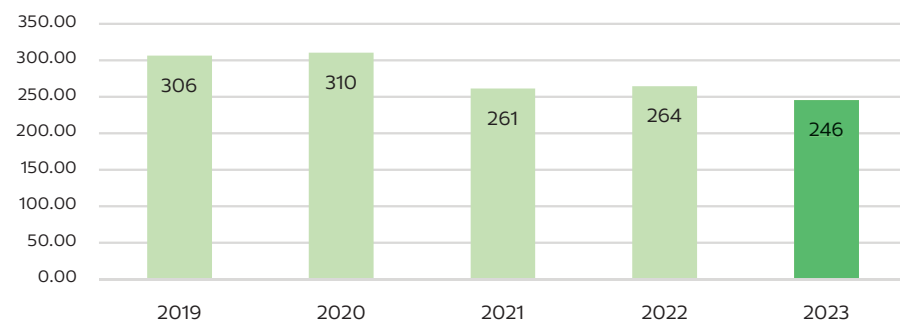
### Hazardous Waste Generation

Kilograms per Ton of Production



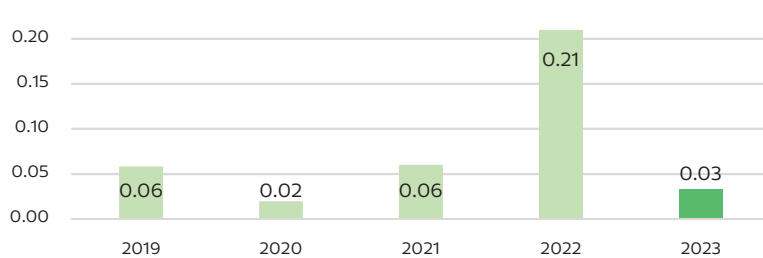
### Non Hazardous Waste Generation

Kilograms per Ton of Production



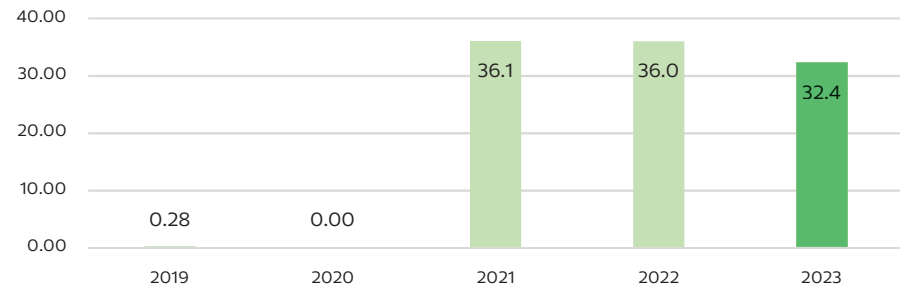
### Hazardous Waste Management Incinerated without Energy Recovery

Thousand Tons



### Non Hazardous Waste Management Incinerated without Energy Recovery

Thousand Tons



## EN0.1 Production and Raw Materials

1. 1.Total raw materials and recycled raw materials during 2018 — 2020. This section of the report includes data on leftover paper used as raw material for plants in Thailand and abroad.
2. For the year 2021-2022, the total raw materials, recycled raw materials, renewable raw materials are reported separately based on the location of the plants utilizing these raw materials, covering Thailand and abroad.
3. Production data from abroad companies has been included since 2022.

## EN1 Greenhouse Gas

Greenhouse gas means the volume of greenhouse gas emissions from operations, calculated in accordance with the "Greenhouse Gas Reporting and Calculation Guidelines" by the WRI/WBCSD GHG Emissions Protocol and the calculation tools of the International Council of Forest and Paper Associations (ICFPA). The principles are as follows:

1. Scope of reporting
  - 1.1 Direct Greenhouse Gas emissions (Scope 1)
 

These emissions are generated from the production processes or activities that are under the company or factory's control and management. Examples include stationary combustion emissions, mobile combustion emissions, fugitive emissions, chemical reaction emissions, and carbon dioxide emissions from biomass combustion, biogas, and lime mud combustion at lime kilns. Reporting for emissions from biomass, biogas, and lime should be separated from Scope 1, as the carbon contained in these materials originates from natural sources.
  - 1.2 Indirect Greenhouse Gas Emissions (Scope 2)
 

These emissions are generated indirectly from energy use, including greenhouse gases generated from the generation of electricity, heat, or steam imported from outside the for internal consumption.
  - 1.3 Indirect Greenhouse Gas Emissions (Scope 3)
 

These emissions are generated indirectly from other sources, including those arising from activities not specified in Scope 1 and Scope 2. The categories are as follows:

    - Category 1: Purchased Goods and Services
    - Category 3 Fuel-and Energy-Related Activities
    - Category 4 Upstream Transportation and Distribution
    - Category 5 Waste Generated in Operations (reporting to commence in 2023)
    - Category 6 Business Travel
    - Category 7 Employee Commuting
    - Category 9 Downstream Transportation and Distribution
    - Category 10 Processing of Sold Products (reporting to commence in 2023)
    - Category 11 Use of Sold Products
    - Category 12 End-of-Life Treatment of Sold Products
    - Category 14 Franchises
    - Category 15 Investments
  - 1.4 In 2023, Indirect Greenhouse Gas Emission (Scope 3) from category 2 Capital Goods (36,550 ton CO<sub>2</sub>e) were calculated after data assurance, resulting in total Scope 3 emissions of 2,096,246 ton CO<sub>2</sub>e.
  - 1.5 Carbon Dioxide Emissions from Lime Mud Combustion at Lime Kilns and Biomass/Biogenic Combustion (Biogenic CO<sub>2</sub>)
 

These emissions are generated from the release of carbon dioxide during the combustion of biomass/biogenic fuels, such as biomass fuel, sludge from wastewater treatment systems, biogas, black liquor from pulp production, and lime mud combustion at lime kilns.
  - 1.6 Carbon Sequestration
 

This involves the capture of carbon from the atmosphere, stored in the form of wood mass, such as the areas of eucalyptus forests serving as a reservoir for atmospheric carbon sequestration.

## EN1 Greenhouse Gas

### 2. Reporting of Greenhouse Gas Volumes

#### 2.1 Calculation of Greenhouse Gas Emissions from Direct Production Processes (Scope 1)

– Combustion sources.

- Report based on fuel consumption (By weight or volume), e.g. oil or natural gas x emission values referenced from the Thailand Greenhouse Gas Management Organization (Public Organization) (TGO) Other than TGO refer to "Intergovernmental Panel on Climate Change 2006", (IPCC).
- Report based on fuel consumption (by weight or volume), such as volume of oil or natural gas x emission values referenced from the Thailand Greenhouse Gas Management Organization (Public Organization) (TGO) Other than TGO refer to "Intergovernmental Panel on Climate Change 2006", (IPCC).

2.2 Calculation of Indirect Greenhouse Gas Emissions (Scope 2) will be reported from the volume of purchased electricity, steam x greenhouse gas emission factor referencing values from TGO, the producer, or the supplier.

2.3 In 2023, SCGP has set a target to reduce greenhouse gas emissions by 25% within 2030 compared to the base year of 2020 (4.99 million tons CO<sub>2</sub>e), covering both domestic and overseas businesses, and aims to achieve net-zero greenhouse gas emissions by 2050.

2.4 Greenhouse gas data from overseas companies has been included since 2021.

2.5 The margin of error in calculating greenhouse gas emissions shall not exceed 0.05% of the reported data.

### 3. Reporting of Greenhouse Gas Emissions

This will cover gases CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>, calculated and presented in terms of carbon dioxide equivalents using the Global Warming Potential (GWP) values set by the IPCC.

## EN2 Energy

The total energy consumption includes thermal energy and steam, and all the electricity used in the company/factory areas. For thermal energy, the report shows the volume of renewable and non-renewable fuels used, and the volume of electricity sold externally and to associated companies.

1. Thermal Energy Consumption = The volume of fuel or steam (estimated based on the purchased amount or the change in stock) x Low Heating Value (obtained from laboratory testing or from the supplier).
2. Electrical Energy Consumption = The volume of electricity used in the form of electric current purchased from external power sources for company/factory activities. This does not include electricity generated internally through fuel combustion, as this would be double-counting energy.
3. Renewable Fuel = Biomass fuels, sludge from wastewater treatment systems, black liquor from the pulp production process, biogas.
4. Biomass Fuel = Fuel from wood chips, wood bark, sugarcane bagasse.
5. Non-Renewable Fuel = Fossil fuels and fuels from waste materials or by-products from production processes produced from fossil fuels, including waste reject and used oil.
6. Renewable Energy = Clean energy derived from natural sources, including biomass energy (Biomass, Biogas, Sludge, Black Liquor), solar energy, wind energy, hydro energy, geothermal energy, used to replace energy from fossil fuels.
7. Non-Renewable Energy = Thermal energy derived from fossil fuels and purchased steam produced from fossil fuels.
8. Data from overseas companies has been included since 2020.



## EN3 Water

1. Water Management (comprising the volume of water withdrawal, water treated before discharge into external water bodies, and water recycling) is a consideration for assessing the efficiency of using water from various sources.
2. Water Withdrawal refers to the volume of water from various raw water sources used in production processes, offices, maintenance, and utilities. The sources of raw water are divided into five categories: surface water, groundwater, sea water, tap water, and water produced alongside the production process. This information is obtained from accounting records or meter readings.
3. Water Source Quality refers to the quality of water from various sources, measured by Total Dissolved Solids (TDS) using standard methods. This is used to categorize the water source quality into two types:
  - Freshwater: TDS less than or equal to 1,000 milligrams per liter.
  - Other Water: TDS greater than 1,000 milligrams per liter.
4. Water Recycling refers to the volume of water reused in all factory activities after undergoing quality treatment processes, excluding water that has not been through quality improvement.
5. Effluent Quality refers to the quality of water discharged externally, such as BOD, COD, and total suspended solids, which are measured for concentration using standard methods along with the volume of effluent discharged into external water bodies.
6. Receiving Water Body Quality refers to the quality of various receiving water bodies, measured by Total Dissolved Solids (TDS) using standard methods. This is used to categorize the water source quality into two types:
  - Freshwater: TDS less than or equal to 1,000 milligrams per liter.
  - Other Water: TDS greater than 1,000 milligrams per liter.
7. Water Data from overseas companies has been included since 2021.

## EN4 Industrial Waste

Waste management is a consideration for assessing the efficiency of production processes, improving product quality, and reducing the costs of manufacturing processes. SCGP has established guidelines for the collection and reporting of environmental data since 2013, to serve as a standard for data collection and reporting for companies within SCGP. The volume of industrial waste refers to the amount of waste generated from production processes, excluding waste still in the production process that can be recycled (Work in Process, WIP). It is categorized into two types: hazardous waste and non-hazardous waste, as defined by the Ministry of Industry's 2023 Decree on the Disposal of Wastes and Unused Materials.

### Quantification Report

1. Waste Generated refers to the volume of industrial waste or used materials at the point of origin, or before entering the waste storage building. This is complied with weighting scale or estimation.
2. Waste Stock refers to the volume of industrial waste accumulated and not yet managed or stored in designated areas as of the end of the year. This is complied with weighting scale or estimation.
3. Waste Managed refers to the volume of industrial waste handled both internally and externally by SCGP. This is solely complied from weighting scale.
4. Onsite Waste Management within SCGP refers to waste management carried out by companies within the scope of SCGP's management.
5. Offsite Waste Management outside SCGP refers to waste management carried out by companies outside the scope of SCGP's management.
6. Reporting of waste management volumes from 2017-2020 was in accordance with GRI 306-2, 2016.
7. Reporting of waste management volumes in 2021 was in accordance with GRI 306-4 and GRI 306-5, 2020.
8. Data from overseas companies has been included since 2021.

## EN5 Air Emissions

Air emissions refer to the volume of air pollutants, such as nitrogen oxides, sulfur oxides, and particulate matter deriving from combustions and present in production processes. The type of pollutant depends on the specific production processes of each operational unit. The results and methods of measurement are based on legal requirements, such as those set by the US EPA or equivalent standards.

1. Reporting Air Pollutant Volumes is done by calculating the concentration obtained from random emission testing (Spot Check) at the time of measurement under actual conditions. This is conducted by laboratories certified and registered with the Department of Industrial Works. This includes the flow rate of the released hot air and the operating hours of the steam boiler. Additionally, the measurement of pollutant discharge from the stacks is carried out using Continuous Emission Monitoring Systems (CEMS).
  - Fiber-Based Packaging Business and Performance Packaging Business conducts random emission testing of air pollutants discharged from stacks (Spot Check) under actual conditions at the time of measurement by laboratories certified and registered with the Department of Industrial Works.
  - Food Packaging Paper and Pulp & Paper Packaging Business conducts continuous automatic measurement of air pollutant discharge from stacks using Continuous Emission Monitoring Systems (CEMS).
2. In 2021, SCGP set a target to reduce the rate of air pollution emissions by 5% within 2025 and by 10% within 2030 compared to the base year of 2020, covering both domestic and overseas businesses. In 2020, the air pollution emission rates for both domestic and overseas businesses were as follows:
  - a. Nitrogen oxide emission rate was 0.702 kilograms per ton of production.
  - b. Sulfur oxide emission rate was 0.696 kilograms per ton of production.
  - c. Particulate matter emission rate was 0.178 kilograms per ton of production.
3. Data from overseas companies has been included since 2021.

## EN6 Tax Privileges from the Board of Investment (BOI) for Environmental Projects

## EN7 Number / Amount of Fines or Settlements in case of Violations of Legal Binding/Regulatory Obligations Exceeding 10,000 US Dollars

# Social Performance

## Health and Safety

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Lost Time Injury Frequency Rate : LTIFR (Cases per 1,000,000 hours worked) <sup>S1,*</sup>							
• Employee	0.522	0.087	0.822	0.267	0.417		
• Contractor	0.678	0.296	0.400	0.599	0.454		
Injury Severity Rate: ISR (Cases per 1,000,000 hours worked) <sup>S1</sup>							
• Employee	10.200	0.831	7.644	2.241	5.340		
• Contractor	8.098	8.155	6.858	18.853	10.270		
Total Number of Work-Related Fatalities (Cases) <sup>S1,*</sup>							
• Employee (male : female)	0 : 0	0 : 0	1 : 0	0 : 0	1 : 0		
• Contractor (male : female) (Workplace and Direct Transportation)	0 : 0	0 : 0	1 : 0	0 : 0	1 : 0		
Total Number of Fatalities from Work-Related in Workplace (Cases) <sup>S1,*</sup>							
• Employee (male : female)	0 : 0	0 : 0	1 : 0	0 : 0	1 : 0		
• Contractor (male : female)	0 : 0	0 : 0	1 : 0	0 : 0	1 : 0		
Total Number of Fatalities from Work-Related in Transportation (Cases) <sup>S1,*</sup>							
• Employee (male : female)	0 : 0	0 : 0	0 : 0	0 : 0	0 : 0	GRI 403-9	
• Direct Transportation Contractor (male : female)	0 : 0	0 : 0	0 : 0	0 : 0	0 : 0	GRI 403-9	
• Other Transportation Contractor (male : female)	2 : 0	0 : 0	0 : 0	0 : 0	1 : 0	GRI 403-9	
Number of Fatalities as a result of Work-Related Injury (Cases) <sup>S1,*</sup>							
• Employee	0	0	1	0	1	GRI 403-9	
Fatalities as a result of Work-Related Injury Rate (Cases per 1,000,000 hours worked) <sup>S1,*</sup>							
• Employee	0.000	0.000	0.027	0.000	0.026	GRI 403-9	
Number of Fatalities as a result of Work-Related Injury (Cases) <sup>S1,*</sup>							
• Contractor	0	0	1	0	1	GRI 403-9	
Fatalities as a result of Work-Related Injury Rate (Cases per 1,000,000 hours worked) <sup>S1,*</sup>							
• Contractor	0.000	0.000	0.027	0.000	0.028	GRI 403-9	
Number of High Consequence Work-Related Injury (Cases) <sup>S1,*</sup>							
• Employee	N/A	0	2	1	1	GRI 403-9	
High Consequence Work-Related Injury Rate (Cases per 1,000,000 hours worked) <sup>S1,*</sup>							
• Employee	N/A	0.000	0.055	0.027	0.026	GRI 403-9	

## Health and Safety

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Number of High Consequence Work-Related Injury (Cases) <sup>S1,*</sup> • Contractor	N/A	1	2	2	2	GRI 403-9	
High Consequence Work-Related Injury Rate (Cases per 1,000,000 hours worked) <sup>S1,*</sup> • Contractor	N/A	0.027	0.053	0.063	0.057	GRI 403-9	
Number of Recordable Work-Related Injury (Cases) <sup>S1,*</sup> • Employee	30	23	67	53	52	GRI 403-9	
Recordable Work-Related Injury Rate (Cases per 1,000,000 hours worked) <sup>S1,*</sup> • Employee	1.423	1.006	1.836	1.414	1.355	GRI 403-9	
Number of Recordable Work-Related Injury (Cases) <sup>S1,*</sup> • Contractor	43	27	48	56	32	GRI 403-9	
Recordable Work-Related Injury Rate (Cases per 1,000,000 hours worked) <sup>S1,*</sup> • Contractor	1.823	0.727	1.281	1.765	0.908	GRI 403-9	
Hours worked (Hrs) <sup>S1,*</sup> • Employee	21,078,805	22,869,683	36,498,929	37,481,036	38,387,881	GRI 403-9	
• Contractor	23,585,144	37,155,610	37,471,979	31,719,780	35,249,808	GRI 403-9	
Number of Occupational Illness & Disease (Cases) <sup>*</sup> • Employee	0	0	0	0	0	GRI 403-10	
• Contractor	0	0	0	0	0	GRI 403-10	
Number of Recordable Occupational Illness & Disease (Cases) <sup>*</sup> • Employee	0	0	0	0	0	GRI 403-10	
• Contractor	0	0	0	0	0	GRI 403-10	
Occupational Illness & Disease Frequency Rate (Cases per 1,000,000 hours worked) <sup>S1,*</sup> • Employee	0.000	0.000	0.000	0.000	0.000	GRI 403-10	

\* Within SGS (Thailand) limited assurance scope (page 60)



## Employee and Social Development

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Number of Employee (Persons) <sup>S2</sup>	6,660	6,416	23,341	22,289	21,882	GRI 2-7	RT-CP-000.C
• By Gender (female : male : N/A) <sup>S3</sup>	N/A	N/A	N/A	5,166 : 17,123	5,197 : 16,472 : 213		
• By Age Group (under 30 yrs : 30-50 yrs : over 50 yrs)	N/A	N/A	N/A	5,854 : 12,311 : 4,124	5,605 : 12,696 : 3,581		
Female share of total workforce (%)	16.9	17.5	17.9	21.9	23.8	GRI 405-1	
Female in all management positions (%)	19.6	20.6	21.2	24.4	23.8	GRI 2-7	
Female in junior management positions (%)	21.3	23.0	23.5	23.5	24.8		
Female in top management positions (%)	10.5	7.7	8.1	8.9	14.0		
Female in management positions in revenue-generating functions (%) <sup>S4</sup>	20.1	19.6	18.2	18.0	18.8		
Female in Science, Technology, Engineering and Mathematics positions (STEM-related positions) (%)	N/A	N/A	42.1	40.9	53.8		
Proportion of local senior management (%) <sup>S5</sup>	9.0	8.0	7.0	7.0	15.2	GRI 202-2	
Average salary of Executive Level (base salary only) (Baht) *							
• Female	0	0	0	0	0	GRI 405-2	
• Male	6,723,000	6,844,000	5,368,444	6,774,800	6,722,880	GRI 405-2	
Ratio of average salary of female to male (Executive Level) (base salary only) *	0	0	0	0	0	GRI 405-2	
Executive level (base salary + other cash incentives) (Baht) *							
• Female	N/A	N/A	0	0	0	GRI 405-2	
• Male	N/A	N/A	8,955,339	11,029,875	9,890,280	GRI 405-2	
Ratio of average salary of female to male (Executive Level) (base salary + other cash incentives) *	N/A	N/A	0	0	0	GRI 405-2	
Average salary of Management Level (base salary only) (Baht) *							
• Female	2,363,000	2,331,000	2,208,303	2,233,090	2,226,940	GRI 405-2	
• Male	2,458,000	2,501,000	2,187,859	2,431,474	2,273,120	GRI 405-2	
Ratio of average salary of female to male (Management Level) (base salary only) *	0.961	0.932	1.009	0.918	0.959	GRI 405-2	
Average salary of Management Level (base salary + other cash incentives) (Baht) *							
• Female	3,170,000	3,143,000	2,942,157	3,176,664	3,305,560	GRI 405-2	
• Male	3,458,000	3,585,000	3,132,744	3,658,904	3,446,150	GRI 405-2	

## Employee and Social Development

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Ratio of average salary of female to male (Management Level) (base salary + other cash incentives) *	0.910	0.877	0.939	0.868	0.959	GRI 405-2	
Average salary of Non-management Level (base salary only) (Baht) *							
• Female	563,000	584,000	584,901	596,741	581,920	GRI 405-2	
• Male	461,000	478,000	476,272	493,696	478,220	GRI 405-2	
Ratio of average salary of female to male (Non-Management Level) (base salary only) *	1.221	1.222	1.228	1.209	1.217	GRI 405-2	
Average salary of Non-management Level (base salary + other cash incentives) (Baht) *							
• Female	N/A	N/A	792,075	820,962	796,780	GRI 405-2	
• Male	N/A	N/A	773,453	778,892	746,540	GRI 405-2	
Ratio of average salary of female to male (Non-Management Level) (base salary + other cash incentives) *	N/A	N/A	1.024	1.054	1.067	GRI 405-2	
Number of employees with disability (Persons) <sup>S6</sup>	N/A	N/A	76	87	89		
Employees with disability share of total workforce (%)	N/A	N/A	0.86	0.39	0.41	GRI 405-1	
Employees represented by an independent trade union or covered by collective bargaining agreements (%) <sup>S7</sup>	100	100	100	100	100	GRI 2-30	
Number of new employees hire (Persons)	174	133	723	1,259	990	GRI 401-1	
New employees hire of total workforce (%)	2.6	2.1	5.0	5.6	4.5	GRI 401-1	
• By Gender (female : male)	N/A	N/A	N/A	47 : 53	49.6 : 50.4		
• By Age Group (under 30 yrs : 30-50 yrs : over 50 yrs)	N/A	N/A	N/A	79.5 : 20.3 : 0.2	74.8 : 24.8 : 0.3		
• By Employee level (Operation : Supervisory : Management)	N/A	N/A	N/A	N/A	86.7 : 13.1 : 0.2		
• By Region (ASEAN / Non-ASEAN)	N/A	N/A	N/A	100 : 0	100 : 0		
Number of open positions filled by internal candidates (internal hires) (Persons)	N/A	N/A	N/A	688	416		
Open positions filled by internal candidates (internal hires) of total workforce (%)	N/A	N/A	N/A	4.76	1.90		
• By Gender (female : male)	N/A	N/A	N/A	30 : 70	31.0 : 69.0		
• By Age Group (under 30 yrs : 30-50 yrs : over 50 yrs)	N/A	N/A	N/A	11 : 73 : 16	16.3 : 62.0 : 21.6		
• By Employee level (Operation : Supervisory : Management)	N/A	N/A	N/A	N/A	35.6 : 54.8 : 9.6		
• By Region (ASEAN / Non-ASEAN)	N/A	N/A	N/A	N/A	100 : 0		

## Employee and Social Development

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Average hiring cost of new employee (Baht/Person)	N/A	N/A	41,781	62,842	24,684		
Voluntary employee turnover (Persons)	228	289	1,054	920	959	GRI 401-1	
Voluntary employee turnover rate (%)	3.4	4.5	7.2	4.1	4.4	GRI 401-1	
• By Gender (female : male)	N/A	N/A	N/A	40 : 60	29.8 : 70.2		
• By Age Group (under 30 yrs : 30-50 yrs : over 50 yrs)	N/A	N/A	N/A	49 : 48 : 3	47.4 : 48.0 : 4.6		
• By Employee level (Operation : Supervisory : Management)	N/A	N/A	N/A	N/A	81.5 : 17.9 : 0.5		
• By Region (ASEAN / Non-ASEAN)	N/A	N/A	N/A	100 : 0	99.9 : 0.1		
Total employee turnover (Persons)	238	475	1,115	1,300	1,326	GRI 401-1	
Total employee turnover rate (%)	3.6	7.4	7.6	5.8	6.1		
• By Gender (female : male)	N/A	N/A	N/A	50 : 50	48.5 : 51.5		
• By Age Group (under 30 yrs : 30-50 yrs : over 50 yrs)	N/A	N/A	N/A	47 : 42 : 11	41.2 : 39.7 : 19.1		
• By Employee level (Operation : Supervisory : Management)	N/A	N/A	N/A	N/A	79.9 : 18.5 : 1.6		
• By Region (ASEAN / Non-ASEAN)	N/A	N/A	N/A	100 : 0	99.9 : 0.1		
Number of employees taken maternity leave (Persons) <sup>S8</sup>	42	34	42	90	103	GRI 401-3	
Number of employees returned to work after maternity leave (Person)	41	34	39	87	102	GRI 401-3	
Employee engagement level <sup>S9</sup>	74	80	76	76	4.1		
• By Gender (female : male)	N/A	N/A	N/A	N/A	4.09 : 4.11		
• By Age Group (Gen-X/Gen-Y/Gen-Z/BB)	N/A	N/A	N/A	82 : 72 : 76 : 86	4.1 : 4.1 : 4.2 : 4.1		
• By Employee level (Operation : Supervisory : Management)	N/A	N/A	N/A	N/A	4.2 : 4.0 : 4.2		
• By Region (ASEAN/Non-ASEAN)	N/A	N/A	N/A	81 : 56	4.1 : 3.5		
Average training and development of employee (Hours/Person)	42	24	12	15	14	GRI 404-1	
• By Gender (female : male)	N/A	N/A	N/A	16 : 15	14 : 14		
• By Age Group (under 30 yrs : 30-50 yrs : over 50 yrs)	N/A	N/A	N/A	N/A	13 : 14 : 12		
• By Employee level (Operation : Supervisory : Management)	N/A	N/A	N/A	9 : 35 : 31	8 : 37 : 40		
• By Region (ASEAN / Non-ASEAN)	N/A	N/A	N/A	N/A	14 : 0		
Average mandatory training and development program of employee (Hours/Person)	N/A	N/A	N/A	6	10		
Average non-mandatory training and development of employee (Hours/Person)	N/A	N/A	N/A	9	4		

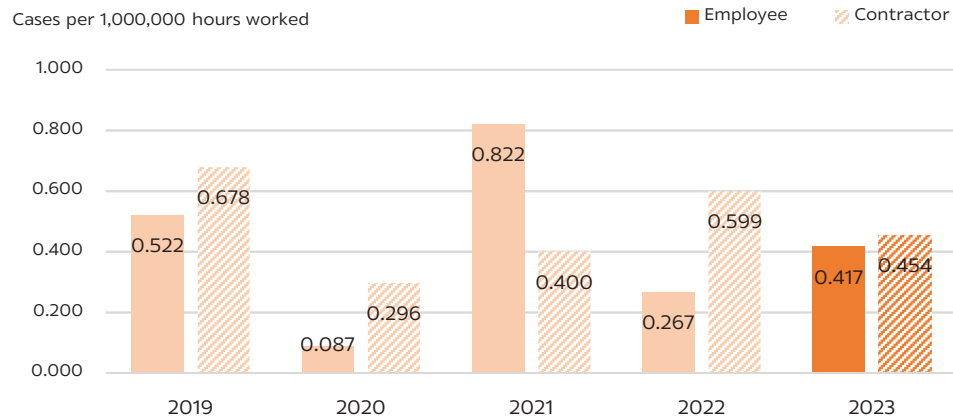
## Employee and Social Development

Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Percentage of employee who have received training in the organization's human rights policies (%)	N/A	N/A	N/A	100	100	GRI 410-1	
Average cost of hiring a new employee (Baht/Person)	31,617	20,387	10,082	7,301	4,353		
• By Gender (female : male)	N/A	N/A	N/A	1,979 : 5,322	6,051 : 3,874		
• By Age Group (under 30 yrs : 30-50 yrs : over 50 yrs)	N/A	N/A	N/A	945 : 4,873 : 1,483	3,509 : 4,575 : 4,888		
• By Employee level (Operation : Supervisory : Management)	N/A	N/A	N/A	N/A	1,320 : 12,051 : 57,630		
• By Region (ASEAN / Non-ASEAN)	N/A	N/A	N/A	N/A	4,353 : 0		
Employee volunteering during paid working hours (Million Baht)	3	4	2	15	19		
In-kind giving: product or services donations, projects/partnerships or similar (Million Baht)	11	7	29	7	4		
Management overheads related to CSR activity (Million Baht)	26	34	25	42	23		
Contribution for social and community development (Million Baht)	N/A	N/A	N/A	43	49	GRI 201-1	

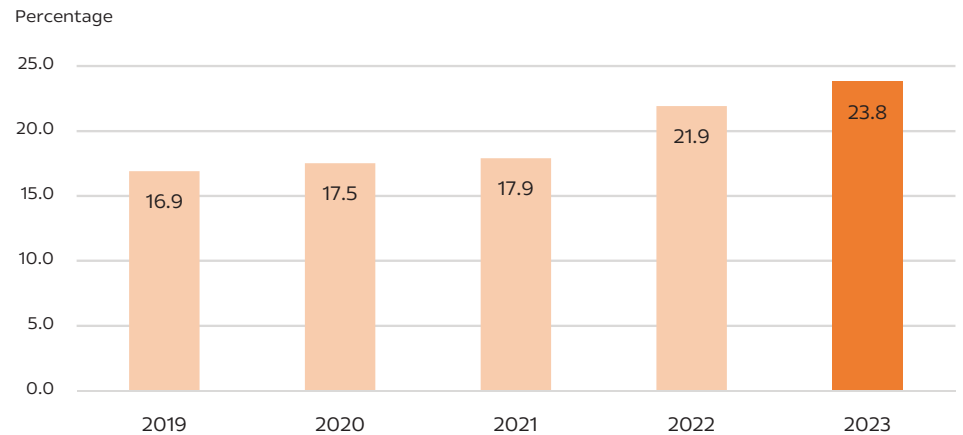
\* Within SGS (Thailand) limited assurance scope (page 60)



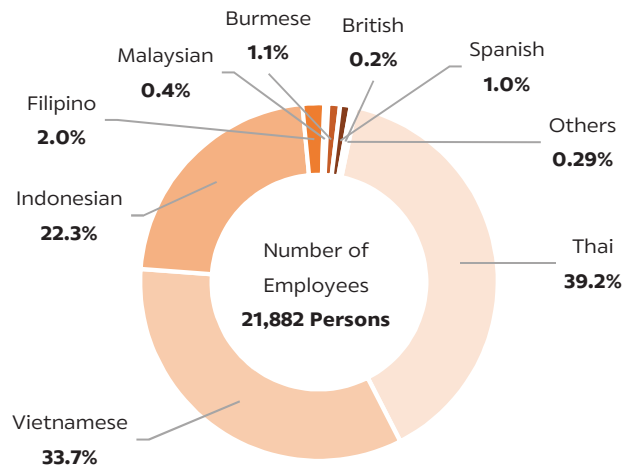
### Lost Time Injury Frequency Rate : LTIFR



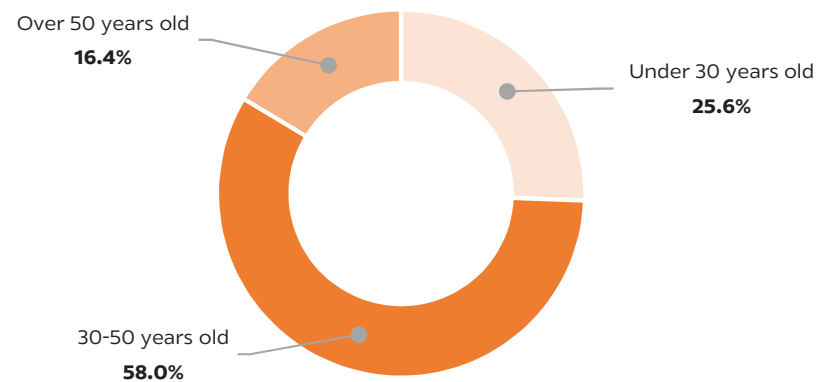
### Female Share of Total Workforce



### Percentage of Employees by Nationality



### Percentage of Employees by Age



## S1 Data on Number of Employees and Contractors

1. Employees are individuals who work for the company full-time under an employment contract. This includes operational staff, supervisory and professional staff, management staff, probationary staff, and special contract staff.
  - Operational Staff are employees who use skills and techniques in regular work.
  - Supervisory and Professional Staff are employees responsible for managing specific tasks or supervising operational-level staff.
  - Management Staff are executives responsible for setting strategies or policies, delegating work, and ensuring subordinates follow policies and daily work.
  - Special Contract Staff are individuals who work under a temporary contract with a defined start and end date.
2. Contractors are individuals authorized to perform work or services or provide benefits to the company, other than the employees defined above. Contractors are divided into three categories:
  - 1) Under Supervision Contractors are contractors who perform work for the company where the work and/or workplace is controlled by the company.
  - 2) Direct Transportation Contractors are transportation contractors managed under the SCGP brand.
  - 3) Other Transportation Contractors are transportation contractors not managed under the SCGP brand.

The data of employees and contractors under the company's control are analyzed in terms of working hours. For transportation contractors in SCG JWD Logistics Company Limited, the data are presented in terms of kilometers traveled.

SCGP also defines Not Under Supervision Contractors as contractors not under the company's oversight. The company does not control their work methods or work locations. This includes contracted work or services conducted outside the company's areas, such as work done at home or at the contractor's own location.

### Calculation of Hours Worked

1. Data from the clock-in systems, human resources databases, or accounting units.
2. Data from documents specifying hours worked, such as timesheets, time records from accounting units processing payroll, or units with evidence recording the number of hours worked or collected from work permits.
3. In cases where the company or factory does not have a clock-in system, the following formula is used to estimate:
 
$$\text{Total Hours Worked} = (\text{Total number of workers} \times \text{Number of days worked} \times \text{Number of regular hours worked per day}) + \text{Total overtime hours (if any)}.$$

### Recording of Health and Safety Data

SCGP records health and safety data at work and categorizes them into 6 types:

1. Fatality refers to injuries, illnesses, and diseases from work resulting in death, whether immediate or subsequent due to the accident.
2. Injury Frequency Rate (IFR) refers to the number of recordable work-related injuries per 1,000,000 hours worked.
3. Lost Time Injury Frequency Rate (LTIFR) refers to the number of work-related injuries resulting in lost time per 1,000,000 hours worked.
 

Lost Time Injury refers to injuries, illnesses, and diseases from work that result in the injured or ill person being unable to perform normal duties on the next working day or shift, including cases where the inability to work occurs subsequently due to the accident.
4. Injury Severity Rate (ISR) refers to the number of lost workdays due to work-related injuries per 1,000,000 hours worked.
5. High-Consequence Work-Related Injuries Rate refers to the number of severe work-related injuries, excluding fatalities, per 1,000,000 hours worked.
6. Occupational Illness & Disease Frequency Rate (OIFR) refers to the number of recordable work-related illnesses and diseases per 1,000,000 hours worked.

The calculation base has been adjusted from per 200,000 hours worked to per 1,000,000 hours worked to align with the organization's size and for comparison within the same industry group. The collection and calculation of data on severe work-related injuries began in 2020.

<b>S2</b>	<b>Number of employees is reported within the 2023 Annual Report's scope.</b>
<b>S3</b>	<b>Identify employee gender as male: female: N/A in 2023.</b>
<b>S4</b>	<b>Revenue - generating functions, e.g., marketing, sales, production.</b>
<b>S5</b>	<b>Calculate from number of local management level abroad over total number of management level.</b>
<b>S6</b>	<b>Visual and physical impairment and movement disabilities or others. e.g., hearing impairment, mental disability, communication disability.</b>
<b>S7</b>	<b>Employees joining trade unions or working with the company covered by the Welfare Committee.</b>
<b>S8</b>	<b>Under Thai laws, only female employees can take parental leave.</b>
<b>S9</b>	<b>Change in reporting format of employee engagement score in 2023.</b>

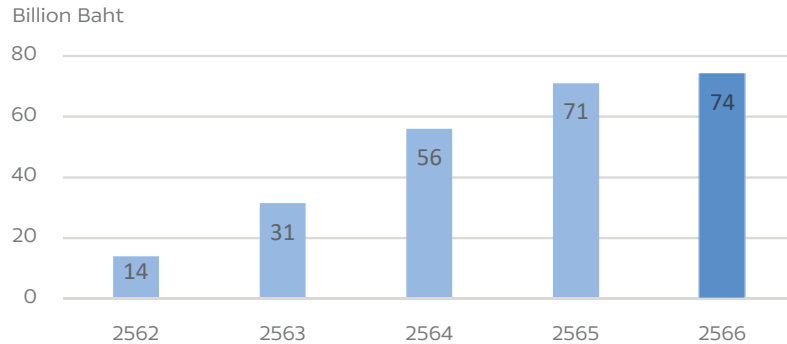
# Economic & Governance Performance

Economic & Governance Performance covers SCGP both Thailand and abroad

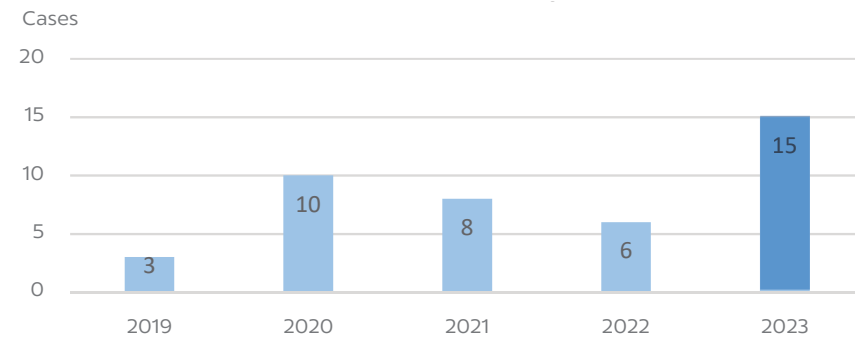
Performance	2019	2020	2021	2022	2023	GRI Standard	SASB
Revenue from sales (Billion Baht)	89	93	124	146	129	GRI 201-1	
Profit for the year (Billion Baht)	5	6	8	6	5	GRI 201-1	
EBITDA (Billion Baht)	15	17	21	19	18	GRI 201-1	
Employee compensation comprising salary, wage, welfare and regular contributions (Million Baht)	10,025	10,603	11,687	13,542	14,002	GRI 201-1	
Dividend to shareholders (Million Baht) <sup>EC1</sup>	3,300	1,932	2,790	2,576	2,361	GRI 201-1	
Interest and financial expenses to lender (Million Baht)	1,741	1,452	1,180	1,468	2,020	GRI 201-1	
Taxes to government and local government authorities such as income tax, local maintenance tax, property tax and other specific taxes (Million Baht)	1,621	1,756	1,933	1,715	2,069	GRI 201-1	
Privilege tax and others from investment promotion, and research and development (Million Baht)	408	244	293	159	201	GRI 201-4	
Investment for Research & Development and Innovation (Million Baht) <sup>EC2</sup>	584	529	958	522	998		
Revenue from Sales of SCG Green Choice Products and Services (Billion Baht)	14	31	56	71	74		RT-CP-410a.2
Revenue from Sales of SCG Green Choice Products and Services (%)	16	34	45	48	57		
Contributions to organizations (Baht) <sup>EC3</sup>	N/A	500,177	2,462,438	1,643,770	2,074,222		
Contributions to political activities(Million Baht) <sup>EC4</sup>	0	0	0	0	0	GRI 415-1	
Non-compliance case through SCG Whistleblowing System (Cases)	3	10	8	6	15	GRI 205-3	
Suppliers that assessed Environmental, Social and Governance (ESG) Risks (% of procurement spending) <sup>EC5</sup>	100	100	100	100	100	GRI 414-1	
Procurement Spending by Geography (% of procurement spending) <sup>EC6</sup>							
- Domestic	53	55	88	70	85	GRI 204-1	
- Regional	47	45	12	30	15	GRI 204-1	



**Revenue from Sales of SCG Green Choice**



**Non-compliance case through SCG Whistleblowing System**



- EC1** Dividend to shareholders is the total dividend reference to the SCGP Annual Report. In 2019, dividend was paid in cash and ordinary shares.
- EC2** In 2019 was reported on the Investment in Research and Development including the investment in innovations.
- EC3** The first 8 Organizations contributed by SCGP are Global Compact Network Association, CEFLEX, CDP Worldwide, The Federation of Thai Industries, Thailand Institute of Packaging and Recycling Management for Sustainable Environment (TIPMSE), The Thai Chamber of Commerce, Asian Corrugated Case Association, and The Thai Pulp and Paper Industries Association
- EC4** SCGP remains political neutral with no financial support or any other kinds to any political parties, political groups or candidates in local, regional or national levels or persons with political influence or Lobbying or interest representation or similar and other categories (e.g. spending related to ballot measures or referendums).
- EC5** The Environmental, Social and Governance (ESG) risk assessment for Suppliers began in 2018.
- EC6** Consider geography based on seller data and trading currency.

# Subsidiaries Included in Sustainability Report 2023

	Business / Company	Country	Principal Business / Products	Total Direct / Indirect Holding (Percent)	Production	Environment													Society		Remark
						Energy		Air emission				Water					Waste	Health & Safety			
						Thermal	Electricity	Dust	SO <sub>x</sub>	NO <sub>x</sub>	GHG	Water withdrawal	Recycle Water	BOD	COD	TSS		Safety	Occupational Illness		
1	SCG Packaging Public Company Limited	Thailand	Office														✓	✓			
	Subsidiaries																				
2	Thai Containers Group Co., Ltd. (Navanakorn)	Thailand	Fiber Packaging	70.00	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓			
	Thai Containers Group Co., Ltd. (Pathumthani)	Thailand	Fiber Packaging		✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓		
	Thai Containers Group Co., Ltd. (Samutprakan)	Thailand	Fiber Packaging		✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓		
	Thai Containers Group Co., Ltd. (Ratchaburi)	Thailand	Fiber Packaging		✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓		
	Thai Containers Group Co., Ltd. (Songkhla)	Thailand	Fiber Packaging		✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓		
	Thai Containers Group Co., Ltd. (Chonburi)	Thailand	Fiber Packaging		✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓		
	Thai Containers Group Co., Ltd. (Prachinburi)	Thailand	Fiber Packaging		✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓		
	Thai Containers Group Co., Ltd. (Saraburi)	Thailand	Fiber Packaging		✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓		
	Thai Containers Group Co., Ltd. (Kamphaeng Phet)	Thailand	Fiber Packaging		✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓		
	Thai Containers Group Co., Ltd. (Bang Sue)	Thailand	Office															✓	✓		
3	Thai Containers Khonkaen Co., Ltd.	Thailand	Fiber Packaging	70.00	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓		
4	Thai Containers Rayong Co., Ltd.	Thailand	Fiber Packaging	70.00	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓		
5	Tawana Container Co., Ltd.	Thailand	Fiber Packaging	50.40	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓		
6	Orient Containers Co., Ltd.	Thailand	Fiber Packaging	70.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓		
7	Dyna Packs Co., Ltd. <sup>(1)</sup>	Thailand	Fiber Packaging	70.00	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓		
8	D-In Pack Co., Ltd. <sup>(1)</sup>	Thailand	Fiber Packaging	70.00	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓		
9	New Asia Industries Co., Ltd.	Vietnam	Fiber Packaging	70.00	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	ND		
10	Alcamax Packaging (Vietnam) Co., Ltd.	Vietnam	Fiber Packaging	70.00	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	ND		
11	Packamex (Vietnam) Co., Ltd.	Vietnam	Fiber Packaging	70.00	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
12	AP Packaging (Hanoi) Co., Ltd.	Vietnam	Fiber Packaging	70.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	ND		
13	PT Primacorr Mandiri	Indonesia	Fiber Packaging	67.90	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	ND		

	Business / Company	Country	Principal Business / Products	Total Direct / Indirect Holding (Percent)	Production	Environment														Society		Remark
						Energy		Air emission				Water					Waste	Health & Safety				
						Thermal	Electricity	Dust	SO <sub>x</sub>	NO <sub>x</sub>	GHG	Water withdrawal	Recycle Water	BOD	COD	TSS		Safety	Occupational Illness			
14	PT Indoris Printingdo	Indonesia	Fiber Packaging	69.96	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	ND			
15	PT Indocorr Packaging Cikarang	Indonesia	Fiber Packaging	69.99	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	ND			
16	SCGP Solutions Co., Ltd. <sup>(2)</sup>	Thailand	Holding Company	100.00																		
17	Precision Print Co., Ltd.	Thailand	Fiber Packaging	100.00	✓	✓	✓	NR	NR	NR	✓	✓	NR	✓	✓	✓	✓	✓	✓			
18	TCG Solutions Pte. Ltd. <sup>(2)</sup>	Singapore	Holding Company	70.00																		
19	Bien Hoa Packaging Joint Stock Company	Vietnam	Fiber Packaging	65.88																Have been M&P since 2021 and data will be disclosed through a sustainability report 2024		
20	PT Indonesia Dirlajaya Aneka Industri Box.	Indonesia	Fiber Packaging	52.50																		
21	PT Bahana Buana Box	Indonesia	Fiber Packaging	52.50																		
22	PT Rapipack Asritama	Indonesia	Fiber Packaging	52.50																		
23	Siam Kraft Industry Co., Ltd. (Kanchanaburi)	Thailand	Packaging Paper	100.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Siam Kraft Industry Co., Ltd (Ratchaburi)	Thailand	Packaging Paper		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Siam Kraft Industry Co., Ltd (Bang Sue)	Thailand	Office															✓	✓			
24	Vina Kraft Paper Co., Ltd.	Vietnam	Packaging Paper	70.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	ND			
25	Thai Cane Paper Public CompanyLimited (Kanchanaburi)	Thailand	Packaging Paper	98.20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Thai Cane Paper Public CompanyLimited (Prachin Buri)	Thailand	Packaging Paper		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
26	United Pulp and Paper Co., Inc.	The Philippines	Packaging Paper	74.77	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	ND			
27	SCGP Solutions (Singapore) Pte. Ltd. <sup>(2)</sup>	Singapore	Holding Company	100.00																		
28	PT Fajar Surya Wisesa Tbk.	Indonesia	Packaging Paper	55.24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	ND			
29	PT Dayasa Aria Prima	Indonesia	Packaging Paper	55.24	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	ND	Have been M&P since 2020 and data will be disclosed through a sustainability report 2023		
30	SCG Paper Energy Co., Ltd.	Thailand	Energy And Utilities	100.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
31	SCGP-T Plastics Co., Ltd. <sup>(2)</sup>	Thailand	Holding Company	51.00																		
32	Conimex Co., Ltd.	Thailand	Rigid Packaging	38.25	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓			
33	SCGP Rigid Plastics Co., Ltd. <sup>(2)</sup>	Thailand	Holding Company	100.00																		
34	Vexcel Pack Co., Ltd. <sup>(5)</sup>	Thailand	Rigid Packaging	100.00	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓			
35	TC Flexible Packaging Co., Ltd. <sup>(2)</sup>	Thailand	Holding Company	52.50																		
36	Prepack Thailand Co., Ltd. (Samut Sakhon)	Thailand	Flexible Packaging	52.38	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓			
	Prepack Thailand Co., Ltd. (Samut Songkhram)	Thailand	Flexible Packaging		✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓		
	Prepack Thailand Co., Ltd. (Rayong)	Thailand	Flexible Packaging		✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓			

Business / Company		Country	Principal Business / Products	Total Direct / Indirect Holding (Percent)	Production	Environment													Society		Remark
						Energy		Air emission				Water					Waste	Health & Safety			
						Thermal	Electricity	Dust	SO <sub>x</sub>	NO <sub>x</sub>	GHG	Water withdrawal	Recycle Water	BOD	COD	TSS		Safety	Occupational Illness		
37	Tin Thanh Packing Joint Stock Company	Vietnam	Flexible Packaging	52.49	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	ND		
38	SCGP Rigid Packaging Solutions Pte. Ltd. <sup>(2)</sup>	Singapore	Holding Company	100.00																	
39	Duy Tan Plastics Manufacturing Corporation Joint Stock Company	Vietnam	Rigid Packaging	70.00																Have been M&P since 2021 and data will be disclosed through a sustainability report 2024	
40	Duy Tan Long An Company Limited	Vietnam	Rigid Packaging	70.00																	
41	Duy Tan Precision Mold Company Limited	Vietnam	Rigid Packaging	70.00																	
42	Duy Tan Binh Duong Plastics Company Limited	Vietnam	Rigid Packaging	70.00																	
43	MATA Plastic Company Limited	Vietnam	Rigid Packaging	70.00																	
44	International Healthcare Packaging Co., Ltd. <sup>(2)</sup>	Thailand	Holding Company	100.00																	
45	Deltalab Global, S.L. <sup>(2)</sup>	Spain	Holding Company	85.00																	
46	Deltalab, S.L.	Spain	Medical Supplies and Labware	85.00																Have been M&P since 2021 and data will be disclosed through a sustainability report 2024	
47	Keylab, S.L.U.	Spain	Medical Supplies and Labware	85.00																	
48	Nirco, S.L.	Spain	Medical Supplies and Labware	85.00																	
49	Envases Farmaceuticos, S.A.	Spain	Medical Supplies and Labware	85.00																	
50	Equilabo Scientific, S.L.U.	Spain	Medical Supplies and Labware	85.00																	
51	Sanilabo, S.L.U. <sup>(6)</sup>	Spain	Medical Supplies and Labware	85.00																	
52	Phoenix Pulp & Paper Public Company Limited	Thailand	Foodservice Packaging/Pulp and Paper Products	69.58	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
53	Thai Paper Co., Ltd. (Paper Production)	Thailand	Foodservice Packaging/Pulp and Paper Products	69.58	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓		
	Thai Paper Co., Ltd. (Fest hub)	Thailand	Foodservice Packaging/Pulp and Paper Products		✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓		
	Thai Paper Co., Ltd. (Pulp Production-Banpong)	Thailand	Foodservice Packaging/Pulp and Paper Products		✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓		
	Thai Paper Co., Ltd. (Pulp Production-Wangsala)	Thailand	Foodservice Packaging/Pulp and Paper Products		✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	NR	✓	✓	✓		
	Thai Paper Co., Ltd. (Bang Sue)	Thailand	Office															✓	✓		
54	Go-Pak UK Limited	The United Kingdom	Foodservice Packaging	100.00																Have been M&P since 2021 and data will be disclosed through a sustainability report 2024	
55	Go-Pak Vietnam Limited	Vietnam	Foodservice Packaging	100.00																	
56	Go-Pak Paper Products Vietnam Company Limited	Vietnam	Foodservice Packaging	100.00																	
57	Pheonix Utilities Co., Ltd. <sup>(3)</sup>	Thailand	Utilities	69.58	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	NR	✓	✓		
58	Interpress Printers Sendirian Berhad	Malaysia	Foodservice Packaging	68.30	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	♻️	✓	ND		

	Business / Company	Country	Principal Business / Products	Total Direct / Indirect Holding (Percent)	Production	Environment														Society		Remark
						Energy		Air emission				Water					Waste	Health & Safety				
						Thermal	Electricity	Dust	SO <sub>x</sub>	NO <sub>x</sub>	GHG	Water withdrawal	Recycle Water	BOD	COD	TSS		Safety	Occupational Illness			
59	The Siam Forestry Co., Ltd.	Thailand	Forestry Products	69.58	✓	✓	✓	NR	NR	NR	✓	☞	NR	NR	NR	NR	NR	✓	✓			
60	Siam Panawes Co., Ltd.	Thailand	Forestry Products	69.58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR			
61	Suanpa Rungsaris Co., Ltd.	Thailand	Forestry Products	69.58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR			
62	Panas Nimit Co., Ltd.	Thailand	Forestry Products	69.58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR			
63	Thai Panaboon Co., Ltd.	Thailand	Forestry Products	69.58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR			
64	Thai Panaram Co., Ltd.	Thailand	Forestry Products	69.58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR			
65	Thai Panadorn Co., Ltd.	Thailand	Forestry Products	69.58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR			
66	Thai Panason Co., Ltd.	Thailand	Forestry Products	69.58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR			
67	Thai Wanabhum Co., Ltd.	Thailand	Forestry Products	69.58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR			
68	SCGP Excellence Training Center Co., Ltd.	Thailand	Training and seminar	100.00														✓	✓			
69	Invenique Co., Ltd. <sup>(2)</sup>	Thailand	Asset and Intellectual Property Management Service	100.00																		
70	United Industrial Energy Corporation <sup>(4)</sup>	The Philippines	Holding Company	74.77																		
71	Peute Recycling B.V. <sup>(2)</sup>	The Netherlands	Holding Company	100.00																Have been M&P since 2022 and data will be disclosed through a sustainability report 2025		
72	Peute Papierrecycling B.V.	The Netherlands	Packaging Materials Recycling	100.00																		
73	Peute Recycling International B.V. <sup>(2)</sup>	The Netherlands	Holding Company	100.00																		
74	Peute Plasticrecycling B.V.	The Netherlands	Packaging Materials Recycling	100.00																		
75	Peute Portugal, Unipessoal Lda	Portugal	Packaging Materials Recycling	100.00																		
76	Peute Recycling Spain S.L.	Spain	Packaging Materials Recycling	100.00																		
77	Peute UK Limited	The United Kingdom	Packaging Materials Recycling	100.00																		
78	SKIC International Co., Ltd. <sup>(2)</sup>	Thailand	Holding Company	100.00																		
79	Jordan Trading International	The United States of America	Packaging Materials Recycling	90.10																		
80	Bicappa Lab S.r.L.	Italy	Medical Supplies and Labware	72.25																Have been M&P since 2023 and data will be disclosed through a sustainability report in 2026		
81	Law Print & Packaging Management Limited (UK)	The United Kingdom	Flexible Packaging	100.00																		
82	Law Print & Packaging Management Limited (IE)	Ireland	Flexible Packaging	100.00																		
83	Peute Investments B.V.	The Netherlands	Holding Company	100.00																		



Business / Company		Country	Principal Business / Products	Total Direct / Indirect Holding (Percent)	Production	Environment											Society		Remark
						Energy		Air emission				Water					Health & Safety		
						Thermal	Electricity	Dust	SO <sub>x</sub>	NO <sub>x</sub>	GHG	Water withdrawal	Recycle Water	BOD	COD	TSS	Waste	Safety	
84	Infiniplast B.V.	The Netherlands	Packaging Materials Recycling	100.00															
85	Starprint Vietnam JSC	Vietnam	Fiber Packaging	70.00															Have been M&P since 2024 and data will be disclosed through a sustainability report in 2025
	Associates and Other subsidiaries																		
1	Siam Toppan Packaging Co., Ltd.	Thailand	Fiber Packaging	49.00															
2	P&S Holdings Corporation <sup>(2)</sup>	The Philippines	Holding Company	40.00															
3	Siam Nippon Industrial Paper Co., Ltd.	Thailand	Specialty Paper	31.31															
4	Sahagreen Forest Co., Ltd.	Thailand	Energy And Utilities	17.40															
5	ReUse SAS	France	Packaging Materials Recycling	45.00															
6	Packworks Co., Ltd	Thailand	Foodservice Packaging / Pulp and Paper Products	28.48															

Remark NR = Non-Relevance Information (businesses are in operation but their data is irrelevant or significant)

ND = Not disclose this year

Office/Investment/Sales/Service where the collection of data is not necessary and non-production companies

Greenfield (less than 4 years) or newly acquired companies (less than 4 years) are not required to incorporate environmental, safety and occupational illness data into SCGP

(1) Dyna Packs Co., Ltd. and D-In Pack Co., Ltd. transferred the entire business to ORIENT on November 1, 2020 and registered the dissolution of the company with the Department of Business Development, Ministry of Commerce on December 22, 2020. It is currently in the process of liquidation.

(2) Companies that operate the main businesses

(3) Pheonix Utilities Co., Ltd. transferred the entire business to Phoenix Pulp & Paper Public Company Limited on October 1, 2021 and registered the dissolution of the company with the Department of Business Development, Ministry of Commerce on December 20, 2021. It is currently in the process of liquidation.

(4) United Industrial Energy Corporation registered the termination of its business on April 24, 1997.

(5) Visy Packaging (Thailand) Limited changed its name to Vexcel Pack Co., Ltd.

(6) Sanilabo, S.L.U. registered the liquidation with the Commercial Registry on December 27, 2023 and is in the process of transferring its entire business to Equilabo Scientific, S.L.U. and Nirco, S.L.

- At the Board of Directors' meeting held on February 13, 2018, approval was given for TCGS to cease operations from mid-2018 and liquidation was completed on January 25, 2022.



- The Data reporting of SCG Packaging Public Company Limited includes the Headquarters office and organizations under SCGP.

# Supplementary Information

List of information  
presented on the website



On the words presented website

-  [Sustainability Approaches](#)
-  [Policy](#)
-  [Sustainability Structure](#)
-  [Corporate Governance](#)
-  [Materiality](#)
-  [Stakeholder Engagement](#)
-  [Sustainability Value Chain](#)
-  [Human Rights Issues 2023](#)
-  [Award/Certificates](#)

# Assurance Statement



## ASSURANCE STATEMENT

### SGS (THAILAND) LIMITED'S REPORT ON SUSTAINABILITY ACTIVITIES IN SCG PACKAGING PUBLIC COMPANY LIMITED'S FOR 2023

**NATURE OF THE ASSURANCE/VERIFICATION**  
SGS(Thailand) Limited (hereinafter referred to as SGS) was commissioned by SCG Packaging Public Company Limited (hereinafter referred to as SCGP) to conduct an independent assurance of the SCGP Sustainability Report 2023 (hereinafter referred to as the Report) for the year ended December 31, 2023 in accordance with the reporting criteria.

**INTENDED USERS OF THIS ASSURANCE STATEMENT**  
This Assurance Statement is provided with the intention of informing all SCGP's Stakeholders.

**RESPONSIBILITIES**  
The information in the Report and its presentation are the responsibility of the directors or governing body (as applicable) and the management of SCGP. SGS has not been involved in the preparation of any of the material included in the Report. Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of verification with the intention to inform all SCGP's stakeholders.

**ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE**  
The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognised assurance guidance and standards. Assurance has been conducted at a limited level of scrutiny.

The assurance of this report has been conducted according to the following Assurance Standards:  

- ISAE 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements

**SCOPE OF ASSURANCE AND REPORTING CRITERIA**  
The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:  

- GRI Standards 2021 (in Accordance with)
- WBSCD/WRI Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard
- Sustainability Accounting Standards Board (SASB)

**SPECIFIED PERFORMANCE INFORMATION AND DISCLOSURES INCLUDED IN SCOPE**  
SCGP's Sustainability Report are adequately in line with the Sustainability Reporting Standard and fulfills all the required content and quality criteria for the identified aspects listed as below:

- Environmental dimension performance indicators expressed numerically or in descriptive text
  - Energy consumption (petagoules)
  - Greenhouse gas emissions scope 1 & 2 & 3 (ton CO<sub>2</sub> equivalent)
  - Greenhouse gas removal (ton CO<sub>2</sub> equivalent)
  - Water withdrawal (million cubic meters) and recycled water (million cubic meters)
  - Water discharge (million cubic meters)
  - Water discharge by quality (BOD, COD and TSS (tons))
  - Oxides of Nitrogen (NO<sub>x</sub>), Oxides of Sulfur (SO<sub>x</sub>), dust and other significant air emissions data (thousand tons)
  - Total weight of waste by type and disposal method (thousand tons)
  - Waste management (waste generated, waste diverted from disposal, waste directed to disposal) (thousand tons)
- Social dimension performance indicators or in descriptive text
  - Number and rate of fatality work-related injury, high-consequence work-related injury, lost time injury, recordable work-related injury and number of hours worked
  - Number of fatality work-related occupational illness & disease and occupational illness & disease frequency rate
  - Ratio of the basic salary and remuneration of women to men and gender pay gap
- Governance dimension performance indicators or in descriptive text
  - Double materiality assessment
  - Number of Tier-1 supplier, significant supplier in Tier-1, spend on significant supplier in Tier-1 and

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- significant supplier in non Tier-1
- Number of supplier assessed assessment, significant supplier assessed and supplier assessed with substantial actual/potential negative impact
- Number of supplier supports in corrective action plan implementation and supplier assessed with substantial actual/potential negative impact supported in corrective action plan implementation

#### ASSURANCE METHODOLOGY

SGS's assurance engagements are carried out in accordance with assurance procedure.  
The assurance comprised a combination of  

- SCGP's Management interviews, including the ESG & Sustainability team with responsibility for performance in the areas within scope
- Interview with data owners &/or managers responsible for internal data collection and reporting databases
- Document review of relevant systems, policies, and procedures where available
- Understanding, analysing and sample testing the key data collection, aggregation, validation and reporting systems, processes, procedures, and controls
- Sampling evidence to confirm the reliability of the selected reporting standards, selected 2 sites for onsite visit as below:
  - Phoenix Pulp & Paper Public Company Limited
  - United Pulp and Paper Co., Inc.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

#### LIMITATIONS AND MITIGATION

Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process. Note here any other specific limitations for the assurance engagement and actions taken to mitigate those limitation. Some statements and data within the scope were not assured due to lack of accessible records during the timescale allowed for assurance, and these are clearly marked throughout the Report.

#### STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from SCGP, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.  
The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 9001, ISO 14001, ISO 45001, ISO 50001, ISO 14064-1, ISO 14067, ISO 26000, WFP, SA 8000 and experience on the Sustainability Report Assurance (SRA) Assurance service provisions.

#### ASSURANCE/VERIFICATION OPINION

On the basis of the methodology described and the verification work performed, nothing has come to our attention that causes us to believe that the specified performance information included in the scope of assurance is not fairly stated and has not been prepared, in all material respects, in accordance with the reporting criteria. We believe that the organisation has chosen an appropriate level of assurance for the selected indicators and GHG Scope 3 in 15 categories for the year ended December 31, 2023 included in their reporting.

#### Signed:

For and on behalf of SGS (Thailand) Limited

*Montree Tangtermsirikul*  
Montree Tangtermsirikul  
General Manager  
100 Nanglinchee Road Chongnonsee Yannawa, Bangkok 10120 Thailand  
16 February 2024  
[WWW.SGS.COM](http://WWW.SGS.COM)

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attached sheet

#### Summary of Scope 3 GHG Emissions Report 2023

The emission is described as below: Unit: tonnes of CO<sub>2</sub>e

Category	GHG emissions
1. Purchased goods & services	859,465
3. Fuel and energy-related activities	441,172
4. Upstream transportation & distribution	384,560
5. Waste generated in operations	17,883
6. Business travel	831
7. Employee commuting	247
9. Downstream transportation & distribution	66,206
10. Processing of sold products	219,533
12. End-of-life treatment of sold products	37,463
15. Investment	32,336
<b>Total emissions</b>	<b>2,059,696</b>

#### Remarks:

- Categories 11 and 14 are not reported as GHG emissions because the organization's activities are not relevant to the context
- Categories 8 and 13 - The total GHG emissions are negligible, close to zero, and thus not significant to assurance reporting. Therefore is excluded.

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# Global Reporting Initiative (GRI) Index

**Statement of use :** SCG Packaging Public Company Limited has reported in accordance with the GRI Standards for the reporting period 2023 (1 January 2023 — 31 December 2023)

**GRI 1 used :** GRI 1: Foundation 2021

**Applicable GRI Standards :** None

In the 'Ref' column, 'SR' refers to this SCGP Sustainability Report 2023, and 'AR' to the SCGP Annual Report 2023.

GRI STANDARD	DISCLOSURE	LOCATION	EXTERNAL ASSURANCE
GRI 2: General Disclosures 2021	2-1 Organizational details	SR 7, AR inside front cover	
	2-2 Entities included in the organization's sustainability reporting	SR 54-58	
	2-3 Reporting period, frequency and contact point	SR 2-3	
	2-4 Restatements of information	SR 2-3	
	2-5 External assurance	SR 60, SCGP Website: ESG Homepage	
	2-6 Activities, value chain and other business relationship	SR 6-7	
	2-7 Employees	SR 45	
	2-8 Workers who are not employees	SCGP Website: ESG Homepage	
	2-9 Governance structure and composition	AR 141-143	
	2-10 Nomination and selection of the highest governance body	AR 144-146	
	2-12 Role of the highest governance body in overseeing the management of impacts	SCGP Website: ESG Homepage	
	2-13 Delegation of responsibility for managing impacts	SCGP Website: ESG Homepage	
	2-14 Role of the highest governance body in sustainability reporting	SCGP Website: ESG Homepage	
	2-15 Conflicts of interest	AR 10-13	
	2-16 Communication of critical concerns	AR 10-18, SCGP Website: ESG Homepage	
	2-17 Collective knowledge of the highest governance body	AR 192-194	
	2-18 Evaluation of the performance of the highest governance body	AR 194	
	2-19 Remuneration policies	AR 16, SCGP Website: ESG Homepage	
	2-20 Process to determine remuneration	AR 16, SCGP Website: ESG Homepage	

GRI STANDARD	DISCLOSURE	LOCATION	EXTERNAL ASSURANCE
	2-22 Statement on sustainable development strategy	SR 4, AR 8-9, SCGP Website: ESG Homepage	
	2-23 Policy commitments	SR 8-9, SR 12-29, AR 123-136, SCGP Website: ESG Homepage	
	2-24 Embedding policy commitments	SR 27-28, SCGP Website: ESG Homepage	
	2-25 Processes to remediate negative impacts	SR 27-28, SCGP Website: ESG Homepage	
	2-26 Mechanisms for seeking advice and raising concerns	SR 22, 27	
	2-27 Compliance with laws and regulations	SR 29	
	2-28 Membership associations	SR 29	
	2-29 Approach to stakeholder engagement	AR 90-92	
	2-30 Collective bargaining agreements	SCGP Website: ESG Homepage	
GRI 3: Material Topics 2021	3-1 Process to determine material topics	AR 90-92, SCGP Website: ESG Homepage	Yes
	3-2 List of material topics	SR 12-13	Yes
	3-3 Management of material topics	SR 10-13	
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	SR 52	
	201-2 Financial implications and other risks and opportunities due to climate change	SCGP Website: ESG Homepage	
	201-3 Defined benefit plan obligations and other retirement plans	AR 180, SCGP Website: ESG Homepage	
	201-4 Financial assistance received from government	SR 52	
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	SCGP Website: ESG Homepage	
	202-2 Proportion of senior management hired from the local community	SR 45	
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	SCGP Website: ESG Homepage	
	203-2 Significant indirect economic impacts	SR 21-24	

GRI STANDARD	DISCLOSURE	LOCATION	EXTERNAL ASSURANCE
GRI 204: Procurement	204-1: Proportion of spending on local suppliers	SR 52	
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	SCGP Website: ESG Homepage	
	205-2 Communication and training about anti-corruption policies and procedures	SR 27	
	205-3 Confirmed incidents of corruption and actions taken	SR 27	
GRI 206: Anti-competitive	206-1: Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	SCGP Website: ESG Homepage	
GRI 207: Tax 2019	207-1 Approach to tax	SCGP Website: ESG Homepage	
	207-2 Tax governance, control, and risk management	SCGP Website: ESG Homepage	
	207-3 Stakeholder engagement and management of concerns related to tax	SCGP Website: ESG Homepage	
	207-4 Country-by-country reporting	SCGP Website: ESG Homepage	
GRI 301: Materials 2016	301-1 Materials used by weight or volume	SR 31	
	301-2 Recycled input materials used	SR 31	
GRI 302: Energy 2016	302-1 Energy consumption within the organization	SR 32, 40, SCGP Website: ESG Homepage	Yes
	302-2 Energy consumption outside of the organization	SR 32	
	302-3 Energy intensity	SR 32, 40	
	302-4 Reduction of energy consumption	SR 17, 32, 40	
	302-5 Reductions in energy requirements of products and services	SR 19	
	302-6 Reductions in energy requirements of products and services	SR 19	
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	SR 26, SCGP Website: ESG Homepage	
	303-2 Management of water discharge-related impacts	SR 26, SCGP Website: ESG Homepage	
	303-3 Water withdrawal	SR 33-34, 38, 41	Yes
	303-4 Water discharge	SR 33-34, 38, 41	Yes

GRI STANDARD	DISCLOSURE	LOCATION	EXTERNAL ASSURANCE
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SR 25, SCGP Website: ESG Homepage	
	304-2 Significant impacts of activities, products and services on biodiversity	SR 25, SCGP Website: ESG Homepage	
	304-3 Habitats protected or restored	SR 25	
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	SCGP Website: ESG Homepage	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	SR 31, 39-40	Yes
	305-2 Energy indirect (Scope 2) GHG emissions	SR 31, 39-40	Yes
	305-3 Other indirect (Scope 3) GHG emissions	SR 31, 39-40	Yes
	305-4 GHG emissions intensity	SR 31, 39-40	
	305-5 Reduction of GHG emissions	SR 31, 39-40	Yes
	305-6 Reduction of GHG emissions	SR 31, 39-40	Yes
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx),	SR 32, 42	Yes
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	SR 15-16, SCGP Website: ESG Homepage	
	306-2 Management of significant waste-related impacts	SR 15-16, SCGP Website: ESG Homepage	
	306-3 Waste generated	SR 35, 38, 41	Yes
	306-4 Waste diverted from disposal	SR 35-36, 38, 41	Yes
	306-5 Waste directed to disposal	SR 35-36, 38, 41	Yes
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	SR 27-28	
	308-2 Negative environmental impacts in the supply chain and actions taken	SR 27-28	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	SR 46-47	
	401-3 Parental leave	SR 47	



GRI STANDARD	DISCLOSURE	LOCATION	EXTERNAL ASSURANCE
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	SR 23	
	403-2 Hazard identification, risk assessment, and incident investigation	SR 23	
	403-3 Occupational health services	SR 23	
	403-4 Worker participation, consultation, and communication on occupational health and safety	SCGP Website: ESG Homepage	
	403-5 Worker training on occupational health and safety	SCGP Website: ESG Homepage	
	403-6 Promotion of worker health	SR 23	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SR 23	
	403-8 Workers covered by an occupational health and safety management system	SR 23	
	403-9 Work-related injuries	SR 43-44, 50	Yes
	403-10 Work-related ill health	SR 43-44, 50	Yes
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	SR 48	
	404-2 Programs for upgrading employee skills and transition assistance programs	SR 22	
	404-3 Percentage of employees receiving regular performance and career development reviews	SR 47	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	SR 45-48, AR 142-143	
	405-2 Ratio of basic salary and remuneration of women	SR 46-47	Yes
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	SR 21, SCGP Website: ESG Homepage	

GRI STANDARD	DISCLOSURE	LOCATION	EXTERNAL ASSURANCE
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	SCGP Website: ESG Homepage	
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	SCGP Website: ESG Homepage	
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	SCGP Website: ESG Homepage	
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	SCGP Website: ESG Homepage	
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of Indigenous peoples	SCGP Website: ESG Homepage	
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	SCGP Website: ESG Homepage	
	413-2 Operations with significant actual and potential negative impacts on local communities	SCGP Website: ESG Homepage	
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	SCGP Website: ESG Homepage	
	414-2 Negative social impacts in the supply chain and actions taken	SCGP Website: ESG Homepage	
GRI 415: Public Policy 2016	415-1 Political contributions	SR 52, SCGP Website: ESG Homepage	
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	SR 19, SCGP Website: ESG Homepage	
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	SR 19, SCGP Website: ESG Homepage	
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	SCGP Website: ESG Homepage	
	417-2 Incidents of non-compliance concerning product and service information and labeling	SR 17	
	417-3 Incidents of non-compliance concerning marketing communications	SR 17	
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	SCGP Website: ESG Homepage	

# Sustainability Accounting Standards Board Response (SASB)

SASB Content Index

Topic	Disclosure Code	Disclosure Title	Page	Disclosure or Additional Explanation	Unit
Greenhouse Gas Emissions	RT-CP-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	31		Metric tons (tCO <sub>2</sub> e) Percentage (%)
	RT-CP-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	17-18, 31		N/A
Air Quality	RT-CP-120a.1	Air emissions of the following pollutants: (1) NO <sub>x</sub> (excluding N <sub>2</sub> O), (2) SO <sub>x</sub> , (3) volatile organic compounds (VOCs), and (4) particulate matter (PM)	32		Metric tons (t)
Energy Management	RT-CP-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	8, 32		Gigajoules (GJ) Percentage (%)
Water Management	RT-CP-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	33-34		Thousand cubic meters (m3) Percentage (%)
	RT-CP-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	26		Number
	RT-CP-140a.3	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	35	0 Case	Number
Waste Management	RT-CP-150a.1	Amount of hazardous waste generated, percentage recycled	35		Metric tons (t)
Product Safety	RT-CP-250a.1	Number of recalls issued, total units recalled	17	0 Case	Number
	RT-CP-250a.2	Discussion of process to identify and manage emerging materials and chemicals of concern	19-20		N/A
Product Lifecycle Management	RT-CP-410a.1	Percentage of raw materials from: (1) recycled content, (2) renewable resources, and (3) renewable and recycled content	31	(3) 99.1%	Percentage (%) by weigh
	RT-CP-410a.2	Revenue from products that are reusable, recyclable, and/or compostable	52	74,209 Million Baht (SCG Green Choice)	Reporting Currency
	RT-CP-410a.3	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	19-20		N/A
Supply Chain Management	RT-CP-430a.1	Total wood fiber procured, percentage from certified sources	25	2.31 Million tons 100% of FSC™-CW/COC : FSC-C133879	Metric tons (t) Percentage (%)
	RT-CP-430a.2	Total aluminum purchased, percentage from certified sources		Not Applicable	Metric tons (t) Percentage (%)
Activity Metric	RT-CP-000.A	Amount of production, by substrate	31		Metric tons (t) Percentage (%)
	RT-CP-000.B	Percentage of production as: (1) paper/wood, (2) glass, (3) metal, and (4) plastic		Annual Report 2023 P. 42 (1) 81.7% (4) 12.5%	Percentage (%) by revenue
	RT-CP-000.C	Number of employees	45		Number



For more information and/or comments on the sustainability report,  
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