

ESG INTEGRATION A Pathway for Sustainable Business

Sustainability Report 2023 SCG Chemicals Public Company Limited

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Sustainability Approach

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Message from CEO and President

2023 presented SCGC with a number of challenges: a global oversupply of petrochemical products, increasing competition and price volatility, the Russian - Ukrainian war and Middle Eastern conflicts showing no signs of near - term resolution. These factors have exposed global market vulnerabilities and slowed the world economy. At the same time, environmental challenges including global warming, climate change, plastic waste and the loss of biodiversity, remain pressing global issues. Social problems related to inequality and discrimination have also intensified during this period. Cumulatively, these factors impact how business operates and call for significant adjustment and change.

Amidst these challenges, SCGC remains committed to our business development plan: to enhance our competitiveness and to maintain our ASEAN leadership. The company is focused on operational excellence and innovation to create high value-add products and healthy profitability. SCGC is also dedicated to achieving the production of 1 million tons of sustainable plastic products and solutions by 2030 and attaining carbon neutrality by 2050. The company integrates ESG (Environmental, Social,

and Governance) principles into company direction and strategy for sustainability that align with the United Nations Sustainable Development Goals (UN SDGs).

In our 2023 sustainability report, we are proud to update our stakeholders on SCGC's progress as outlined below.

A Crucial Step towards ASEAN's Leadership in Comprehensive Petrochemical Industry

The Long Son Petrochemicals Complex (LSP) Project is Vietnam's first comprehensive petrochemical facility propelling it and ASEAN's petrochemical industry forward. LSP produces high-quality olefins and polyolefin pellets for domestic and overseas clients. Its goals include to replace imports, promote the downstream sector, and to enhance Vietnam's competitiveness in the petrochemical industry. This will benefit the country's economic growth and improve the quality of life of Vietnamese people, and the ASEAN region more widely. LSP's manufacturing process has been designed and equipped with advanced digital technology, focusing on safe and environmentally friendly plant and machinery that fully comply with international standards. In 2023,



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LSP began an efficiency test of the entire manufacturing system to ensure safety and production quality, as well as evaluating environmental and community impact. Commercial operations are expected to begin in 2024.

"Environmentally friendly" sustainable plastic solutions

In an era where the world is facing a plastic waste crisis, the leakage of plastic waste into the environment severely impacts ecosystems. Additionally, the unsustainable use of natural resources and the loss of natural balance (Nature Loss) are pressing issues. SCGC is a leader in plastic pellet production. By actively applying circular economy principles, SCGC is determined to develop and deliver solutions that address the current global plastic waste crisis and to meet the SCGC Green Polymer[™] goal by 2030. In 2023, SCGC initiated a collaboration with clients and brand owners to develop green packaging solutions and increase the sales of SCGC Green Polymer[™] to 218,000 tons. This encompasses four key themes:

1. Reduce Reduce the use of resources. With the SMX[™] technology, SCGC can produce stronger plastic pellets that reduce the thickness of the final product, whilst maintaining strength, reducing the volume of plastic pellets required.

- 2. **Recyclable** Design for Recyclability Developing of a mono-material packaging solution, which can be more efficiently recycled.
- **3. Recycle** The introduction of a high-guality post-consumer recycled resin (PCR), derived from mechanical recycling and certified circular resin from advanced recycling processes.
- 4. Renewable Biodegradability and Renewable Resource Usage Developing bio-compostable compound resin that can be molded into biodegradable bags. Additionally, SCGC has signed an agreement with Braskem, a Brazilian world leader in bioplastics, to form a joint venture located at Map Ta Phut Industrial Estate in Rayong Province in Thailand. This will produce green ethylene from agricultural ethanol, replacing fossil-based ethylene, with an annual production capacity of 200,000 tons. SCGC plans to use this new eco-friendly material in the production of green polyethylene, which has a negative carbon footprint, under

the brand "I'm green™." This initiative will meet increasing global demand, particularly in Asia and Europe, for sustainable plastics.

Aiming for Carbon Neutrality

SCGC's business conduct and operations have always taken into consideration environment, society and value chain factors, with an aim to cut greenhouse gas emission by 20% from 2024 to 2030, and to achieve carbon neutrality by 2050.

In 2023, SCGC reduced greenhouse gas emission from all projects by the equivalent of over 51,000 tons of carbon dioxide. This was achieved by implementing greenhouse gas reduction initiatives in production processes, using AI Supervisory to enhance production efficiency, increasing the use of low-carbon and alternative energy sources, and selecting eco-friendly, low-carbon materials. SCGC has also implemented nature-based carbon offset projects. During 2022 and 2023, SCGC collaborated with Thailand's Department of Coastal Marine and Resources in the restoration of degraded mangrove forests in the provinces of Rayong, Chonburi, and Phetchaburi, covering an area of 1,100 rai. This collaboration is currently undergoing the registration process



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to gain T-VER (Thailand Voluntary Emission Reduction Program) project status and the Premium T-VER project status. It is expected that this initiative will absorb and retain the equivalent of around 6,500 tons of carbon dioxide annually, while promoting participation from related communities, leading to the creation of green jobs.

SCGC also continues to promote the creation of the low-carbon value chain by implementing a climate change awareness program, encouraging business partners to reduce organization's scope 3 greenhouse gas emissions and to develop new low-carbon and environmentally friendly products. SCGC has also joined the Plastic2Olefins project to study and develop technologies to turn waste into new products; a process that aims to reduce production related greenhouse gas emissions by 70% compared to traditional manufacturing methods.

To further support the transition to clean energy, SCGC has entered a joint venture with Denka Company Limited from Japan to produce and distribute acetylene black. This is a conductive component in the production of lithium-ion batteries for electric vehicles (EVs), and for the high-voltage cables used in offshore wind power production, a key developing global industry. The construction of the plant is expected to be completed in 2026.

Strengthening Communities towards Sustainable Society

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SCGC is determined to support community development by strengthening and improving collective local potential, encouraging community self-reliance. The company strives to promote local job creation, elevating local standard of living, creating safe and supportive social environments, reducing inequality and generating over THB 56 million in revenue through local community enterprises.

SCGC embraces a concept of social and community development that supports the transition to a low-carbon society. SCGC has adopted circular economy principles in various projects, including the 'Nets Up' project, unveiled in 2023, to be an exemplary integrated solution for environmental challenges. Under this project, trawler nets are retrieved from the sea and re-introduced into the textile industry, removing waste from the environment, while enabling the local fishing communities to create additional income.

Furthermore, SCGC has continuously implemented conservation projects for upstream environments and mangrove forests that absorb carbon dioxide, revive ecosystems and enable surrounding communities to pursue stable and sustainable careers.

Four Decades of Sustainable Growth, With Commitment to Quality of Life, Social and Environmental Improvement

SCGC is now entering our 40th year with a continuing determination to deliver on our four fundamental core values: "Fairness, Dedication to Excellence, Belief in The Value of The Individual, Active Social Responsibility." After all these years, SCGC has not only focused on profitability, but also on applying the principles of corporate governance, transparency and fairness, whilst endeavoring to improve the quality of people's lives through the development and delivery of quality goods and services.

SCGC is committed to supporting good society through eco-innovations that drive the entire value chain towards sustainability, and that benefit all parties while pursuing sustainable economic growth under the concept of **"Innovation that's real."**

CA. At

Mr. Tanawong Areeratchakul Chief Executive Officer & President

Vision & Mission

SCGC has operated according to the principles of Sustainable Development Goals (SDGs) for its 40 years of operation, moving forward as "a leading integrated chemical business for sustainability," growing its business in active compliance with global environmental, social, and governance (ESG) stewardship, in accordance with global megatrends. SCGC's production bases in Thailand, Vietnam, and Indonesia represent a key strength, located in the largest and fastest-growing economies in ASEAN. This strength allows SCGC to collaborate with a variety of business sectors to create chemical innovations that benefit the planet and people, creating endless new possibilities and fostering sustainability in both society and the environment.



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Strategy

SCGC aims to be the leading integrated chemicals business in ASEAN, generating business growth together with sustainable environmental, social and governance (ESG) practices. The company incorporates sustainability practices into business operations throughout the value chain, and engages with all groups of stakeholders to increase regional and global competitiveness. The company has defined its business strategy under the framework of 5 key areas.



1 ASEAN CHEMICALS LEADER



SCGC is responding to the rapid growth potential of the chemical industry in ASEAN countries such as Vietnam and Indonesia. The Long Son Petrochemicals Complex, Vietnam's first fully

integrated petrochemical complex, is operated under Long Son Petrochemicals Company Limited (LSP), a subsidiary in which SCGC holds a 100% share. It will begin full commercial operations in 2024. With 30.57% shares, SCGC is also as the second largest shareholder of PT Chandra Asri Pacific (CAP), the only complete service petrochemical plant in Indonesia.

2 FULLY INTEGRATED VINYL PLAYER

SCGC aims to expand and enhance integration into the vinyl business to strengthen its business capabilities, by expanding its PVC resin and PVC finished products businesses in the high-growth ASEAN market, and moving into upstream businesses through partnerships, while increasing cost efficiency and profitability strength in the value chain.

3 GLOBAL LEADER IN SUSTAINABILITY



SCGC has set the goal to increase total sales volume of SCGC GREEN POLYMER[™] products to 1 million tons per year by 2030 and aims to reduce greenhouse gas emissions in the production process.

4 STRONG PORTFOLIO OF HVA GRADES

SCGC has accelerated differentiation and competitiveness in High-Value-Added products and services (HVA) in 5 key industries with high growth prospects, including packaging, consumer goods, medical and health, automotive and infrastructure and energy solutions. SCGC is committed to research and development with both its own internal experts and by collaborating with domestic and international R&D partners.

5 LEADING OPERATOR

SCGC has expanded its leadership in operational excellence through the application of digital technology and data analysis throughout the value chain, considering ESG factors. This enhances competitiveness and enables quicker, more accurate responses to customer needs by integrating ESG principles into business operations.

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About this Report

SCGC has published sustainable development reports since 2021. This report contains information under the responsibility of SCGC, as detailed below.



REPORTING SCOPE

Economic data covers the performance of subsidiaries, joint ventures and associated companies, and other companies both domestically and internationally, in compliance with the annual report. Environmental and social information covers the operating results of subsidiaries over which SCGC has control, including companies located in Thailand and abroad as shown in the <u>2023 Sustainability Report</u>, covering the period from 1 January 2023 to 31 December 2023.

Reporting guidelines are in accordance with the 2021 GRI Standards, which appear under the heading "GRI Content Index" and include operations according to the reporting framework of the <u>Sustainability Accounting Standards</u> <u>Board Response (SASB).</u>

REPORTING ASSURANCE

The economic performance data in this report is obtained from accounting data collection systems and annual reports. Environmental performance data has been audited by a certified public accountant and has been verified by an external agency in accordance with the reporting framework of GRI Standards 2021, in accordance with external agency certification.

SIGNIFICANT CHANGES

There was a change in the scope of environmental and climate change data in 2023 to include information on the performance of Circular Plus Company Limited.

For more information, please contact

SCG Chemicals Public Company Limited

No.1 Siam Cement Road, Bangsue, Bangkok 10800 Thailand **Phone:** +66-2586-1111

Website: www.scgchemicals.com



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Address: No.1 Siam Cement Road, Bangsue, Bangkok 10800 Thailand



Number of employees: 7,815



Product and service distribution: To over 110 countries worldwide

SCGC at Glance

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Over the past 40 years, SCG Chemicals Public Company Limited (SCGC) has committed to operating its business in accordance with ESG (Environmental, Social and Governance) principles, whilst recognizing global trends of accredited management standards.

SCGC has been an ASEAN leader in innovation and technology in the petrochemical industry, with integrated operating bases in Thailand, Vietnam and Indonesia that cover the production and the sale of petrochemical products, ranging from upstream monomers to downstream polymer products.

SCGC's core business is polymer innovation — raw materials used in the production of everyday products, including food packages, automotive parts, medical devices, electrical appliances, and infrastructure elements including high-pressure pipes and telecommunications cables. SCGC has also collaborated with various business sectors to develop "chemical innovations" that directly provide practical and accessible solutions, and that benefit industry sectors more generally.



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SCGC's BUSINESS

Three key sectors are as follows:



Olefins Chain in Thailand

- Upstream olefins products, including ethylene, propylene, and other related products
- Downstream olefins products/polyolefins resins, including HDPE, MDPE, LLDPE, LDPE, PP, and PE compounds



Vinyl Chain

- PVC resin and PVC compound
- Finished products from PVC, such as pipes and fittings/couplings, door and window frames



Other businesses

- Overseas olefins chain: LSP
- Plastic compound: Chemtech
- Plastic recycling: Sirplaste, KRAS, and REKS
- Industrial services & solutions
- Raw material for bio-ethylene production
- Acetylene black
- Synthetic latex
- Polystyrene
- Polypropylene compound
- Plastic film
- Synthetic rubber
- Acrylic sheet
- Melamine powder

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HIGH-VALUE-ADDED PRODUCTS AND SERVICES

In order to effectively meet ever-changing and fast-growing demand from related industries, SCGC's business strategy has been geared towards the development of high-value-added products and services

such as packages for food delivery and green packaging, as well as goods and services for the health and wellness market, the aging society, the eco-car sector, urbanization and infrastructure development, and the transition into clean energy. These megatrends significantly shape the company's innovation focus and development of products that both drive revenue growth while providing a better quality of life for everyone. SCGC's researchers and technology experts, located both in Thailand and overseas, have developed partnerships with leading international organizations, enabling rapid transfer of R&D to drive innovation and commercial opportunities.

Olefins Chain

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Offering HVA specialty products superior quality when compared with other basic products by SCGC.

Products	End Products
PE Wax HVAs	Hot melt adhesive, PVC, thermoplastic paint, color masterbatch, and coating
	Industrial-grade color masterbatch, industrial-grade color masterbatch coating, and PVC coating
HDPE HVAs Compound	Water piping system, mining piping system, and gas piping system
HDPE HVAs - SMX™ Technology	Lightweight cap and closure, high-pressure film for industrial use, and chemical-resistant intermediate bulk container (IBC)
MDPE HVAs	Various applications, including water storage tanks, cooler boxes, kayaks, and fuel tanks
LDPE HVAs	Coating
PP HVAs	Auto parts, such as front bumpers, rear bumpers, wheel covers, dashboards, door pillar trims, and interior parts of the back doors

• Vinyl Chain

Offering HVA specialty products with superior quality when compared with other basic products by SCGC.

Products	End Products
PVC HVAs	Rain gutter fittings
	Medical tubes Electrical wire and cable
PVC Finished Products	Pipes and fittings/couplings Door and window frames Rain gutters
• Other Businesses	

Types of Business	Products and Services
Plastic Recycling	Post-consumer recycled resin (PCR)
Industrial Services and Solutions	 Comprehensive industrial solutions, consisting of CiBot[™], tank thickness measurement robot, vibration measurement solution, and etc. Eloating solar farm solutions
	 Digital asset solutions to grant patents.



REVENUE STRUCTURE



Note

- 1. There were intercompany transactions between Olefins Chain in Thailand and Vinyl Chain, as one or more upstream petrochemical products from Olefins Chain in Thailand have is/are raw material(s) for Vinyl Chain and also due to the sales and the purchase of products between Olefins Chain in Thailand and other businesses.
- 2. Calculation shows the percentage of sales revenue from within the year or period.



Note

1. Including countries that generate significant sales revenue, namely India, Bangladesh, Pakistan, Sri Lanka and Maldives 2. Excluding Thailand, Vietnam and Indonesia

3. Excluding China



CAPACITY

Plastic Products and Services	Production Volume (Millions of Tons/Year)		
Olefins Chain in Thailand			
Upstream olefins	3.4		
Downstream polyolefins	2.13		
Downstream businesses operated by associated companies	2.4		
Vinyl Chain			
PVC resin and PVC compound	0.886		
Finished products from PVC	0.43		
Other Businesses			
Overseas olefins chain ¹			
Upstream olefins	1.35		
Downstream polyolefins	1.4		
Plastic compound ²	0.012		
Recycled plastic resin ³	0.054		

Note

1. Long Son Petrochemicals Company Limited or LSP, a subsidiary of SCGC, is the first comprehensive petrochemical complex in Vietnam.

2. Chemtech Co. Ltd. or Chemtech, a subsidiary of SCGC, is the first Cross-Linked Polyethylene (XPLE) operation that adopts Solplex technology in Vietnam.

3. SIRPLASTE-SOCIEDADE INDUSTRIAL DE RECUPERADOS DE PLASTICO, S.A. or Sirplaste is a subsidiary of SCGC and Portugal's largest producer of high-quality

post-consumer recycled resin (PCR) with the total production capacity of 45,000 tons per year.

Recycling Holding Volendam B.V. or Kras, is a subsidiary of SCGC and the Netherlands' leading waste collector and sorter, and plastics recycler

with the total PCR production capacity of 9,000 tons per year.



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Petrochemical Business for Sustainability

CHALLENGES

In 2023, SCGC faced a decline in chemical product demand due to unfavourable economic conditions, and the price volatility of raw materials caused by factors including geopolitical tensions, global economic recession, and slower-than-expected economic recovery in China. Moreover, the petrochemical industry experienced a downward trend as a result of an oversupply of chemical products.

Global awareness of climate change and environmental challenges, especially ralated to plastic waste, has driven many countries to introduce policies on carbon dioxide emission reduction and plastic waste management.



OPPORTUNITIES

With the world's everchanging megatrends, SCGC sees business opportunities in six areas:



Greenhouse gas

reduction



Clean energy and renewable energy







Sustainable water management solution



Circular Economy



Reduced inequalities

These are important factors in the formulation of the strategies and the development of the operational plans to catch up with the megatrends while propelling the company's business towards sustainability.



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- SCGC has contributed to the creation of a more sustainable world and society by extensively and continuously operating in accordance with Environmental, Social, and Governance (ESG) principles, to become ASEAN's leading sustainable and recognized chemical company. SCGC strives for efficient resource utilization under the concept of a circular economy by introducing the SCGC GREEN POLYMER[™] innovation with a sales target of "1 million tons per year" by 2030.
- SCGC has vigorously sought to tackle climate change through energy efficiency improvement, renewable energy, and low-carbon technology that leads to business sustainability and achieving carbon neutrality targets by 2050, while helping to improve the quality of life for all communities, promoting job creation, and fostering a low-carbon society.

CHANGES FOR SUSTAINABILITY

SCGC has committed to adopt the concept of a circular economy, with the SCGC GREEN POLYMER[™] brand promoting the efficient use of resources that will contribute to tackling global warming. This brand has been well-received and already registered the sales volume of 218,000 tons of all four solutions, in 2023.

REDUCE

Enhancing material for Eco-efficiency

RECYCLABLE Design for recyclability

RECYCLE

Mechanical & advanced recycling

RENEWABLE

Bio-compostable compound resin from renewable resources

To enhance operational capabilities, SCGC has continuously applied digital technologies including artificial intelligence (AI), data visualization, and digital twin & advanced process control, throughout the value chain. SCGC has enhanced the implementation of the digital commerce platform (DCP) to bolster profitability for operations in Thailand and Vietnam, while adopting the computer-aided engineering (CAE) model to develop new grades of polymer to reduce costs and time.

The accelerated development of new products, which allows SCGC to better accommodate rapid expansion and swift changes in the future, includes lightweight but high impact resins used in the production of pallets for logistics and storage business, and heat resistant resin used in the production of biaxially oriented polypropylene film (BOPP).

SCGC places an emphasis on both in-house R&D and actively encourages innovation through an extensive network of global educational institutions and research institutes. The establishment of i2P (Ideas to Products) in 2019, the first and only innovation and product prototype development center in ASEAN, aims at expediting the development of material selection solutions, product design and production processes. Moreover, SCGC has created a prototype development center to foster collaborative ideas and product development collaboration between customers and brand owners. These initiatives continue to drive the use of recyclable and sustainable

materials in our high-quality plastic resin packaging and flame retardant EV charger parts.



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SCGC's ADVANCEMENT IN SUSTAINABLE DEVELOPMENT

- The establishment of the Innovation Management Process (IMP) and the i2P Center both foster rapid product development in collaboration with customers. This approach has yielded more than 100 innovative products and solutions, with 25-30 new products launched to the market every year.
- The investment in recycling technology and new machinery installation at our Sirplaste plant boosted the annual production of high-quality recycled plastic resin by 9,000 tons. This led to a total annual production capacity of 45,000 tons, helping to expand the production of EuCertPlast-certified high-quality odorless HDPE PCR, and underlined SCGC's adoption of the concept of a circular economy.







• The development of eco-friendly bottle caps, under the concept of sustainable design, has been a collaboration with SACMI IMOLA S.C., a leading supplier of plastic cap machines and molds working with numerous global beverage brands. The final design of a tethered cap that remains attached to the bottle has also ensured that the entire container will effectively and entirely enter the recycling process even after the cap has been opened.



- A joint venture agreement with Braskem, a Brazilian global leader in bioplastics from, to set up Braskem Siam Company Limited, has been tasked to replace the production of fossil-based ethylene with bio-based ethylene derived from agricultural ethanol, with an expected annual production target of 200,000 tons. This eco-friendly product offers a negative carbon footprint and is similarly recyclable as conventional polyethylene plastics marketed under the brand "I'm green™."
- The study and the collaboration with Avantium N.V., a leading global technology expert in renewable chemistry to develop the production of PLGA polymer, a carbonnegative based plastic that incorporates carbon dioxide as a reactant. Furthermore, SCGC has collaborated with IHI Company, a leading Japanese enterprise with expertise in power plant equipment production, to develop a Carbon Dioxide Capture and Utilization (CCU) technology converting CO₂ into light olefins.

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Awards and Achievements



Gold Award for the 2nd line break year for sustainable marketing from "Marketing Award of Thailand 2023" or "MAT AWARD 2023," Thailand's biggest marketing campaign competition, run by the Market Association of Thailand.

Sustainability Disclosure Award 2023 (highest level) from the Thaipat Institute for the 2nd consecutive year.



Received a plaque of honor award from the Bio diversity-Based Economy Development Office (BEDO), Ministry of Natural Resources and Environment for Payment for Ecosystem Services (PES) concept, a key biodiversity assessment. **Received a certificate of honor for supporting the organization of an exhibition that promotes knowledge and morality 2023.** This recognition is organized by the Center for Morality Promotion (Public Organization) to praise organizations that have transparent and fair governance that takes into account their stakeholders and act in accordance with ESG (Environmental, Social and Governance).

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Asia's Greatest COO 2023 for excellence in operation with digital technology, organized by Asia One.

A total of 10 companies in the SCGC received gold awards in the "Disease-Free, Safe Workplaces, Healthy Body and Mind" project 2023 from the Department of Disease Control, Department of Health and Department of Mental Health, Ministry of Public Health, Thailand.

Companies in the SCGC **received a Platinum Award** in the Zero-Accident Campaign 2023 for the ninth consecutive year from the Thailand Institute of Occupational Safety and Health (Public Organization), Ministry of Labor, Thailand.

Companies in SCGC **received the EIA Monitoring Award 2023,** organized by the Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment. Companies in the SCGC have **received awards for their performance in governance, environment and safety. In 2023,** 8 companies were rated at the "excellent level" and 10 companies at the "good level".

Received a Certificate of Honor for Proactive Environment Management Pilot project from the Deputy Governor of Rayong Province.

Carbon Footprint Certification

- 294 SCGC products have been low carbon-footprint certified.
- SCGC certified as a Carbon Footprint Enterprise in 2023, covering 5 companies:
 - TPC Paste Resin Company Limited
 - Thai Plastic and Chemicals Public Company
 Limited
 - Nawaplastic Industry Company Limited
 - Nawaplastic Industry Company Limited
 (Saraburi)
 - Siam Tocello Company Limited

For more information, please visit SCGC Pride

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SCGC's Sustainability Management Process

SCGC aims to become a leading global integrated chemical enterprise, prioritizing business growth alongside caring for society, communities, and restoring natural resources and the environment in crisis due to excessive consumption.

SCGC has adopted the ESG Framework to enable this holistic approach, providing guidelines and processes that allow challenges to be identified and decision making to be guided in accordance with longer term sustainability goals. The process is as follows:



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Mission for Advancing Towards Sustainable Development Goals

SCGC is dedicated to setting standards for environmental development within the petrochemical industry. It actively seeks to contribute to meeting United Nations Sustainable Development Goals (SDGs) across society, the economy, and the environment. In 2023, SCGC performed operational analysis across the value chain to identify and prioritize 17 targets and 45 objectives. These are outlined below. SCGC has focused on these priorities as follows:



MAIN TARGETS



8.2, 8.3, 8.5, 8.7, 8.8 Promote economic growth at the business and community levels by emphasizing equal employment and creating valuable work to drive the overall economy through production planning and continuous implementations to reduce any impact on the environment and global resources



12.2, 12.4, 12.5, 12.7 Apply the circular economy principles in business operations to increase efficient resource utilization and reduce the risk of future shortages of important production resources, while minimizing the environmental impacts in accordance with the target of responsible production and consumption.



9.4, 9.5

Focus on the application of innovations and technologies in all activities throughout the business chain to boost operational efficiency, create added value, and promote competitiveness for long-term business safeguard creating strong immunity – all of which will safeguard business operations in the long term.



Promptly adapt and pursue all operations in a bid to reduce greenhouse gas emissions, including collaborating with all sectors to strengthen social and community adaptability and capabilities to respond to climate change and its potential impacts.



SECONDARY TARGETS



Aim to improve the quality of life and to eliminate poverty through education and the development of skills essential for careers and through finding added values for products that will sustainably secure jobs and incomes for all communities.



Help the local community and the government to secure the upstream food production ecosystem through the Khao Yai Da Water Management project, enabling the community to have a continuous and secure clean water supply.

2.3, 2.4



entire organization to reduce occupational risks, ensure health security and promote well-being for everyone in the business value chain.



6 CLEAN WATER AND SANITATION

1

Emphasize the elimination of inequality and the creation of opportunities for communities to improve the quality of life through income-generating and value-added activities and projects. These, in accordance with the principle of sufficiency economy, have been made possible by making use of SCGC innovations to support and encourage the collaboration among all sectors to push for constant community capacity-building.

management, both inside and outside the

Promote efficient energy production as well as

the use of renewable and alternative energy to

reduce greenhouse gas emissions.



Develop and promote community participation in waste management through the Bang Sue Model Waste Bank project and the Zero-Waste Community project, which are aimed to sustainably reduce environmental impacts from wastes.



Establish diversity and inclusion policy, and human rights policy to promote and create equal opportunities – all of which are crucial foundations for coexistence and sustainable orowth.



Commit to protect, restore and preserve coastal ecosystems through the Artificial Fish Home Project to increase breeding grounds and nursery areas for aquatic animals, and to maintain abundance and biodiversity in respective areas.



INSTITUTIONS

Aim to reduce environmental impacts by adding green space in order to restore ecosystems and sustainably promoting biodiversity.

Respect and comply with the laws, operating under principles of good corporate governance and stakeholder responsibility by adhering to SCGC's four core values: 1) Fairness, 2) Excellence, 3) Value of Individuals, 4) Social Responsibility and Business Ethics.



Collaborate with all stakeholders to drive the organization and the society forward, both at national and international levels, to achieve the target of sustainable growth.

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Risk Management and Crisis Risk Management

RISK MANAGEMENT POLICY

SCGC has established integrated systematic risk management processes, fully in compliance with international standards. This enables the company to effectively identify and manage business risk and opportunities. SCGC's risk management process actively

promotes sustainable business operations and closely follows principles of good corporate governance. SCGC's risk management policy can be found in the Risk Management section.



RISK GOVERNANCE



SCGC operates under the Enterprise Risk Management Framework (ERM Framework), in accordance with international standards including COSO and ISO. This framework underscores the interconnectivity within the organization and has been adapted by all organizational levels (from Sections and Divisions to Units). It encompasses 5 key risk management activities that manage risks within the operations system, reporting system and governance. diagram below.

SCGC at A Glance

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SCGC clearly defines objectives and risk appetite to ensure risk management practices within the organization are comprehensively aligned. Furthermore, SCGC has established a risk management structure, shown in the

Board of Directors and Audit and Risk Management Committee

The Audit and Risk Management Committee acts as a representative of the Board of Directors in reviewing the formulation of policies, strategies, the risk management framework, risk management plans, and in overseeing the work of the Risk Management Committee. It also reviews the risk assessment and enterprise-wide risk management process (ERM Framework), work processes, operational and IT governance, data security and effective communications systems in line with international standards. as detailed in the Charter of the Audit and Risk Management Committee.

Internal Audit Office

The Internal Audit Office is responsible for evaluating the risk management system and encouraging SCGC's affiliated companies to manage risks in accordance with international standards, while identifying



significant risks and managing them efficiently with appropriate indicators. The Internal Audit Office also sets warning signals and verifies the accuracy and effectiveness of work processes, risk management and governance, data security management, and communications systems to ensure they comply with international standards.

SCGC Risk Management Committee ٠

The Risk Management Committee's main responsibilities include:

- 1) Establish the structure and delegate responsibilities of risk management.
- 2) Determine strategies, risk management framework, and risk management plans for approval by the Audit and Risk Management Committee.
- 3) Regularly review the Risk Profile and continuously monitor enterprise-wide risk management practices.
- 4) Report risk management results to the organization's Audit and Risk Management Committee on a quarterly basis.

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RISK MANAGEMENT PROCESS

SCGC has applied risk management principles to three main areas essential to SCGC business operations:

- 1. Strategic Risk Management (Medium to Long Term)
- 2. Operational Risk Management (Short to Medium Term)
- 3. Investment Project Risk Management

For all three areas of risk management, risk assessment and impact evaluation are conducted to cover all risk topics, including both financial and non-financial.





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The risk assessment process considers the likelihood of risk occurrence and the potential impact of that risk. These are then prioritized (Risk Prioritization) by categorization into one of three risk levels: High Risk, Medium Risk, and Low Risk.

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Likelihood



The risk management process starts with identifying risks, such as threats or business opportunities. The next step is to assess the risk impact and to determine whether the risk is at an acceptable level and how to manage it; for example to eliminate or to reduce the risk level before reporting the results to the Risk Management Committee.



Identifying Risks or Opportunities

Assess Risks and Impacts

Set Risk Management Indicators and Measure

Report Results

- or low.

- Reduce the likelihood or potential impact if benefits are greater than costs.



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RISK CULTURE

Risk management is not achieved only by policies, governance and risk management guidelines, but crucially also with stakeholder understanding and awareness of risks and risk management practices. SCGC realizes that successful risk management must be derived from making risk culture part of organizational culture and integrating it into business processes.

SCGC encourages executives to communicate about risk culture, the importance of risk management, and the application of risk management in actual operations, as well as to clearly define roles, duties and ownership of risks, while using language that is consistent with the risk management program agenda in SCGC's main meeting agenda. For employees, SCGC has incorporated lessons about risk and risk management in the employee training curriculum and encouraged the sharing of experiences related to the benefits of risk management.

Fostering this culture among personnel, from operational to management levels sustainably benefits SCGC's business partners, allies, and stakeholders.



Risk	Risk description	Risk management
Occupational Safety Risks	• The petrochemical industry's manufacturing process is complex and involves various dangerous activities, from production to transportation.	 Promote a culture of safety at all levels. Cultivate discipline and raise operational and occupational health and safety standards (OHS), along with health management systems and processes of safety management to meet international standards. Use of software and technology for impact assessment
Natural Resources and Environmental Management Risks	 Physical risks from climate change or greenhouse gas emissions Waste Management Risks from changes in biodiversity are a challenge for today's businesses. 	 Monitor and assess risks from various expected disasters, as well as prepare a business continuity plan (BCP). Assess short-term and long-term impacts and determine measures to prevent and mitigate them. Develop a water analysis system and alert relevant agencies to prepare the management plan. In terms of waste management, SCGC introduced policies to encourage waste management operators to adopt waste processor standards to reduce the risk of illegal and improper waste disposal while complying with circular economy principles. Set up a waste processor audit system to ensure that the waste management process complies with SCGC standards. Establish a Biodiversity taskforce committee to assess risks, study impacts, and set operational targets to promote "No Net Loss" and "No Gross Deforestation."



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Risk	Risk description	Risk management
Cyber Threat Risks	• The increasing use of information technology in business operations is vulnerable to cyber-threats, which continually evolve into new various forms. Ineffective protection against such threats can have far-reaching consequences as it can disrupt the company's systems and businesses or attack confidential or protected information.	 SCGC implemented the ISO/IEC 27001 quality control system and the SCGC Industrial Control Systems (ICS) policy in accordance with the ISA/IEC 62443 standards. The Digital Council and the Industry Control System (ICS) Cyber Security Governance working groups oversee policies on the implementation of information and digital technology systems in business and production control systems. The aforementioned working groups are also responsible for overseeing cybersecurity. Improve the protection against attacks on the information technology system through a security operations center (SOC), while regularly arranging for the cybersecurity risk assessment by internal and external auditors. Formulate the disaster recovery plan (DRP), the system recovery plan and the cyber incident response plan.
Risks from Business Transformation towards a Low Carbon Economy	Businesses need to adjust operations to be able to cope with changes in cost, revenue and related laws.	 Collaborate with partners and customers in the value chain to move towards a low carbon business, bring recyclable waste into new production processes, implement recycle mechanical and advanced recycling, and switch to the bio-based Ethylene. Develop low carbon products and SCGC Green Polymer[™] innovation. Implement projects that rely on natural climate solutions to accumulate carbon credits.



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Risk	Risk description	Risk management
Risks from impacts of regulatory changes	 Various business and investment expansions in many countries requires expanding the ability to track awareness and analysis of relevant laws and regulations to cover more businesses and countries in which investments have been made. 	 Supervise the Compliance Management System (CMS) both in Thailand and overseas to ensure everything follow the same set of guidelines throughout the organization in order to achieve sustainability, while adopting such digital platforms as the e-compliance system to enhance efficiency and effectiveness in tracking legal compliance. Setting policies and guidelines to ensure clear legal compliance, such as the anti-trust policy, the human rights policy, the privacy policy and the sanction policy that are in line with to international practices. SCGC has also developed an automatic sanction screening system to verify and screen suppliers and customers to conform with the trade sanction policy.



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SCGC'S APPROACH TO CREATING VALUE-ADDED WORK PROCESS

SCGC has applied the Integrated Report (IR) Framework for information disclosure. The company has developed a model for the creation of sustainable stakeholder valueadded through short, medium and long-term operational strategic plans. It analyzes and evaluates organizational adaptability to change, financial cost relationships, and indicators linking inputs to outputs. This approach and focus on sustainability promotes understanding of the environmental impact of all forms of capital expenditure. This sustainability approach also provides more information for project decision-making, promotes transparency and social responsibility, and ultimately yields added value for all stakeholders. This is described in the following six capital frameworks:





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Sustainable Development Issues

SCGC's analysis and assessment of sustainable development issues focus on the alignment with the Double Materiality approach, detailed within the international reporting framework GRI Standards 2021. The company actively reviews factors impacting the economy, society or the environment, while also understanding stakeholder human rights. This allows SCGC to actively reduce risk, create oppotunities and to maintain business competitiveness throughout the value chain.

SCGC identifies sustainable development issues that inform and determine wider corporate strategies. Action plans and key sustainability goals are reviewed annually to allow for agility in responding to developing issues.





Process	Description	
Business context assessment	 Internal Assess the context of business operation-related sustainable development and the expectations of stakeholders. SCGC has identified all sustainable development issues that may have both financial and non-financial impacts. 	
	 External Consider various issues related to conducting business and compliance with standard regulations, such as CBAM and the European Green deal, as well as guidelines from domestically - and internationally - recognized agencies, such as UN Sustainable Development Goals (SDGs) and World Economic Forum and WBCSD. Consider the direction of other businesses in the industry to help select and identify sustainable development agendas for respective business operations. 	
Stakeholder impact analysis	• Identify stakeholders and analyze each stakeholder group's expectations through various channels to appropriately collect feedback.	
Sustainable development analysis and impact assessment	 Analyze risks, impacts, and opportunities from sustainable development issues that SCGC has identified, by pointing out the scope, the severity, and the likelihood of any impact on the company, the society, and the environment. This will enable the company to effectively address key sustainability issues. 	
Build trust in key sustainability issues	• Provide key sustainability issues to risk management experts to present to SCGC senior executives in order to ensure that all key sustainability issues are included and consistent with business direction and stakeholder needs.	
Prioritize sustainable development issues	 Prioritize sustainable development issues in accordance with corporate strategy, with consideration to the impacts on stakeholders and their respective urgency in each year. Identify the directions for the implementation of key sustainability issues. 	



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SCGC'S KEY SUSTAINABILITY ISSUES



Level of impacts from ESG issues on SCGC, economy, society, and environment



KEY SUSTAINABILITY ISSUES

Environmentally Friendly Business		Low - carbon Business Development		
Issue 1	Issue 2	Issue 3	Issue 4	Issue 5
Laws on expanded producer responsibility	Recycled plastic innovations	Resource usage	Greenhouse gas management	Carbon tax measures
Related issues				
Recycled plastic innovationPromotion of renewable resources			 Reduction of greenhouse gas from the production process Procurement of low - carbon raw materials Development of low - carbon products 	
Opportunities				
 Access to green markets to expand customer base and increase competitive opportunities Efficient waste management that leads to an increase in plastic waste recycling 	 Upgrade the green supply chain to add product choices for consumers Promote the value and image of SCGC Green Polymer[™] brand and products 	• Reuse plastic waste in productions and innovations to add value to products	 Increase the percentage of clean energy use Develop environmentally friendly technology for production processes 	 Develop low - carbon products Expand investment in businesses aimed towards a low - carbon society



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Environmentally Friendly Business			Low - carbon Business Development	
Issue 1	Issue 2	Issue 3	Issue 4	Issue 5
Laws on expanded producer responsibility	Recycled plastic innovations	Resource usage	Greenhouse gas management	Carbon tax measures
		Risks		
Stringent laws on Extended Producer Responsibility (EPR), requiring packaging producers to be liable throughout the products' lifecycles Loss of competitive opportunities due to changes in trade regulations	 poor - quality plastic waste is an obstacle to recycling Continuous increase in demand for recycled raw materials 	-	 Changes in domestic and international trade regulations and conditions, such as the European Green Deal Constant rise in budgets required for reporting on greenhouse gas emissions and technology development 	• Flood - and drought - related disasters impacting businesses and related activities

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Business Strategy for Creating Sustainable **Economic and Social Value**

SCGC has integrated the concept of sustainable development with consideration to Environmental, Social and Governance (ESG) principles throughout the value chain in order to sustainably meet stakeholder demand. This has been particularly achieved by applying

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1. Increase the percentage of sustainable products and solutions

- Increase total sales of Green Polymer products to 1 million tons by 2030
- Accelerate the development of low carbon footprint products
- Develop HVA products that cater to customer demands and megatrends (health and aging society, automotive, urban society, and infrastructure, renewable energy)
- Increase the percentage of environmentally friendly products that focus on natural resource conservation and have extended lifespan, save energy, reduce climate change, and promote good hygiene to 67% by 2030





2. Support sustainable operations throughout the value chain

Conduct business with consideration to the environment and the society throughout the entire value chain

- Reduce greenhouse gas emissions and aim towards carbon neutrality by 2050 while increasing the percentage of low - carbon energy use
- Choose low carbon, environmentally friendly raw materials
- Increase eco-efficiency through various environmental projects that help reduce water usage, waste generation, and air pollution
- Create a happy and safe workspace for employees and business partners
- Promote respect for human rights throughout the entire value chain



circular economy principles to the development of environmentally friendly products, and the reduction of greenhouse gas emissions that enhances competitiveness at both regional and global levels.



3. Develop solutions for society

- Promote occupations in the community by adopting circular economy principles to encourage the practice of "Close the Loop for Plastic" that will help move towards the goal of a low - carbon society
- Create a safe society and reduce inequality through SCGC's CSR projects
- Increase the potential of the community to be more self-reliant through the development of community enterprises
- Use SCGC's expertise and experience to create sustainable value for society




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SCGC'S SUSTAINABILITY PERFORMANCE

SCGC places importance on achieving long-term positive outcomes for both the business and society. This emphasis supports sustainable business development strategies across the entire value chain by setting short-term and

long-term objectives to ensure sustainable business development that benefits both the world and society. SCGC's detailed sustainability performance under the ESG framework in 2023 is detailed below.



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Corporate Governance Structure



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Board of Directors

Makeup of the Board of Directors

Diversity

Male
Female

Number of Directors

Number of Independent Directors

Independent DirectorCompany Director

Executives

Non-Executive DirectorExecutive Director



Mr. Chumpol Na Lamlieng Chairman and Independent Director Mr. Roongrote Rangsiyopash Vice Chairman and Chairman of

Vice Chairman and Chairman of the Remuneration Committee



Air Chief Marshal Satitpong Sukvimol Director



Mr. Winid Silamongkol Independent Director and Chairman of the Audit and Risk Management Committee



Mr. Kitipong Urapeepatanapong

Independent Director and Member of the Corporate Governance, Nomination, and Sustainable Development Committee



Mr. Tos Chirathivat Independent Director and Member of the Remuneration Committee

Percentage of non-executive directors

11

92%

Evaluation of the performance of the Board of Directors **100%**

For more information, please visit Corporate Governance Structure



Mr. Suphachai Chearavanont Independent Director and Member of the Remuneration Committee



Mr. Thapana Sirivadhanabhakdi

Independent Director and Member of the Corporate Governance, Nomination, and Sustainable Development Committee



Mr. Cholanat Yanaranop Independent Director and Chairman of the Corporate Governance, Nomination, and Sustainable Development Committee



Mr. Tanawong Areeratchakul Director, Chief Executive Officer, and President



Mr. Rapee Sucharitakul Independent Director and Member of the Audit and Risk Management Committee



Mrs. Siriluck Rotchanakitumnuai Independent Director and Member of the Audit and Risk Management Committee



Roles and Responsibilities

The Board of Directors serves as the strategic leader of SCGC, driving sustainable growth through vision, goal-setting, strategy development, and policy formulation. The Board oversees management to safeguard long-term shareholder interests and meet stakeholder expectations.

Additionally, the Board is responsible for supervising and evaluating the performance of the President, CEO, and management team to ensure business objectives are achieved. The Board's specific duties and responsibilities are outlined in the Board of Directors Charter.

Analysis of the Board of Directors' **Skills and Expertise**

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SCGC adheres to rigorous director selection criteria aligned with the Thai Institute of Directors Association (IOD) guidelines. The Corporate Governance, Nomination, and Sustainable Development Committee assesses potential directors against a Board Skills Matrix, which comprises:

(1) Core competencies: Knowledge, expertise, or experience in macro-management, including the company's core business, businesses in the

company's value chain, organizational management, policymaking, strategic planning, global vision, risk management, and crisis management.

- (2) Specialized expertise: Specific knowledge, experience, or expertise in areas such as law, accounting and finance, information technology, and logistics management.
- (3) ESG proficiency: Knowledge, expertise, or experience in environmental, social, and governance (ESG) areas, including decarbonization, diversity, equity & inclusion, and governance.

Since 2022, all directors have undergone self-assessments, confirming the Board's alignment with SCGC's strategic goals and sustainable growth initiatives.



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BOARD SKILLS MATRIX AND EXPERIENCE



Companies mandate annual performance evaluations of the Board, its committees, and individual directors. These assessments aim to identify skill and expertise gaps and inform improvements to meet the company's strategic objectives.

Performance Evaluation of the Board

The 2017 Corporate Governance Principles for Listed

- The Board and its committees undergo annual performance evaluations. All members collectively review performance metrics and identify areas for improvement. Benchmarks are established to measure future progress objectively.
- Performance evaluations are conducted both collectively and individually through self and peer assessments. Evaluation results are presented to the Board for review and incorporated into the Director Development agenda.

The Corporate Governance, Nomination, and Sustainable Development Committee developed a performance evaluation framework for the Board, its committees, and the Chairman. The Board subsequently approved the implementation of annual performance evaluations for these entities, encompassing both collective and individual assessments.

The Committee oversees corporate governance, establishing policies and guidelines aligned with national and international best practices. It also monitors the Board and Sustainability Management Committee's performance against these standards and the company's sustainability strategy.



of Directors

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Sustainable Development Committee

The Sustainable Dvevelopment Committee (SDC) oversees two working groups: Economic and Corporate Governance, and Environment and Social. Led by SCGC senior executives, these groups drive sustainable business operations and report progress to the Committee every two months. Quarterly reports are submitted to the Corporate Governance, Nomination, and Sustainable Development Committee for review and subsequent presentation to the Board of Directors.





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Role of the Sustainable Development Committee

The Sustainable Development Committee is responsible for developing and overseeing strategies to achieve SCGC's sustainable business goals. This includes setting policies, monitoring progress, and managing risks across environmental, social, and governance dimensions. Our focus is on improving quality of life in our operating communities while driving long-term value. The Committee has identified **three key sustainability strategies:**

- 1) Increase the percentage of products and solutions that address sustainable development needs.
- 2) Develop sustainable business practices throughout the value chain.
- 3) Develop solutions for society.



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Stakeholder Engagement

SCGC has established a stakeholder engagement policy that prioritizes open communication and responsible interaction with all stakeholders. By actively seeking input and considering diverse perspectives, we identify key sustainability issues that inform our strategic decisionmaking. This ongoing engagement process fosters continuous improvement and ensures that our actions align with stakeholder expectations. SCGC recognizes eight primary stakeholder groups.

Stakeholders	Objectives	Stakeholder expectations	Engagement guidelines	Topics for reporting
	 Understand expectations and apply them in employee retention guidelines. Attract employees with potential to join the organization. Strengthen the organ- izational culture that embraces differences and diversity, and creates a safe and pleasant work environment. Promote employee partic- ipation in driving the organization's continuous growth. 	 Fair and equal treatment of employees, in terms of work, performance evaluation and remuneration. Career growth and advancement. Constant learning and skill development. Stable and safe work environment. Appropriate and equal treatment of employees, regardless of age, gender, race, religion, and education. Transparency of organizational news and information. 	 Survey employee engagement with the organization at least once a year. Create an organizational engagement development plan, at least once a year, and hold focus groups with employees to gain insights. Organize a quarterly leadership forum to communicate business strategies and direction. Initiate a job and career development project to create career pathways for employees. Develop a career development system on a digital platform to provide employees with information to prepare their own development plans that are in line with their career goals. Implement the <i>Your Career Your Choice</i> project to provide opportunities for employees to apply for vacant positions within the organization while setting up an appropriate and fair selection process that accounts for all selection criteria. Take care of employees' mental health through the <i>Care Ourselves</i> initiative in organizations with highly diverse work environments. Establish work measures to allocate resources for safe work. Organize activities for executives to meet with employees to strengthen relationships and communicate important information at least once a quarter. Provide news through accessible channels such as email, Line and the <i>Employee Connect</i> and <i>WeLink</i> application. 	 Business ethics and work supervision Respect for diversity and acceptance of differences Health and safety Employee care and development



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Stakeholders	Objectives	Stakeholder expectations	Engagement guidelines	Topics for reporting
Customers	 Understand needs and expectations in order to deliver products and services that meet the needs of customers and consumers. Build partnerships with customers to develop sustainable products and services. Respond to suggestions and requests for advice, recommend solutions for customers, and use suggestions to develop products and services. 	 Products and services that meet customer needs Add value to environmentally-friendly products throughout the production chain. Be a solution provider to manage problems for customers and brand owners to create quality products that can compete in the global market. 	 Provide an easily accessible channel for customer feedback. Survey customer opinions through customer satisfaction assessments at least once a year. Provide advice and co-develop products that meet customer needs through the i2 P Innovation Center. Share new knowledge with customers by holding seminars at least twice a year. Open 24-hour channels to receive complaints and suggestions. 	 Create customer experience. Innovation management Responsibility for products and services
Supplier and contractor	 Work collaboratively to develop work knowledge and innovations to further business growth. Maintain a safe work environment in both production and transpor- tation to achieve zero- accident goals. Promote legal compliance and compliance with SCGC policies. 	 Follow the terms and conditions of contracts made between SCGC and supplier and contractor. Treat supplier and contractor fairly and transparently throughout the order process. Reduce the risk of work-related accidents. Support the education on the elevation of operational standards according to the ESG framework. 	 Communicate expectations and supplier guidelines through the SCG Business Supplier Code of Conduct and provide advice on how to proceed accordingly. Regularly meet and visit supplier and contractor to exchange ideas and listen to various suggestions. Share knowledge and new trends to enable continuous development. Raise and create awareness on safety, environmental protection, social responsibility and respect for human rights at work. Advance the level of logistics supplier and contractor in the areas of evaluation and operational development under the Sustainability Program project, on an annual basis. 	 Business ethics and operational regulatory Create sustainable values for supplier and contractor. Human rights operations Health and safety



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Stakeholders	Objectives	Stakeholder expectations	Engagement guidelines	Topics for reporting
Shareholder / Investors	 Build confidence through transparent disclosure of operational information, with clear long-term goals and plans. Listen to opinions through various channels to help make informed decisions. 	 Good corporate governance, especially regarding trans- parent and up-to-date risk management and operational information disclosure to allow investors to see the business development direction. Continuously expand compet- itiveness and business growth. 	 Open appropriate channels to collect opinions. Organize activities for executives to communicate business strategies and directions, such as analyst conferences, every quarter. Communicate performance results through annual reports, sustainability reports and website. 	• Every topic
Community	 Disseminate knowledge and understanding about SCGC business operations. Understand expectations to help direct community engagement. Create engagement through projects that promote potential and benefit society in various aspects. Respect human rights and tackle inequality, provide care for the vulnerable such as the elderly, the disabled, children and youth in order for them to have a good quality of life. 	 Be responsible for the community and avoid causing any impact on the environment and the community safety. Listen to opinions and welcome the community to review the company's operations. Take part in the improvement of the quality of life and the promotion of job security, income and education in the community. Respect community rights and treat all communities fairly. 	 Establish a tripartite committee to allow for the community engagement in reviewing and making suggestions on the company's operations, at least once a year. Implement the EIA or EHIA process before the construction commences. Make a field visit to collect opinions and hear what the community may need at least once a month. Arrange for a factory open house for the community to visit at least once a year. Conduct the community satisfaction and relationship survey at least once a year. Organize brainstorming activities to plan social development projects. Provide advice and help on community development according to the ESG framework. Provide a 24-hour channel to receive complaints Create online communication channels to disseminate accurate, complete and timely information. 	• Biodiversity, community and social engagement ecosystem



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Stakeholders	Objectives	Stakeholder expectations	Engagement guidelines	Topics for reporting
Government agencies	 Conduct business in accordance with laws and regulations to minimize any risk of law violations. Propose national-level policies and plans to the government to help boost the country's industrial capacity. 	 Strictly comply with all laws, rules and regulations regarding business operations and industry-specific requirements. Cooperate and support government agencies in conducting academic studies and activities that are beneficial to society. Be a sustainable business role model that is in line with SDGs. 	 Join any committees or working groups assigned or requested by government agencies and share opinions, suggestions, and proposals on government policies and practices. Promote engagement and share good practices with the government for them to be disseminated to other industries. 	 Business ethics and operational regulatory Water and waste- water management Air quality management Community and social engagement
Media	 Communicate in-depth organizational information and support accurate and transparent information. Create online communi- cation channels to dissem- inate accurate, complete and timely information. Encourage engagement and good relationships with the media. 	 Disclose operational information in a transparent and timely manner. Be a good role model in transparent organizational management and excellence in operating according to sustainable development guidelines. 	 Organize activities to regularly receive and exchange opinions and listen to suggestions from the media. Create online communication channels to disseminate accurate, complete, and timely information. Organize regular activities to disseminate corporate information, such as quarterly earnings announcements. Support media activities that are beneficial to society and consistent with the company's operations. 	• Every topic



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Stakeholders Objectives		Stakeholder expectations	Engagement guidelines	Topics for reporting
Civil society, academics and opinion leaders, NGO	 Understand expectations and apply them to determine guidelines for engagement with civil society. Build partnerships to advance key sustainability issues. Apply knowledge from academics, experts, and related agencies to improve the organization's operations. 	 Join a network of large business organizations in encouraging and helping small and medium-sized businesses to drive forward sustainable business development issues. Strengthen the power of cooperation for better changes towards sustaina- bility goals, both domestically and internationally, as well as for the society and the environment. 	 Open channels to hear opinions that are easily accessible and consistent with the interests of each stakeholder group. Collaborate with various networks to drive forward issues that the public expects and are in line with SCGC strategies. 	• Every topic
			For more information, please visit the	Stakeholder Care section

SCGC is committed to ethical business practices and fulfilling stakeholder responsibilities in alignment with the SCG Group's values and Code of Conduct. Our corporate governance framework, established under the 2017 Corporate Governance Principles for Listed Companies, provides clear guidelines for directors, executives, and employees to uphold transparency, accountability, and ethical conduct. For detailed information on our corporate governance structure, board composition, roles, responsibilities, selection criteria, and performance evaluation, please visit the SCGC website.

CORE VALUES

Review of Corporate Governance Policy

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GOALS

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CREATIVITY

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SCGC has published its Corporate Governance Policy in both Thai and English on its website. For more information, please visit Corporate Governance Policy.

In 2023, the Board of Directors enhanced the Human Rights Policy to align with international standards. Additionally, the Remuneration Committee's charter was updated to include the ESG Committee's responsibilities, as assigned by the Board. These changes solidify SCGC's commitment to sustainable business practices.

QUALIT

TEAMWORK

GROWTH

TRUST

65

RESPONSIBILITY

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Business Code of Conduct

SCGC mandates strict adherence to the SCGC Code of Conduct from all employees to foster a robust organizational culture. This commitment is fundamental to building stakeholder trust, navigating economic, social, environmental, and technological challenges, and ensuring uninterrupted business operations. By strengthening our operational regulatory framework, we aim to mitigate risks from domestic and international investments while maintaining full compliance with relevant laws. Key related operational themes are described below.





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	Communications of Business Ethics	Anti-corruption	Compliance Management S	ystem
			Domestic operational regulatory	International operational regulatory
Objectives	Communicate business ethics and create awareness of corporate ethics.	• Fight corruption throughout the business value chain.	Increase efficiency in legal compliance.	 Enhance efficiency by taking into account local and national laws that may impact continuous investment growth.
Stake- holders	 New employees: training and evaluation Trained employees: update knowledge and information 	All employees	Concerned domestic employees	 Concerned overseas employees
Operations in 2023	• Communicate the code of business ethics to all SCGC employees, who must pass Ethics e-Testing and e-Policy Testing.	 The Board of Directors regularly reviews and updates details and guidelines and includes them as part of the SCGC Code of Ethics, which contains basic principles and reflects the organization's culture. All employees must comply with the anti-corruption policy to help make informed decisions in order that any business operations with corruption risks will be carefully considered and treated. 	 Use an e-Compliance system to administer the assessment of legal compliance, the creation of the post-assessment improvement plan, the inclusion of legal requirements, the follow-up on the assessment status, and the legal compliance summary report for the management. 	 Adapt the compliance management system in managing overseas businesses by considering legal compliance risks relevant to the nature of business in that particular country in order to determine the intensity of the process and the appropriate operational regulations in accordance with the estimated risks.

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	Communications of Business Ethics	Anti-corruption	Compliance Management System		
			Domestic operational regulatory	International operational regulatory	
Operations in 2023	• Communicate the Code of Ethics to business partners to use as shared guidelines.	• Set up a whistleblowing system to receive complaints and tip-offs regarding illegal actions or failure to comply with SCGC's corporate governance policy and business partners' Code of Conduct.	• Update important key legal requirements, such as the Factoty Act, Hazardous Substance Act, and laws governing radioactive substances and radiation radiators, for verification and periodical assessment purposes.	• Prepare a summary of laws in countries where high-risk investments are made in order to produce a legal database that will prevent any case of law violation.	
	• Create a Governance, Risk, Compliance (GRC) Helpline to offer counsels, regarding the supervision of compliance with the Code of Ethics, to employees.	• Organize refresher training on anti-corruption policies and guidelines for employees in high-risk processes, along with the self-evaluation process as an internal control system in areas such as sales, procurement, government affairs, and community relations.	Constant legal compliance audit by the Compliance Management Office and external audits.	• Organize training for relevant overseas employees to gain knowledge and ability to perform the legal assessment in the checklist format and report assessment results.	
	-	• Review and recommend improvements on operating systems found to be at risk in order to prevent corruption.	• Regularly communicate and create an awareness of operational regulations among employees through such approaches as compliance newsletters and compliance training courses that will provide basic knowledge in this area to all new employees.	-	
	-	-	• Conduct a Control Self-Assessment (CSA) and develop Automatic Sanction Screening to crosscheck the names of vendors and customers with the Sanction List.	-	

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Environmentally Friendly Product and Solution Development

SCGC recognizes that the unsustainable consumption of natural resources poses significant risks to both the environment and the economy. Depleting these finite resources can disrupt supply chains and hinder manufacturing operations. This concern is echoed in the Global Risks Report 2023, which highlights the growing importance of environmental factors in shaping economic growth. As environmentally conscious consumers drive market demand, businesses must adapt by developing sustainable products and solutions to remain competitive.







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SCGC is committed to optimizing resource utilization and recycling throughout our operations. Through the SCGC GREEN POLYMER™ brand, we've developed the Green Solutions product line, which focuses on four key principles: reduction, recyclability, recycling, and renewable materials. These innovative solutions address diverse consumer needs while minimizing environmental impact.

SCGC GREEN POLYMER™: PLASTIC INNOVATIONS FOR SUSTAINABLE BUSINESS VALUE

SCGC offers low-carbon plastic innovations that reduce energy consumption and greenhouse gas emissions throughout the production process. These products are certified with SCG Green Choice and carry a carbon footprint label. Examples include:

- SMX[™] Technology Resins Our SMX[™] technology produces high-strength plastic resins that reduce product thickness without compromising durability. This minimizes plastic usage and transportation energy, lowering greenhouse gas emissions.
- Mono-Material Packaging Solutions Our flexible mono-material packaging, made solely from PE, PP, or PO plastics, simplifies recycling and enhances resource recovery. These packages maintain the quality of traditional multi-layer packaging.



- **High-Quality Post-Consumer Recycled Resin (PCR)** We produce high-quality PCR resins from household plastic waste through mechanical recycling. Available in both PE and PP types, these traceable resins meet rigorous standards like GRS and EUCertPlast. They can fully replace virgin resins.
- **Certified Circular Polyolefin Resin** Our advanced recycling process transforms hard-to-recycle plastics into new resins with virgin-like properties. Certified to the ISCC PLUS standard, these resins address the growing demand for sustainable food packaging.



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Collaborative Projects on the Development of Environmentally Friendly Packaging Solutions

Collaboration with Global House

SCGC has partnered with Siam Global House to develop a closed-loop plastic waste management project. Together, we aim to transform plastic waste into high-quality recycled plastic resin (PCR). By collaborating with packaging producers, we will provide Siam Global House with solutions to reduce landfill waste and create value from plastic waste.

This project transforms plastic waste into PCR plastic pellets, which are then used to create eco-friendly plastic bags for Global House. These products align with circular economy principles by promoting reuse and reducing waste. This initiative expands the market for PCR recycled plastic resin, optimizes resource utilization, and lowers greenhouse gas emissions, contributing to a sustainable future.

Collaboration with Kao

SCGC has partnered with Kao Industrial (Thailand) Company Limited and Dow Thailand Group to develop eco-friendly packaging solutions. This collaboration aims to provide consumers with high-quality, recyclable packaging that reduces carbon emissions. The new materials will be used across Kao Industrial's product range in the future.

Collaboration with HomePro

SCGC, a plastics industry leader, has partnered with Home Product Center Public Company Limited to create eco-friendly "Circular Products" from recycled plastic waste. By transforming plastic straps, broken appliances, and stretch wraps into shopping bags, STACKO boxes, and garbage bags, respectively, we are demonstrating a commitment to circular economy principles. This collaboration aims to reduce waste, conserve resources, and contribute to Thailand's carbon neutrality and net zero goals.









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Promote the Use of Renewable Resources and Recycled Materials

• Bio Compostable Compound

SCGC's biodegradable plastic innovation is ideally suited for producing degradable bags, including garbage and shopping bags for both household and industrial use. Our Bio Compostable Compound is certified as industrially compostable by DIN CERTCO, Germany. At a temperature of 60°C, this product fully decomposes into carbon dioxide, water, and biomass within 180 days, leaving no harmful residues. It is a truly eco-friendly and recyclable solution.

• High-Density Polyethylene for MDOPE Film

A groundbreaking high-density polyethylene film, specifically designed for machine direction orientation, offers a solution for transforming multi-layer flexible packaging into recyclable mono-material packaging. Crafted from HDPE grade H619F, this film excels in heat resistance and facilitates seamless packaging production, from printing and coating to filling. Its versatility extends to replacing traditionally non-recyclable materials like BOPET and BOPA films in the printing layer, significantly enhancing overall recyclability.

• Pallets Made from Recycled Plastic

SCGC's Circular Plastics, a producer of 100% closed-loop recycled plastics, has partnered with Dutch construction giant Xella to replace traditional wooden pallets with sustainable, recycled plastic alternatives. Equipped with RFID chips, these pallets can be efficiently tracked and reused through a blockchain-based return system.

This innovative solution reduces greenhouse gas emissions by 70 tons of CO₂ equivalent annually and optimizes storage space by 60% due to their stackability.



Remarkably, after 5-7 years of use, the pallets can be recycled into high-quality plastic pellets, which can be transformed into new pallets, creating a circular process that can be repeated for over a century.







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• BWO1501G Grade 'Air Permeation Barrier' Film Coating

SCGC Green Polymer™'s BWO1501G-grade air permeation barrier film coating technology is a pioneering solution for the flexible packaging industry. As Asia's first RecyClass-certified coating of its kind, it enables a significant shift from multi-layer to mono-material packaging without compromising air barrier performance. This innovation maintains the same protective qualities as traditional packaging while offering superior recyclability. Its potential has been showcased at industry-leading events such as the ASEAN Flexible Packaging Summit in Jakarta, the Multilayer Flexible Packaging event in Spain, and the World Plastics Innovation Summit in Germany.





Thai Nam Poly Pack has adopted the BCG economic model to align its operations from raw materials to finished products with sustainable development principles. By catering to environmentally conscious consumers, the company utilizes SCGC's recyclable MDO-PE and LLDPE resins to produce eco-friendly vegetable and fruit wash pouches. This approach significantly reduces waste and contributes to a circular economy. Through continuous innovation, Thai Nam Poly Pack optimizes resource efficiency and waste management while meeting market demands without compromising environmental performance.



Wattana Krisnavarin Deputy Managing Director Thai Nam Poly Pack Co., Ltd.



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• Nets Up Project

SCGC's Nets Up project is a comprehensive circular economy model addressing marine debris. By collaborating with the government, fishing communities, businesses, and environmental groups, The project transforms discarded fishing nets into valuable marine materials. This innovative approach maximizes resource utilization and minimizes environmental impact.

To create a sustainable system, SCGC focuses on raising awareness, incentivizing proper waste management, and developing new markets for recycled materials. Fishing communities benefit from increased income through waste management and the creation of a waste bank fund.

This initiative is pioneering the use of marine materials in industries like textiles, demonstrating the potential of upcycling and reducing reliance on fossil fuels. By linking supply and demand, improving recycling processes, and enhancing product quality, SCGC is building a robust circular economy model.

(The average carbon footprint of 1 kg virgin nylon is 6.52 kg CO_2 equivalent (kgCO_2e)3)



The pilot project in Rayong has successfully collected and recycled over a ton of fishing nets, preventing them from polluting our oceans. This initial success highlights the potential of Nets Up to reduce greenhouse gas emissions and create a more sustainable future.

In 2023, SCGC partnered with over 10 local fishing groups in Rayong Province to pilot the Nets Up project. This initiative focuses on collecting and recycling discarded fishing nets, repurposing them as marine materials, with 200 to 500 kilograms being processed each month. To date, approximately one ton of nets has been collected and recycled.



In 2023, 1 ton (1,000,000 grams) of discarded fishing nets was collected to produce more than



Reduced the use of new resources by as much as **20,812.5** kgs of carbon dioxide equivalent.



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FEATURE STORIES NETS UP



The Kao Yod fishing community has transformed discarded nets into a valuable income source through the Nets Up project. By cleaning and sorting the nets, they've increased their selling price and generated additional revenue. The community has also developed a stronger awareness of marine pollution, recognizing its harmful impact on both the ecosystem and their livelihoods. SCGC's comprehensive support and collaboration were instrumental in the project's success, fostering strong community engagement.



Supat Prompiang Consultant Kao Yod Small Fishing Boat Community Enterprise

Promote Renewable Resources for a Sustainable Society

• "Upcycling Milk Pouches Project"

SCGC is committed to educating young people about waste management and supporting schools in addressing waste challenges. Recognizing the significant waste generated by milk pouches, SCGC partnered with schools in Rayong to launch the "Upcycling Milk Pouches Project." This initiative encouraged innovation and design to transform discarded milk pouches into valuable products, promoting resource efficiency and proper waste sorting. Students participated in the "Cut-Wash-Dry-Collect" process for recycling milk pouches and were rewarded with recycled items, fostering environmental awareness and demonstrating the circular economy in action. SCGC has also facilitated collaborations between the public and private sectors to collect, process, and create value from waste materials.

In 2023, SCGC successfully recycled over 1.6 million milk pouches from 1,850 schools across 50 provinces, benefiting a total of 304,030 students.







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Development of Low-Carbon Business

Climate change is a global crisis disrupting ecosystems and economies. Businesses must adapt to mitigate its impacts. SCGC is committed to developing low-carbon products and processes across our value chain to meet consumer needs. We aim to reduce direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions by 20% from 2021 levels by 2030 and achieve carbon neutrality by 2050. To accomplish this, we are taking the following steps:







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Performance during the past 4 years

Amount of greenhouse gas reduced

(thousands of tons of carbon dioxide equivalent)



Greenhouse gas emissions

(tons of carbon dioxide equivalent per ton of products)





SCGC has continuously been improving the improved energy efficiency, with a focus on the following main areas:

- Combustion Efficiency
- Electricity Efficiency
- Thermal Efficiency
- Machine Efficiency

Digital and AI technologies have been used as supplementary tools to increase accuracy and efficiency.

Waste Heat Recovery

SCGC's Waste Heat Recovery project is a key energy conservation initiative that converts waste heat into steam for power generation. By expanding and upgrading our heat recovery exchangers, we've significantly reduced reliance on external steam sources. This has led to lower energy consumption, increased system efficiency, and decreased greenhouse gas emissions. As a result, we've achieved annual energy cost savings of over THB 27 million and reduced carbon emissions by more than 2,500 ton of CO_2 equivalent per year.

Energy Efficiency Project for Vacuum Pump

SCGC has implemented energy-saving measures in its pipe and profile production process. By installing inverter devices to optimize vacuum pump operations, we've reduced energy consumption and lowered electricity costs. This initiative has cut greenhouse gas emissions by 80 ton of CO₂ equivalent and saved THB 1.1 million annually. We plan to expand this solution to our global operations.



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• Project to Improve the Cooling System Efficiency for Side Cracker



SCGC has optimized cooling system pumps in the olefins production plant by reducing the number of pumps from three to two while maintaining output. This enhancement saved 27,984 gigajoules of energy annually. The company has expanded this initiative to other cooling systems, resulting in a 4,000-ton reduction in greenhouse gas emissions and THB 28 million in energy cost saving.

Production Enhancement Project through Machine Learning Prediction Model



SCGC has optimized thermal reaction furnace efficiency through real-time digital technology, employing data analytics and machine learning to maximize performance throughout the furnace's lifecycle. By consolidating platforms, we've reduced energy consumption by 72,882 gigajoules and greenhouse gas emissions by 3,800 ton of CO_2 equivalent annually. Additionally, Al-driven cooling system improvements have saved 4,000 ton of CO_2 equivalent and THB 43 million in energy cost saving.



Gas Turbine Generator (GTG)



SCGC's Gas Turbine Generator (GTG) project is a strategic investment in sustainable energy and climate action. By harnessing waste gas from our production processes, the GTG promotes clean energy while prioritizing plant safety and efficiency.

This innovative approach has significantly reduced electricity costs and greenhouse gas emissions, surpassing our initial targets with a 430 ton of CO_2 equivalent reduction and THB 2.9 million in energy cost saving.



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More Uses of Clean Energy

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SCGC is committed to replacing fossil fuels with clean energy sources, including solar power and waste heat recovery. This transition reduces greenhouse gas emissions and creates value through low-carbon products and services.

We've installed 10.3 megawatts of solar power across our sites, including 2.4 megawatts added in 2023. Our solar farms and rooftop installations have reduced emissions by over 6,700 tons of CO_2 annually. We also offer floating solar farm solutions to clients, with a combined capacity of 150 megawatts, resulting in 105,000 tons of CO_2 reduced.

To further lower emissions, we're collaborating with partners on carbon capture technologies.

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Carbon Dioxide Capture and Storage

SCGC has made an effort to reduce the amount of carbon dioxide in the earth's atmosphere, through the following 2 methods:

• Carbon Capture and Utilization (CCU) Technology

SCGC is committed to reducing atmospheric carbon dioxide through Carbon Capture and Utilization (CCU) technology. In collaboration with Japanese machinery manufacturer IHI, and with support from Japan's New Energy and Industrial Technology Development Organization (NEDO), we are developing a process to convert captured CO_2 into valuable hydrocarbon compounds, including light olefins. This innovative approach will reduce our reliance on naphtha and create a new sustainable feedstock. A feasibility study is underway, with pilot plant construction planned for 2024 and operations commencing in 2026.





• Negative Carbon Footprint Technology

SCGC has partnered with Avantium to develop carbon-negative PLGA polymer using Avantium's Volta technology, which converts carbon dioxide into valuable chemicals without emitting greenhouse gases. PLGA, a blend of lactic and glycolic acids, offers exceptional oxygen and moisture barrier properties, recyclability, and both natural and marine biodegradability. These attributes make PLGA a sustainable solution for various industrial applications. ESG

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Carbon Offsets through Nature Climate Solutions (NCS)

In addition to operational emissions reductions, SCGC is investing in Natural Climate Solutions (NCS) to absorb and store greenhouse gases.

SCGC partnered with the Department of Marine and Coastal Resources to restore 1,100 rai of degraded mangrove forests across Rayong, Chonburi, and Phetchaburi provinces. This 30-year project involved planting approximately 500,000 mangrove seedlings with a target survival rate of 80%.

SCGC is currently registering for the T-VER and Premium T-VER projects with the Thailand Greenhouse Gas Management Organization (TGO), aiming for completion in 2024. These initiatives are expected to sequester around 6,500 tons of CO₂ annually.



Natural Climate Solutions (NCS): To absorb and store greenhouse gases in areas across 3 provinces, covering 1,100 rai

This accounts for more than 500,000 newly planted mangrove seedlings



- Promote local community participation through job creation under the "Green Job" concept.
- community participation. • Project duration: 30 years



SCGC, in collaboration with Thailand's Department of Marine and Coastal Resources (DMCR), has successfully restored 1,100 rai of degraded forests across three provinces, planting over 500,000 mangrove seedlings. This achievement marks a significant milestone in SCG's "Plant-Cultivate-Protect Campaign," aiming to plant one million trees nationwide.

² This estimate is based on ongoing operations.

Development of Low - Carbon Products throughout the Lifecycle (Product Portfolio Adjustment)

SCGC has aligned its operations with evolving market demands and stringent environmental regulations, including carbon taxes and the EU's Carbon Border

Adjustment Mechanism (CBAM). By developing low-carbon products and expanding investments in sustainable businesses, we are reducing our environmental impact and building a resilient future.

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SCGC will contribute recycled feedstock, including landfill and hard-to-recycle plastic waste from ASEAN countries, for pilot plant testing. The project is expected to be completed by 2027, after which SCGC plans to implement the technology in ASEAN to produce one million tons of eco-friendly SCG GREEN POLYMER™ products by 2030.



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Plastics Olefins • SCGC x Plastics2Olefins Project



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SCGC has certified **294 products** with Carbon Footprint labels and **20** with Carbon Reduction labels.

Additionally, **28%** of our total sales come from SCG Green Choice products, which contribute to lower emissions.

• High - Quality Recycled Plastic Resins

SCGC has developed advanced recycling technology capable of producing 45,000 tons of high-quality recycled plastic resins annually. Our High Quality Odorless HDPE PCR Resin eliminates odor retention, making it ideal for personal care and fragrance packaging. Backed by EuCertPlast certification, consumers can trust the traceability of our recycled materials. This innovative process reduces greenhouse gas emissions by 70% compared to traditional HDPE, contributing to a lower carbon footprint.



• Certified Circular Polyolefins Resin

Our products are created through an advanced recycling process that transforms hard-to-recycle plastics into new plastic resins. This innovative approach reduces carbon footprint compared to traditional plastic production and has earned ISCC PLUS certification for its entire supply chain.



• Green - Polyethylene

SCGC has formed a joint venture with Braskem to produce Green-Ethylene from renewable ethanol. This sustainable alternative to fossil-based ethylene has an annual capacity of 200,000 tons. The resulting Green-PE shares the recyclability of traditional polyethylene while significantly reducing carbon emissions. This partnership underscores our commitment to environmentally friendly solutions.





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Expanding Investment in Businesses Supporting a Low - Carbon Society

• Acetylene Black Business to Support Electric Vehicle Growth

SCGC is transitioning to a low-carbon future by developing high-value-added products and services. A key initiative involves a joint venture with Japan's Denka Company to produce Acetylene Black, a critical component for electric vehicle batteries and offshore wind energy transmission lines. This high-purity material supports clean energy solutions and industrial innovation. With an annual production capacity of 11,000 tons, the plant is expected to begin operations in early 2025.



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Responsibility for Production of Goods and Services

Consumers are paying increasing attention to both the quality and the environmental impact of products and services. SCGC actively prioritizes the quality and safety of our products and services, and our responsibility to environmental standards, and compliance with evolving regulatory trends, both domestically and internationally. This includes the European Union's (EU) Carbon Border Adjustment Mechanism (CBAM), which requires manufacturers to reduce production-related greenhouse gas emissions.

SCGC is committed to developing high quality products and services by applying innovation and new technology to our production processes, and by implementing environmentally-friendly design, reducing the production of hazardous chemicals. Risk assessment is undertaken to reduce negative impact on consumers and to the environment throughout the product life cycle, by focusing on the efficient use of resources in accordance with the principles of the circular economy. These initiatives include the production of low-carbon products, benefiting society, the environment, and by creating sustainable economic growth.

TARGETS	PERFORMANCE IN 2023
67% of revenue from SCG green choice products by 2030	56%
Products that have received a product carbon footprint label	294 product groups (90% of product groups)
Products that have received a carbon footprint reduction label	20 product groups

OPERATIONAL STRATEGY



1. Implement the Product Stewardship Management System (PSMS)



2. Assess the impact of greenhouse gas emissions and receive a carbon footprint product label certification from the Thailand Greenhouse Gas Management Organization (Public Organization).



3. Develop products that are safe and environmentally friendly throughout the product life cycle.

as well as determining preventative measures to reduce environmental impacts on users and communities. Control the use of items in SCGC's seven hazardous chemicals standard list, which covers both domestic

• Implementation of Product Stewardship

Product risk assessment through Product Hazard

Analysis (PHA) and Failure Modes and Effects

Analysis (FMEA) processes are implemented to ensure

that products are safe and environmentally friendly,

and international hazardous chemicals, for example, by following the EU's REACH Restriction and SVHC in order to eliminate the use of hazardous chemicals in production. In 2023. 10.8 % revenue was from products containing hazardous chemicals in the REACH category and 2.4% of total revenue from substances covered under SVHC 2.4%

Determine targets for which the use of lead and lead compounds can either be reduced or eliminated by 2027 in the PVC product group, such as PVC pipes, rainwater gutter systems, agricultural water pipes, electrical conduits, and air duct covers.

Assess the environmental impact of greenhouse gas emissions and attain carbon footprint labelling of products certified by the Thailand Greenhouse Gas Management Organizaton (TGO).

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In 2023, a total of 298 products were given a carbon footprint label, or 86% of all products, and 20 received carbon reduction certification, accounting for 6% of total products.

In addition, the product life cycle has been assessed per the Environmental Product Declaration on polyethylene compound PE 112 and PE 100 for the production of high-pressure drinking water pipes. They have been assessed in accordance with ISO 14025 and this will extend to other products over the next year.

• SCGC develops products to be safe and environmentally friendly throughout the life cycle. In the process of new product development, SCGC has integrated sustainable product development concepts by

Considering SCG green choice guidelines: climate resilience, circularity and well-being.

SCGC selects raw materials that are safe and environ mentally friendly, prepares hazard analysis for products and packaging, and produces product safety data documents in accordance with the Globally Harmonized System (GHS).

SCGC develops innovative green products such as the SCGC Green Polymer[™] to reduce greenhouse gas emissions, waste and pollution, and to improve resource efficiency.





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Management System (PSMS)

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SCG GREEN CHOICE PRODUCT EXAMPLE











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Creating Customer Experiences

SCGC proactively addresses customer needs by learning from customer experiences through listening to customer feedback. SCGC believes that delivering customer satisfaction through our products and services greatly influences operational results. Understanding and acting on customer feedback is especially important in today's volatile market environment, which is experiencing an imbalance between supply and demand, and changes in consumer habits as they follow trends towards environmentally friendly products and services. SCGC cooperates with and supports our customers by proactively meeting challenges to manage change as it occurs. Operations are as follows.





PROMOTE KNOWLEDGE, REPORT CALCULATION, AND GREENHOUSE GAS DATA

The effect of global warming is becoming increasingly evident, with public awareness of the issue also rising. The European Union (EU) is actively focused on greenhouse gas emissions (GHGs) and has set a goal to reduce GHGs by 55% by 2030. In 2050 SCGC aims to achieve net zero GHG.

The EU plans to implement a Carbon Border Adjustment Mechanism (CBAM), which will set prices to prevent imports of certain products with high greenhouse gas emissions into the EU. This will begin with electrical services, cement, fertilizer, iron, steel and aluminum.

It is expected that plastic products will be the next product group to be impacted by CBAM measures. For this reason, manufacturers in Thailand must be aware that in the near future there may be an impact on the export of their products to European countries.

SCGC has monitored these regulatory developments and has accordingly directed personnel to participate in training on GHG information reporting systems, as organized by the Thailand Greenhouse Gas Management Organizaton (Public Organizaton) (TGO). This training has provided our personnel with knowledge and understanding related to product greenhouse gas calculations, data collection on emission sources, assessment of greenhouse gas quantities, and carbon footprint reporting.

SCGC understands the importance of preparation and planning for our customers and business partners. We have therefore organized workshops for targeted groups of companies who are export focused and who may be affected by CBAM. These workshops have enabled our partners to collect real data on their production processes, and to evaluate raw materials that could reduce their greenhouse gas emissions. In 2023 we organized workshops for seven companies, with workshop participants reporting an 89% satisfaction rating. SCGC has increased its innovation excellence by organizing training in "Design Thinking" principles, and by use of the Business Model Canvas to help customers understand innovation processes, and to create flexible business plans to promote innovation and business creation to expand their businesses. The training sessions have received positive responses from more than 20 participants, with 82% expressing satisfaction.

In addition, in response to changing consumer behavior, SCGC has established an i2P (Ideas to Products) center as a space for customers to develop solutions and their own ideas to create products for actual sale. The center provides a space for customers to design products, test product properties, and use equipment, machinery and technologies such as prototype product design programs, which not only designs products, but also creates final

product testing methods. This helps reduce product

development and testing time, to more quickly meet

fast-changing market demands and trends.

In an era of rapid technological change, businesses

must adapt through innovation and by introducing new products or services to meet customer needs. Therefore, innovation and flexibility in business must play an

important role in helping businesses to operate effectively.

PROMOTE BUSINESS ADAPTATION

PROMOTE TRADE OPPORTUNITIES

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SCGC continues to apply circular economy principles to our business operations throughout the supply chain. We are committed to environmental best practices enabling

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our customers and partners to access recycled plastics produced with high quality post-consumer recycled resin (High Quality PCR), used in eco-friendly packaging. Customers and partners are encouraged to manage their resources and costs effectively to create positive change.





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PCR pellet



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PROMOTE WORK EFFICIENCY THROUGH DIGITAL SYSTEMS

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SCGC's "Digital for Customers" unit provides consultation services to our customers. This is focused on increasing their business competitiveness through adoption of technology in their organizations. This unit specializes in providing consulting services that emphasize the use of data analysis and work process improvement to reduce costs and increase profits. It helps customers to manage orders, access information and check product delivery status with greater efficiency. We aim to continuously update our customers with technological knowledge enabling them to achieve their sustainable development goals using digital tools. For more information, please visit <u>Creating Customer Experience.</u>





Driving a business towards sustainability requires cooperation from all sectors. SCGC is committed to creating value for all stakeholders by focusing on enhancing the capabilities of our supply chain, and elevating our business partners in delivering environmentally and socially friendly products and services. We conduct business in accordance with international standards, with fairness, transparency, and respect for human rights. To achieve sustainability goals, we aim for a low-carbon society. We optimize operational resource utilization using a rigorous process of selection, development, evaluation, and review under the following three main objectives.

MANAGEMENT APPROACH

competition.

1. Risk management in the supply chain Manage risks and improve the efficiency of procurement of goods and services, considering cost-effectiveness, price, quality, and service in order to respond to rapidly changing business

2. Driving the supply chain with digital technology

Develop work processes with technology, creativity and innovation, agility and speed, transparency, fairness, and operating cost reductions.

3. Supply chain development for sustainable growth

Elevate business partners by managing social and environmental risks, and developing business plans aligned with risks and opportunities, thereby enhancing our partners' capabilities for sustainable growth.



Sustainable Supply **Chain Management**

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partners. SCGC has expanded its procurement, diversifying			
across many regions to manage risks and mitigating			
the potential impacts of er	mergencies or raw material		
shortages, thereby creating more efficient procurement			
cost management. Business partner risks are actively			
Ø			
TARGETS	PERFORMANCE IN 2023		

SUPPLY CHAIN RISK MANAGEMENT

SCGC prioritizes supply chain resilience by ensuring the

continuity and diversity of transactions with our business

TARGETS	PERFORMANCE IN 2023
Have an assessment of environmental, social, and governance risks (ESG) with all Tier 1 business partners	100%
Implement projects to help improve business partners with high risk and that may have an impact on the business.	100% (21 suppliers)
Green procurement value at greater than 14%	21%
Satisfaction of business partners	98%

assessed, with important partners flagged to undertake joint development projects in accordance with SCGC's sustainable business management guidelines. In 2023, SCGC delivered the outcomes described below.

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- Increased alternative sourcing options from a selection of more than 120 new business partners, accounting for about 15% of business partners annually, thereby increasing price competitiveness.
- Jointly planned within the SCGC and SCGC Joint Ventures to consolidate trade and service expertise, resulting in a reduction in operating costs of 3-15% of the purchase value of goods and services.
- Developed a business partner screening process to comply with environmental, social, and governance (ESG) regulations.
- Sanctions Screening: monitored the operations of business partners according to the Sanctions List of the United States, the European Union, and the United Nations.
- Human Rights: communicated our human rights policy and assessed human rights risks among SCGC's business partners, focusing on important issues related to the protection of migrant worker rights, forced labor and legal employment conditions.
- Assessed human rights risks among SCGC's business partners.



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reduce operational risk.

SCGC developed a centralized procurement database, consolidating existing platforms and optimizing data collection, analysis, and utilization. We introduced artificial intelligence (AI) technology to our procurement database, resulting in a procurement system called The Arch. The Arch can recommend important information related to procurement, such as price information, lists of partners involved in specific products and services, and related evaluations. Therefore. The Arch facilitates decisions that

In 2023, SCGC developed a business partner management service system called VeNus. This system supports and facilitates work processes and increases opportunities to present SCGC's business partner products and services.

VENUS

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The Vendor Portfolio Management System (VeNus) increases business efficiency via a comprehensive procurement management system, covering all steps and aspects of the procurement process.

System Operation

- Business partners can independently manage related information (vendor self-service)
- Business partners can access procurement and appraisal information (centralized information)
- Business partners can receive important information and access communication channels between business partners and suppliers (two-way communication system).

In addition, VeNus provides comprehensive business partner management, from registration, selection, audit, evaluation, and communication of necessary information (one-stop-service system).

SCGC has been certified to the Sustainable Procurement Standard

ISO 20400

SUSTAINABLE DEVELOPMENT OF SUPPLY CHAINS

SCGC continues to prioritize sustainable business development across all of its operations: from business partner selection to risk assessment, and setting future development plans, both before and after the delivery of products and services.

SCGC actively communicates its environmental, social, and human rights governance policies and intentions for conducting business with business partners through the Suppliers' Code of Conduct. It references the themes outlined below.

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DRIVING THE SUPPLY CHAIN WITH

To support sustainable business growth, SCGC continues to focus on the application of digital technology in the

procurement process to strengthen business operations and competitiveness, and transparency and fairness.

DIGITAL TECHNOLOGY

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Collaborate with business partners to reduce Scope

change and greenhouse gas emission analysis for 128 business partners, and begin real data collection from 60 business partners. Create a business partner development plan to collect data and track progress, and share knowledge on reducing greenhouse gas emissions with business partners.

Collaborate with business partners to develop environmentally friendly products and services Encourage business partners to review and reduce their environmental impact throughout the operating cycle. SCGC collaborated in 2023 with business partners to develop environmentally friendly products and services. This resulted in increasing the proportion of environmentally friendly procurement to 21 percent of total procurement value. These projects are described below.



Recycling pallet project

Collaborated with Srithai Superware Public Company Limited to recycle used plastic pallets as material for producing new pallets or returnable plastic pallets. Newly produced pallets have the same properties and service life as traditional pallets. By using recycled plastic pallets for up to 100% of the remanufacturing process, the lifespan of plastic as a production material can be significantly extended.

Improving blade sharpening work Collaborated with SS & R PRECISION COMPANY LIMITED to improve a blade sharpening process, allowing wastewater from the process to be recycled. The company has also jointly developed blade sharpening technology, extending the service life of blades by 50%.

SUSTAINABLE SUPPLIER AND PARTNERSHIP



SCGC hosted a series of four seminars for suppliers in 2023 to disseminate sustainability knowledge, promote joint development, and to strengthen business partnerships. SCGC representatives shared knowledge on the application of digital technology in purchasing operations, the adjustment of the industrial sector to a low-carbon society, the promotion of environmentally aware operations, creating a workplace culture of safety and occupational health, and shared knowledge on international rules and regulations, such as respect for human rights. Over 200 business partners participated and undertook to further develop and enhance organizational collaboration.



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Management of Social Innovation and Business Operations

SCGC fosters an innovation-driven culture by nurturing creativity and investing in research and development to enhance employees' skills and capabilities. Implementing innovation in operations not only reduces costs and boosts efficiency through technology-driven product development but also creates new business prospects, minimizes environmental footprint, and strengthens competitiveness. SCGC views innovation as pivotal in steering the company towards a sustainable future.



Number of R&D Positions: 655 PEOPLE





or **0.82%** of the company's petrochemical product revenue R&D Spending as % of sales)



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PRODUCT INNOVATION

This refers to the invention and design of new products, or the improvement of existing raw materials and materials used in products to create change. SCGC applies innovation in producing products that can meet consumer needs in various aspects as follows:



• EL-CAT Catalyst

EL-CAT Catalyst is a catalyst used in the HDPE production process, developed by SCGC to have quality comparable to products from leading global manufacturers. SCGC initially researched and developed this product for internal use, improving it to achieve the optimal efficiency before offering it to external customers. Currently, SCGC has a Catalyst

Pilot research and development unit for continuous production and quality improvement of this product.

SCGC[™] PP P483JU

This polypropylene block copolymer resin is utilized in plastic injection molding for industrial products, particularly in large-scale applications such as shipping pallets. Its distinctive molecular structure is designed to minimize white marks during the injection process, ensuring smooth and aesthetically pleasing plastic surfaces. The resin offers excellent impact resistance and 30% greater bending strength compared to standard polypropylene block copolymers. Additionally, it is 20% lighter than traditional plastic resins,



contibuting to a potential reduction of CO₂ emissions by up to 10%, thereby enhancing its environmental friendliness.

• SCGC[™] PVC GG700

This PVC copolymer pellet exhibits excellent meltability and is easier to mold compared to standard PVC. This characteristic enables lower molding temperatures without compromising strength. It also offers flexibility in adjusting the plasticizer formulation, which helps reducing production costs. Moreover, GG700 PVC copolymer demonstrates enhanced flexibility and can withstand impacts that are 5-10% higher than typical PVC formulations.



PRODUCT Benefits INNOVATION		Implementation	Challenges	
	 Focus on quality products that meet customer needs for increased strength. Reduce raw material usage, increase production efficiency, and be environmentally friendly. 	 Strengthen the Innovation Management process to enhance SCGC's innovation in research and development, production, and testing to be faster and more adaptable to situations. Invest in equipment and machinery for Application Development such as Simulation Programs, 3D printing, molding machines, and testing equipment to understand product manufacturing and actual customer usage, ensuring quality before delivery to customers, which is crucial in new product development. 	 Increase the capability to develop new products for the market with quality and in time to meet demands, necessitating investment in research, machinery, and equipment. Implement digital technology in many work processes, along with understanding customer usage and foster good cooperation both within and outside SCGC. 	

A digital platform designed to address issues arising
from petrochemical market volatility by digitalizing the
order management system, sales process, and supply
chain management. This initiative incorporates an
artificial intelligence system that analyzes trends in the
plastic pellet market and ensures timely and efficient
product delivery to customers, even amidst evolving
market conditions. With a monthly sales and transport
volume exceeding 200,000 tons, this platform,
known as DCP, enhances overall management
efficiency across the entire supply chain. It optimizes
processes from supplier and raw material selection to
production, warehouse management, quality control,
and final product delivery to consumers.

OPERATIONAL INNOVATION

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This involves developing operations or improving work processes by implementing technology, and creating platforms in production and operations.

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Digital Commerce Platform (DCP) ٠

Accelerated NPD Digital Platform .

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This is a platform for managing product development to accurately meet customer needs and market trends in a timely manner. The goal is to reduce new product development time by 50%. The platform creates models from a centralized database of no fewer than 40,000 sets to lead to the development of plastic resins that best meet customer requirements.

Simulation & Material Selection for ۰ "Sustainable Packaging"

This is an innovative simulation program (Finite Element Analysis: FEA) combined with expertise in Green Innovation for prototype packaging design. It helps reduce waste during the molding trials and customer use, as well as reduces the time for packaging development and testing to just one-third of the traditional process. For example, a process that used to take 15 months can now be completed within 5 months.



FORMULATION PREDICTION

OPERATIONAL INNOVATION	Benefits	Implementation	
	 Deploy digital technology to improve efficiency in research and development and streamline supply chain management. Reduce time and costs while maximizing the efficient utilization of production resources. Enhance the business's competitive edge. 	• Deploy a range of digital technologies including Big Data, Internet of Things (IoT), and Artificial Intelligence (AI) to expedite work with enhanced accuracy, precision, and efficiency. This approach aims to meet customer demands promptly and improve adaptability to industry fluctuations.	

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Mahidol University **Faculty of Science** •

Collaboration with the Faculty of Science, Mahidol University

This is a collaboration between SCGC and external

networks to create knowledge, experience, and creativity.

The aim is to bring these back to develop SCGC's personnel

and increase SCGC's competitive capacity, creating

balance and sustainability in economic, social, and

environmental aspects. The collaborations between the

company and other organizations include the following:

Research and development of processes for carbon dioxide capture and utilization, processes for converting plastic waste into high-value products, and advancing alternative energy technologies like batteries and hydrogen production. These sectors have secured research funding exceeding THB 4.5 million from the Program Management Unit for Competitiveness (PMUC).

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barrier properties and is biodegradable through home composting.

• Collaboration with Startups

In addition to partnering with large organizations, SCGC actively supports collaborations with startup companies that bring innovative ideas and invest in technology, particularly for advancing environmentally friendly practices. In 2023, SCGC partnered with a company that has developed a low-energy process for producing propane from waste, originally conceived at the University of Oxford, England. This technology is currently undergoing establishment as a commercial venture.

OPEN INNOVATION	Benefits	Implementation	
	 Promote internal knowledge growth within the organization by supporting startups with promising technologies financially, collaborating with partners, and creating opportunities for research and development of innovation partnerships across public and private sectors, and educational institutions globally. This effort translates innovations into practical applications and enhances business outcomes. 	 Forge partnerships and networks for innovation and technology advancement with both domestic and international partners by leveraging partners' capabilities and expertise to accelerate technology development quickly and successfully. Enhance competitiveness significantly through Corporate Venture Capital investments aimed at acquiring technologies that align with SCGC's regional growth strategy, particularly in decarbonization technologies. 	



Collaboration with Avantium BV. Netherlands

SCGC is collaborating on eco-friendly innovations to advance the production technology of Poly (lacticco-glycolic acid) (PLGA), utilizing CO₂ as a primary material. The initiative aims to establish a prototype plant with a future production capacity of 5,000 tons per year. PLGA is known for its highly efficient oxygen

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Data and Cybersecurity

The risk of cyber threat is increasing and comes in various forms, including malware or ransomware attacks on network systems and traffic. This risk is heightened by the increasing use of cloud-based technologies, which can be vulnerable to unauthorized interference and data access, jeopardizing information systems and data security, negatively impacting business operations.

MANAGEMENT APPROACH

SCGC has set a goal of "Zero Cybersecurity Incidents, and Zero Personal Data Leakage (online)" to ensure continuous smooth business operations. By implementing systems to prevent, respond to and reduce cyber threats, our information technology policy (e-Policy) operates in accordance with the international standard ISO/IEC27001 and the Information Security Management System (ISMS). Production control systems are evaluated and improved to comply with ISA/IEC62443 standards, along with raising awareness and developing employees' capability to prevent and respond to cyber threats. Moreover, SCGC has an effective internal management and control system for information and cybersecurity at three levels as follows:

For more information, please visit supervision of personal information privacy





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Management level	Responsible Person	Responsibilities
Policy Level	IT Governance Committee (ITG)	Establish policies and guidelines for maximum benefit, including supporting and monitoring information technology investment projects in line with business strategies.
	Cybersecurity Governance Committee (CGC)	Determine policies and guidelines for cybersecurity management in accordance with e-policy, including consideration, approval, and monitoring of implementation of risk management plans.
Management Level	Cybersecurity Working Group	Set policies, guidelines, and monitor the risk of cyberattack. Follow up on important related projects, including considering new technology trends that could impact business operations, to find effective prevention methods and measures.
		Coordinate with relevant parties in the event of a cyberattack to ensure system recovery and provide evidence efficiently.
	Digital Council	Set policies and plan strategies for information technology and digital business systems, including cyber security and risk assessment for technological changes that can impact business.
	Industrial Control System Cybersecurity Governance Committee	Supervise production control system operations and present risk management standards in line with ICS safety policy.
Operational Level	Digital Division	Establish practices and provide various services regarding information technology (IT) and operational technology (OT), including implementing projects to meet business needs.
		Evaluate and monitor work with service providers and report impacts and information technology system risks to the cybersecurity governance committee on a regular basis.



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CONTROLS IN DATA AND CYBERSECURITY

SCGC requires an Annual Vulnerability Assessment (VA) and a Network Architecture Review from internal and external personnel, and demonstrable improvements to security systems in accordance with the NIST (National Institute of Standards and Technology) framework.





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In 2023, SCGC identified a case of phishing emails within the company's network. But no damage was caused as employees were aware of the risk and were able to respond appropriately. Our cybersecurity operation systems development is outlined below.



PREPARATION AND PREVENTION



INCREASE IMMUNITY

Support projects to increase cyber-immunity: phishing simulation tests 6 times per year. e-policy testing, "cyber hero" campaign, e-learning, cybersecurity awareness.



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CONTROL EVALUATION

Assess internal controls for information security with reference to ISO/IEC27001 to review the adequacy of the system; create a proactive and preventive system to reduce risk in business operations.



RISK MANAGEMENT

Inspect and evaluate systems at risk from end of life (EoL) and end of support (EoS) and find ways to prevent and resolve them.

DATA PROTECTION

Announce SCGC privacy policy, cookie policy, consent management and data subject rights, and practice procedures for dealing with the event of a personal data breach.



Organize knowledge training on personal data protection and on IT security awareness for high-risk working groups. Employees and IT service business partners must pass a test measuring knowledge on e-policy, with 100% passing required.

SYSTEM CHECK Install software to detect and prevent threats to computer equipment.



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CYBERSECURITY INNOVATION

SCGC has introduced automatic cyber threat detection systems: the "Security Information and Event Management" (SIEM) and "Security Orchestration, Automation and Response" (SOAR) which detect abnormalities from interconnected systems and warn relevant parties. We also continuously evaluate new security tools to increase secure work coverage, including zero-trust architecture, secure access service edge (SASE) and cybersecurity resilience frameworks, as well as the use of passwordless technology when developing new applications, and using Al technology to detect cyber threats.

SCGC has shared and applied policies, processes, and knowledge to its overseas subsidiaries to ensure that IT security management meets the same standards and practices.

For more information, please visit Information and Cyber Security



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Water and Wastewater Management

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Low rainfall and drought were regional features of El Niño in 2023, impacted water management and posing a risk of insufficient water supply. This includes Thailand's eastern water network pipeline and community water consumption, as well as agricultural and industrial use in Rayong province.

SCGC has formulated strategies to effectively manage water supply in a sustainable manner by actively monitoring Thailand's water and climate performance. SCGC actively plans and prepares contingencies for potential climate-related challenges, in collaboration with multiple sectors to ensure alignment with shared common goals and ensure water security.



OPERATIONAL STRATEGY

- Cooperate with all sectors in integrated water management to reduce water risks and reduce impacts on communities and society.
- 2. Reduce water withdrawal by increasing efficiency in production processes.
- 3. Treat wastewater to meet quality standards; monitor quantity and quality; report incidents, investigate causes, correct and reduce wastewater releases; reuse treated waste water.
- 4. Restore ecosystems related to water sources.

MANAGEMENT APPROACH

SCGC conducts water risk assessment using the WRI aqueduct tool, together with operating site risk assessment, to determine monitoring and risk reduction measures. SCGC also cooperates with various sectors, including those outlined below.

• Working with various agencies on the Government Subcommittee for Monitoring and Water Situation Analysis at the Smart Water Operation Venture Center (SWOC) to monitor and predict flood and drought risks and prepare prevention measures, such as water redistribution management in the eastern water pipeline network. • SCGC has been selected as an industrial representative on the Eastern Seaboard Basin Committee to help set the direction of water management, allocation, and prioritization, conservation and drought and flood management for Rayong, Chonburi, Chanthaburi, and Trat provinces.

 Collaborate with the Water and Environment Institute for Sustainability of the Federation of Thai Industries to set joint goals for promoting efficient water management and creating cooperation between water users and managers at the basin and national levels.

SCGC COOPERATION AND ROLE IN THE THAILAND WATER USER ORGANIZATION:

Established in accordance with the Water Resources Act of 2017, this organization incorporates a group of over 30 water users in the same watershed area, working together for the mutual benefit of water resource management.

SCGC emphasizes cost-effective and sustainable use of water resources through good water management and the integrated application of technology. Starting from a pilot study and recently expanding to all SCGC

companies, water management also includes the use of digital technology to maximize operational efficiency.

SCGC has adopted a sustainable water management strategy by improving water use efficiency in production processes. This includes reducing water risks through integrated water management, reducing water consumption by increasing efficiency in production processes and products, treating wastewater to meet quality standards, monitoring quantity and quality, reporting incidents, investigating causes, implementing corrective actions, minimizing external wastewater discharge as much as possible, recycling treated wastewater, restoring water-related ecosystems, supporting water management for communities and agriculture, and developing the capabilities of water management personnel.

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 Represent the industrial sector on the Subcommittee on Water Management in the Eastern Economic Corridor (EEC) under the National Water Resources Committee, with a role in jointly planning risk management and water management to mitigate drought while minimizing impact on water users in all sectors.



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ACHIEVEMENTS IN ENHANCING WATER EFFICIENCY IN 2023

Projects	Operation	Result	Target	
Increase efficiency of low-pressure steam optimization	• Study possibilities to improve, review risks and impacts, and test and adjust low-pressure steam which can increase steam turbine energy efficiency, reducing steam use and conserving water.	Reduce water use by 11,650 cubic meters per year.	Reduce water use by 8,760 cubic meters per year.	
• Reduce the amount of water used in the cooling tower at HDPE4 and PP3.	• Expand pilot operations to factories HDPE4 and PP3 by changing chemicals used in cooling towers to increase the control values of chloride and calcium. The new chemicals can reduce chloride levels and increase water circulation in the cooling tower, reducing makeup water.	Reduce water use in the cooling tower by 8,000 cubic meters per year.	Reduce water use by 8,000 cubic meters per year.	
• Application of the PI asset framework (PI AF) to optimize demineralized water in the regeneration process.	• Study the status of adjusting the resin cleaning cycle so that water quality is free from minerals (demineralized water) and that water from the regeneration process is appropriate for the quality and quantity. Digital tools such as PI can monitor data in various steps, including water quality, in order to adjust the conditioning process to reduce water withdrawal.	Reduce water use by 150,000 cubic meters per year. Reduce costs by approximately THB 1.5 million per year.	Reduce water use by 11,500 cubic meters per year.	

For more information, please visit <u>Sustainable Water Management.</u>

Air Quality Management

SCGC is committed to reducing the impact of air pollution on the environment, communities, and employee health by utilizing various technologies to reduce emissions, in accordance with local regulations and international standards. Our goal is operational excellence in controlling the release of nitrogen oxides (NO_), sulfur dioxide (SO₂) dust, and volatile organic compounds (VOCs) from production processes.

OPERATIONAL STRATEGY

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- 1. International technologies, good practices, procedures, and guidelines are applied to control air pollution from the source through strict controls on production processes increased energy efficiency, and reduced fuel consumption and air emissions.
- 2. SCGC applies circular economy approaches to reduce natural resource use and air pollution emissions by recycling waste gas.

- 3. Air pollution exhaust is monitored in real time via Continuous Emission Monitoring Systems (CEMs).
- 4. SCGC engages closely with government and external agencies.

TARGET	PERFORMANCE
ero case in which ne air quality from roduction exceeds egal limits.	0 CASE







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MANAGEMENT OF VOLATILE **ORGANIC COMPOUNDS**

SCGC is aware of its impacts on environmental air quality; therefore, it has implemented air quality management measures to cover all company activities throughout normal business operations and during maintenance breaks. SCGC also applies "green turnaround" to control air quality within standard criteria.

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SCGC takes seriously the importance of reducing the impact of volatile organic compound (VOCs) emissions. From the design stage, SCGC selects modern and environmentally-friendly technology for our production plants. Air pollution controls are designed from the production process up to reduce emissions: including raw materials and product storage tanks, product loading and unloading, and closed wastewater treatment systems. High-efficiency incinerators, vapor recovery units and enclosed ground flares are used to reduce and control VOC emissions to reduce the impact of light and noise on communities. In addition, SCGC focuses on reducing leaks of VOCs from production processes by inspecting and maintaining machinery and equipment regularly, as well as by using green turnaround measures to control air quality during maintenance shutdowns.

SCGC has implemented a VOCs emissions management project during major maintenance of the Thai Plastics and Chemicals Company. Equipment opened for maintenance was covered to prevent odors and VOCs from evaporating into the atmosphere, and leak tests and pre-startup safety reviews (PSSR) were conducted. VOCs levels were monitored at the Fence line of four points and in three community areas before the start of operations and during major maintenance. Results showed that ethylene dichloride (EDC) and vinyl chloride monomer (VCM) levels were within 24-hour surveillance thresholds at all stations.

Effectivity

Volatile organic compounds (VOCs) grams/ton

In addition, SCGC has continued to cooperate with government agencies and the private sector in participating in a pilot prototype of proactive environmental management: the "pilot project for managing ventilation of 1, 3 butadiene and benzene vapors using COP (code of practice)." This pilot has enhanced management and the sharing of a code of practice with other companies.

In 2023, Rayong Olefins Company Limited (ROC), Map Ta Phut Olefins Co., Ltd. (MOC) and Map Ta Phut Tank Terminal Co., Ltd. (MTT) were recognized with a certificate of honor for their pilot project for proactive environmental management from the Deputy Governor of Rayong Province.

2022

72.70

2023

72.67

2021

70.06

• Commitment to volatile organic compounds (VOCs) release reduction in 2023

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75.89



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NO_X, SO₂ AND DUST MANAGEMENT

SCGC uses Ultra Low NO_x burner technology and clean fuel in its reaction furnace to reduce the generation of NO_x , SO_2 and dust, alongside automated air pollution monitoring and measuring via a continuous emission monitoring system (CEMS).

Effectivity	2020	2021	2022	2023
Oxide of Nitrogen (NO _x) (grams/ton production)	163	161	189	186

Note: In 2022 and 2023, there were partial shut down at a SCGC, leading to a higher rate of oxide of nitrogen (NO_x) emissions in those years.

For more information, please visit <u>Air Quality Management.</u>



Waste Management

Waste and pollution present significant challenges that directly impact quality of life and the environment. SCGC has accordingly set guidelines for environmental management by focusing on the key concepts of recovery, healing, and prevention of incident recurrence. SCGC emphasizes efficient use of raw materials and production resources, and recycling according to the 3Rs principle: reduce, reuse, and recycle. Additionally, SCGC conducts R&D to identify methods to reuse waste according to circular economy principles, focused on not only reducing environmental impacts, but also on increasing efficiency in resource and raw material use.

PERFORMANCE **FARGETS** IN 2023 0 Zero industrial waste to landfill. (Thailand) Reduce 30% the amount of waste per ton of production **65%** sent to incineration by 2030, calculated from base year 2020.

OPERATIONAL STRATEGY

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1. Reduce waste at the source and eliminate industrial waste for landfill (for operations in Thailand)

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- 2. Manage industrial waste, both hazardous and non-hazardous, in accordance with the 3Rs and circular economy principles.
- 3. Research and develop innovations to reuse waste and to yield value from waste.
- 4. Reduce waste sent to incineration with or without energy recovery.
- 5. Supervise and promote SCGC's internal and external waste management for maximum efficiency and environmental friendliness in accordance with international cooperation frameworks.

MANAGEMENT APPROACH

SCGC prioritizes the efficient use of raw materials and production resources with minimal waste. In addition, when waste is generated, ways must be found for reuse according to the principles of "3Rs". This includes the selection of waste management partners in accordance with the law and good business practices without affecting local communities and the environment.

Pellet management program to reduce production process waste

SCGC's Thai Polyethylene Company Limited manages its plastic pellet production process to significantly reduce environmental impact. The plastic pellet management program begins with the production process, incorporating various drainage systems and plastic pellet traps, and floating buoys. The goal is to trap plastic pellets and to ensure that no plastic derivatives (pellet, power, or flake) escape into the environment. These efforts started in 2021 and expanded to all sites in 2023.

In 2023, a total of 571 facilities were upgraded, preventing 7,000 kilograms of plastic from escaping the production process annually.

Installing "lights chlorinators" to reduce waste and reuse 1, 2-dichloroethane (EDC).

SCGC's Thai Plastics and Chemicals Company Limited designed a "lights chlorinator" production process to improve quality and reduce the volume of liquid waste requiring incineration.

Up to 1,190 tons per year of EDC can be recycled as raw material, reducing costs by approximately 15.13 million baht/year via an investment of THB 14.85 million.



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Biodiversity and **Ecosystems**

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SCGC is dedicated to restoring and conserving biodiversity, an issue of global importance linked to the effects of climate change. Based on this commitment, SCGC has followed the Kunming-Montreal Global Biodiversity Framework and the guidelines of the

Taskforce on Nature-related Financial Disclosures (TNFD) and has also collaborated with agencies that specialize in disseminating knowledge about biological diversity and ecosystems to create understanding and cooperation in conserving natural resources.



TARGET

SCGC aims to create an ecosystem of living in harmony with nature, achieving Net Positive Impact (NPI), No Net Loss (NNL), No Net Deforestation, and No Gross Deforestation.

The loss of biodiversity caused by climate change has resulted in a decrease in ecosystem productivity. Ecosystems' capacity to mitigate the effects of natural disasters is declining, whether from storms, floods, drought or threats resulting from human activities. Natural ecosystems also play an important role in regulating the climate, storing carbon, and creating ecological balance. Efforts to reduce deforestation and forest degradation, and to restore ecosystems are an important part of combating climate change, as they can help reduce greenhouse gas emissions.

OPERATIONAL STRATEGY

- Ecological balance is managed according to a mitigation hierarchy, starting with the conservation, restoration and compensation of habitat resources to encourage abundance for living organisms.
- 2. Engage communities and stakeholders to enhance knowledge and understanding of ecosystems, nature conservation and biodiversity.
- 3. Serve as a role model of biodiversity conservation to expand into new areas.

THE BIODIVERSITY MODEL PROJECT

In 2023, SCGC collaborated with the Department of Environmental Engineering and Disaster Management, Faculty of Engineering at Mahidol university, to develop a database to assess important natural resources using Geographic Information Systems (GIS) to serve as a guideline for biodiversity management.

By combining SCGC's extensive experience in ecosystem services and nature conservation, this allows us to gain insights into current conditions and plan future operations aligned with international best practices to maintain ecological balance in forest and marine ecosystems. In addition, SCGC uses GIS with data from the Geo-Informatics Data Center for Marine and Coastal to analyze and evaluate locations or areas for development and biodiversity enhancement.

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• The Fish Home Project: Restoring Marine Biodiversity

SCGC has managed the Fish Home Project since 2012. This project utilizes materials derived from waste PE100 pipes located in the coastal areas of Rayong, Chonburi, Chanthaburi, Trat, and Ranong provinces, encompassing a 52 km² traditional fisheries conservation area. To optimize sustainability, the project analyzed the size and composition of the area to strategically locate the fish home.



For over a decade, SCGC has been supporting drought-stricken areas within Thailand's Khao Yai Da, Rayong Province. This initiative spans over 28,930 rai and utilizes our "Good Water Community: Good Water Storage, Sufficient Water Use (Sustainable Environment) Model" to restore forest cover and increase water supplies for local communities, leading to positive environmental outcomes and increased community income. The project complements an existing check dam project to restore upstream forest restoration in Khao Yai Da.











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SCGC collaborated with communities, governments, and water experts to develop a sustainable water management system based on the '2 Cultivate 2 Collect: Cultivate Human Potential, Cultivate Rules, Collect Data, and Collect Water Resources' model. In 2019, the project received a recognition of honor from the Biodiversity-Based

Economy Development Office (BEDO), Ministry of Natural Resources and Environment, as an outstanding example of Payment for Ecosystem Services (PES). The Khao Yai Da watershed forest restoration project has a PES value of 198.8 million baht per year. Surveys have found 120 plant species and 123 wildlife species in the area.





These forests have captured 38.49 tons of CO2 per rai.

The average annual temperature has decreased by degrees Celsius.

Habitat for species of wild animals.



Housing up to different plant species.



The headwater forests of Khao Yai Da have been found to contribute to an annual total water yield of

million cubic meters.



Khao Yai Da Communities generate THB **290,000** per year from tourism.



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Diversity and Inclusion

SCGC's strategic business expansion encompasses both domestic and international markets. It has opened opportunities for collaboration with a diverse array of stakeholders, encompassing employees, business partners, and clientele from varied ethnic, religious, gender, age, linguistic and cultural backgrounds. The organization is committed to fostering an inclusive workplace culture that not only welcomes but actively encourages the expression of innovative ideas. This commitment serves as a catalyst for leadership in the realms of innovation, chemical product development, and the global business landscape.



- A higher level of employee **engagement in the organization.**
- The company continuously attracts talent to support business growth.



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In 2023, the employee engagement survey at SCGC showed that

76% of EMPLOYEES FELT POSITIVE ABOUT THE WORK ENVIRONMENT AND ACCEPTED THE DIFFERENCES OF INDIVIDUALS, an increase of 8% from 2022.

SCGC places importance on human rights policy, diversity management, and recognition of individual differences as foundational elements of its human resources management strategy. This emphasis promotes equitable operational practices across the organization. SCGC consistently establishes, reviews, and refines its policies, strategies, objectives, and performance indicators to align with these principles. In 2023, the company undertook significant initiatives to advance these critical areas.

LEADERSHIP DEVELOPMENT

SCGC prepares employees for managerial roles from their first day through programs such as the "New-to-Role for New Managers" course. This program is designed to instill an understanding of their responsibilities and the expectations associated with their roles. Additionally, the "LeadUp" Program for Management is organized to develop essential leadership skills. There is a strong emphasis on recognizing the importance of accepting differences and providing equal opportunities for everyone, both within and across teams, including collaboration with external stakeholders.

SCGC focuses on creating a work environment that respects differences and promotes equity, such as

- "Feedback for Better SCGC" is a channel for employees to submit questions and suggestions anonymously to develop SCGC's work environment and employees' well-being. Information obtained is used to improve our practices and to communicate and answer employees' questions through multiple channels of SCGC communication.
- For employees working abroad, SCGC provides courses to build language communication proficiency and fundamental cultural understanding necessary for work and daily life.
- For employees going to work abroad, SCGC organizes courses for both Thai and foreign employees to understand the policies and directions as well as relevant information of the organization.
- Internal communication: SCGC provides real-time English interpreters during CEO Town Hall communications to ensure that Thai and foreign employees understand the company's policies, directions and information.



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HUMAN RIGHTS

SCGC places importance on the rights of stakeholders and individual differences as well as social equity and the rights of vulnerable groups such as the disabled, children, and elderly.

SCGC has established human rights policies and guidelines, such as prohibiting the use of child labor and forced labor, to create a safe working environment. A comprehensive human rights inspection process and measures actively monitors and manages human rights risks and provides remedies when required.

In 2023, SCGC reviewed a Human Rights Risk Assessment, encompassing the operation of SCGC and its business partners. This ensures that all stakeholders throughout the value chain are treated fairly regarding human rights, diversity, and equity. SCGC also promotes human rights initiatives by organizing events such as Pride Month celebrations and Inclusion Day, reinforcing the commitment to fostering an integrated and inclusive atmosphere for all employees.



For more information, please visit Human Rights.



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Human Capital Development and Talent Attraction and Retention



"Developing resources and increasing the potential of human resources" is the core of conducting business to achieve sustainable success. Therefore, SCGC consistently emphasizes the importance of recruiting high-potential employees, developing their knowledge, skills, and abilities, and taking care of employees.

HUMAN CAPITAL DEVELOPMENT

in 2023, SCGC conducted a project to enhance employees' knowledge, skills, and abilities which are in accordance with SCGC's business strategy.



• Empowering Employees

SCGC has implemented the Job and Career Development project by dividing it into 18 job families. This initiative aims to familiarize employees with job processes, job scopes, essential knowledge, skills, and necessary experiences. It also establishes career pathways to guide employees in enhancing their capabilities and fostering career growth effectively.

A key process that helps achieve the objectives of this project is "Your Career Your Choice," which creates opportunities for employees to apply for vacant positions within the organization through clear, transparent, and fair selection processes. Criteria and standards are set comprehensively, covering knowledge, job skills, interpersonal skills, and leadership qualities. Employees can plan their future careers within the organization, enabling continuous growth and pursuit of their desired goals.

In 2023, there are 104 employees applied for internal vacancies, with 27 positions successfully filled and 20 positions currently undergoing selection processes.

• Training Courses

SCGC has developed a training curriculum combining Classroom and Workshop formats to foster interaction between participants and real-world practical training. This is complemented by e-Learning courses on a Digital Platform, facilitating continuous learning without time, location, or instructor constraints. Each course is designed to be contemporary and inclusive, catering to both Thai and international staff and accommodating the diverse needs of the business.

For continuous growth, manpower planning, and employee recruitment through internal promotions based

EMPLOYEE RECRUITMENT

employee recruitment through internal promotions based on capabilities, as well as external recruitment, are crucial. SCGC has established appropriate operational guidelines to achieve its vision and goals effectively

- SCGC conducts a recruitment policy that promotes equality in all aspects, regardless of gender, age, race, religion, or educational background, aligning with the principles of Diversity, Equity, and Inclusion (DE&I) that SCGC firmly adheres to.
- Career Development pathways are developed on a Digital Platform where employees can conveniently access detailed information such as job roles, responsibilities, qualifications, and expectations for positions within the organization. This enables employees to smoothly transition to positions that best appropriate their capabilities.
- Preparation in advance, such as when the Long Son Petrochemicals project in Vietnam began operations in 2024, SCG recruited Vietnamese personnel well ahead of schedule as planned, ensuring complete readiness. They are currently in the process of transferring knowledge and skills to ensure the highest level of readiness, preparing them to take on key positions within the organization in the near future. This knowledge transfer involves experts from various fields both from Thailand

and leading training institutions, emphasizing practical training to enable efficient job performance.

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TALENT ATTRACTION AND RETENTION

SCGC places importance on caring for the mental health of employees within the organization as a way to foster a positive work culture amidst rapid economic and social changes. Through the CARE OURSELVES program, the objective is

SCGC has created alternative welfare programs to provide opportunities to employees to choose services that are appropriate for them in 4 areas.

- Medical treatment: Assistance with all types of medical expenses for employees, including employee family members, along with support for all types of health examination expenses and dental treatment costs
- Promoting employee risk management, such as life insurance premiums, health insurance, and accident insurance, among others.

Develop knowledge and promote quality of life to strengthen and reduce the chance of either physical or mental illness by supporting fees for various courses, fitness membership, exercise course fees and the cost of sports equipment. to enable employees to observe their own basic behaviors, raise awareness about stress and depression, and learn stress management techniques. Moreover, they learn to observe the behaviors of those around them to facilitate smooth interaction. This is achieved through three activities: Health Talk and Mental Wellness Assessment, Train the Trainers, and Mental Wellness Workshop. These initiatives ensure that employees stay informed about mental health and can prevent depression, both for themselves and for those around them.



By placing importance on human resources, supported by managers and supervisors across all units, in 2023, employee engagement with the organization increased compared to 2022. From 65% in 2022, it increased to 72% in 2023 among the 6,835 employees surveyed, representing 99% of the total workforce. Employee satisfaction improved in various aspects such as acceptance of diversity and inclusion, performance management, collaboration, and work-life balance integration.

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Occupational Health and Safety

SCGC has consistently placed the highest priority on the care of its personnel, considering them the organization's most valuable assets. The company emphasizes protecting both employees and business partners in accordance with human rights principles, while fostering a safe work environment with a good and equal quality of work life. SCGC has demonstrated its commitment to conducting business alongside managing occupational health, safety, security, and emergency response by establishing occupational health and safety policy and operational strategies that align with business risks, covering all operational aspects, from design, procurement, production, and product transportation. Our aim is to achieve an Incident Free Operation, free from injuries, illnesses, and occupational diseases.





OPERATIONAL STRATEGY



Expand safety culture by encouraging employees at all levels to become safety leaders, maintain operational discipline, and conduct safety observation.



2. Enhance the execution of the occupational health and safety management system in production, service operations, transportation, and logistics



3. Utilize digital technology to enhance risk reduction and monitor potential hazards, injuries, illnesses, and occupational diseases.



 Extend occupational health and safety (OHS) management to new businesses, both domestically and internationally.



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EMBEDDING A SAFETY CULTURE ACROSS THE ENTIRE BUSINESS VALUE CHAIN

SCGC continuously promotes and instills a safety culture in the DNA of its employees and throughout its business chain. In 2023, this culture was expanded to include business partners providing services to companies within the SCGC business group. This covers various types of high-risk work, which must strictly adhere to SCGC's occupational health and safety regulations and conditions, as follows:

Fostering Engagement with Business Partners at all levels in Safety program

ESG

- Encourage the participation of business partners' executives to demonstrate leadership roles and commitment in collaborating with SCGC on occupational health and safety programs.
- Become part of the Safety Network and Safety ٠ Observation Tour (SOT) practices, enabling business partners' supervisors to observe workplace conditions and engage in conversations to transform their own and colleagues' behaviors .

- Encourage business partners at all levels to report unsafe events, various risks, and propose improvements in their work areas.
- Promote the reduction of off-the-job accidents and enhance Safety Awareness, such as setting safe driving behaviors measures, conducting random observations at intersections or main roads. etc.



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Continually promote expected standards for safe behavior for employees and business • partners at all levels.



- Publicize a set of "S-A-F-E-T-Y" behaviors in accordance with SCGC's nine safety principles in all areas, and organize opportunities for business partners to have a dialogue about S-A-F-E-T-Y behavior in their daily routines.
- Establish a Safe Behavior Monitoring process for business partners. The results will be discussed, dialogue and feedback with supervisors to set countermeasures for safe behaviors reinforcement at all times

experts when performing high-risk tasks.

ENHANCING STANDARDS FOR SAFE OPERATIONS

Process Safety Management

In 2023, SCGC developed a system to monitor and assess risks from incidents, in line with the Barrier Management (Dynamic Risk) plan. This system detects undesired events, evaluates their impact and severity, and provides data for efficient decision-making to manage and control risks proactively. All processes were identified and analyzed hazards, create proactive countermeasure including periodic reviews to ensure effective risk management.


Material Topics in Focus

Elevating Transportation Safety Standards

SCGC has established a Driving Policy and utilizes digital technology to monitor driver behavior for safe delivery products and services to customers. Vehicles used for company business are monitored, focusing on ensuring adherence to traffic regulations and Fatigue Management to mitigate risks from driver exhaustion.

In 2023, key initiatives were implemented to achieve the goal of zero transportation accidents, as follows:



Operational Discipline (OD)

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Operational Discipline (OD): SCGC has been emphasizing operational discipline at both organizational and individual ensuring all drivers perform their duties efficiently, safely to achieve customer satisfaction. Since 2022, SCGC launched a pilot project with transport partners of Thai Polyethylene Company Limited to establish standards and evaluate drivers, who must pass



"Participating in the OD project has greatly improved communication with transport drivers." can now realize the consequence, if an accident oc-This understanding has led drivers to change their lead to zero accidents."

- Bunjerd Weksoongnern Thai Polyethylene Co., Ltd. (TPE)

operational discipline training. In 2023, this initiative was expanded to all companies within the SCGC business group and conduct practices sharing among companies in the SCG group.

Furthermore, SCGC aims to reduce accidents during product unloading activities within customer premises. Safety measures have been implemented through the Safe Unloading Guideline to prevent accidents.



The OD project has proven to be an effective tool in maintaining our safety performance, resulting in a zero-accident rate for several consecutive years. This success stems from a top-down approach, where executives serve as role models and systematically cascading it down to drivers. "A key focus of the project is ensuring consistent monitoring of compliance with safety measures."

> - Ravikorn Sayamipakdi **Business Director** Inter Transport and Logistics Co., Ltd.

Industrial

Hygiene Survey

Office Ergonomics

Assessment

DEVELOPMENT OF A DIGITAL SECURITY MANAGEMENT SYSTEM

MY HEALTH Application

SCGC

at A Glance

SCGC has leveraged technology to enhance employee well-being by developing the MY HEALTH application, a digital platform for comprehensive health risk assessment and health surveillance during working life. This app covers various aspects including lighting, noise, chemicals, and ergonomics. It aims to manage risks at their source and adapt working conditions, minimizing direct exposure of health hazards and preventing work-related occupational illness and disease.

MY HEALTH application also serves as a centralized health data recordkeeping system, allowing employees easy access to their health information. This data is used for analysis to proactively identify and prevent diseases, reduce the severity of existing health issues, and facilitate quick recovery to normal health

Health Risk

Assessment

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conditions. In 2023, the system recorded over 232,000 employee interactions. 147 employees were identified, analyzed and advised by occupational medicine physicians in order to reduce risk.

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Permit-to-Work or ePTW

SCGC has developed a digital Permit-to-Work system, or ePTW, a platform for requesting permissions and controlling the work of business partners to reduce operational risks. In 2023, ePTW was integrated with the Contractor Safety Management (CSM) system to ensure that business partners' workers qualify for each type of work including regulation requirements.

The long-term plan for the ePTW and CSM systems is to provide an End-to-End Solution for work permits. This will allow business partners to self-register through an automated system (Automate Job Qualification). It will also connect with the Safe Work Practice system (e-SWP) to monitor and track business partners' work compliance with standards and use for performance evaluation.

EXPANDING OCCUPATIONAL HEALTH AND SAFETY IN OUR OVERSEAS OPERATIONS

SCGC has expanded its policies, and standards for Process Safety Management (PSM) from Thailand to overseas, focusing on Long Son Petrochemicals (LSP) in Vietnam. This expansion includes comprehensive risk assessments for hazardous work and training programs to raise awareness and build a safety culture among employees and business partners. The company conducts emergency drills with severity assessments and emergency response, along with training for firefighters in critical situations. SCGC also coordinates with relevant agencies at both local and national levels to ensure the effectiveness of safety management systems.

prmance evaluation.

For more information, please visit Safety Management



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SCGC is committed to engaging communities and society according to our strategy for sustainable development. By developing social solutions and leveraging the organization's expertise and employees, SCGC aims to drive various projects to enhance community well-being, increase stable incomes, foster self-reliance, and reduce inequality, and establish communities as models for expanding development to other areas. Additionally, SCGC seeks to cultivate environmental awareness and collaborate in transitioning towards a low-carbon and sustainable society.

Community and Social Engagement

Employee Social Activities: 28,800 hours Promote the creation of jobs, generate income, or establish community enterprises, generating **56** million baht of income for communities around the factory.

OPERATIONAL STRATEGY

- 1. Listen to the opinions of the community, encourage community participation and identify the issues that the community cares about.
- 2. Assess the environmental and social risks affecting communities around the factory site and develop a prevention and mitigation plan.
- 3. Establish an integrated project based on circular economy principles, move towards low-carbon practices, and create a better environment while reducuing inequality.
- 4. Apply innovation in project implementation with the community.
- 5. Foster employee engagement in social activities, from executive management to all employees at SCGC.

COMMUNITY AND SOCIAL ENGAGEMENT

SCGC has guidelines to drive social responsibility projects and activities, or flagship CSR projects, in line with sustainable business operations through three approaches: "low waste," "low carbon," and "reduce inequality," with the aim of creating a business ecosystem that starts from small groups and expands to larger networks with other stakeholders.





ESG

in Action

PERFORMANCE IN 2023

Community Satisfaction:

94%



Integrated waste management

SCGC has applied a concrete and tangible end-to-end waste management model.

- The Sea Saver Project based on the concept of "Three Ready for the Sea," namely 1) "Ready mindset" - aware of the problem of waste in water sources and the need for recycling, 2) "Ready to collect" - collect waste that escapes to beaches, rivers and canals via innovative floating waste collection buoys and 3) "Ready to grow" - increase mangrove forest areas, stimulating marine animal life and creating biological diversity via SCGC's "Fish House" innovation. SCGC has participated in beach garbage collection in collaboration with stakeholder groups such as fishermen and youth. In 2023, 2,273 volunteers participated and were able to collect a total of 4,141 kilograms of waste; 3,819 kilograms of general waste and 322 kilograms of recycled waste, equivalent to 314 kilograms of carbon dioxide.
- DMCR Litter Trap by SCGC: In collaboration with the Department of Marine and Coastal Resources (DMCR) and Thailand's Ministry of Industry, SCGC innovated a litter trap that catches loose waste at the mouth of rivers and canals before it leaks into the sea. In use in seventeen provinces across the country, the project has collected a total of 87 tons of waste, which has been recycled to generate income, for example, by using organic waste as fertilizer.
- "Upcycling Milk Pouches Project" is a project to educate young people and solve waste management problems for local schools, starting in Rayong province. Since 2019, over 1.6 million milk bags have been recycled, and 1,850 schools have participated, covering 50 provinces with over 304,030 student participants.

Developing a low-carbon society

SCGC encourages communities to contribute towards a low-carbon society. Through its efforts, SCGC has carried out reforestation and water management activities in both upstream and mangrove forests, in order to facilitate the absorption of carbon dioxide and create a robust ecosystem. These initiatives also result in stable and sustainable livelihoods in agriculture and ecotourism for surrounding communities. These projects are described below.

Khao Yai Da watershed forest restoration project in • Rayong province. In the past, Khao Yai Da faced a drought crisis, so over the past ten years SCGC has stepped in to help the Ban Map Chan community and other communities around Khao Yai Da to better manage their water resources under the "2 Cultivate 2 Collect" model: create people, create rules, collect water, and collect data. In 2023.

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SCGC received recognition from the Biodiversity-Based Economy Development Office (BEDO), Ministry of Natural Resources and Environment, for applying payment for ecosystem services (PES) incentives and payments to its water management. This year, SCGC's water management learning center has passed on knowledge on water management to government agencies, communities, and volunteers across the country, including youth, students, and the general public, who have also joined in activities to restore watershed forests. Over 200 water slowing weir have been built and repaired and 8,500 trees planted, with a total of 4,000 participants. In turn, this has created more ecotourism attractions, which have generated income of over THB 427,000.



• The mission of the "Plant-cultivate-protect campaign" is to plant trees and seedlings, and preserve forests in order to help Thailand become a low-carbon society. The goal is to plant 1 million trees and distribute seeds to employees, local communities and the general public and work together to care for and restore the forest with the assistance of a network of local and community forest volunteers. This project also promotes a low-carbon society by promoting the

Emission Support Scheme (LESS) of the Thailand Greenhouse Gas Management Organization (TGO) through collaboration with the Khao Yot local small-boat fishing group. TGO has certified a reduction of up to 2,960 kilograms of greenhouse gases.

Reducing Inequality

To promote community well-being and self-reliance, SCGC has been developing community enterprise projects in Rayong province non-stop for over a decade.

• Developing a network of community enterprises SCGC has developed and innovated products that promote and preserve the local identity of Rayong province through the creation of community products in line with the government's "Bio-Circular-Green Economy" (BCG) model. In 2023, SCGC helped drive community enterprise through "Three Generations, Three Forces." 1) Map Chalood Community Enterprise: A group of housewives whose lives face serious constraints were encouraged and helped to overcome their obstacles by creating marketable cloth products; 2). Baan Ralin Green Living Community Enterprise: A group of new generation community members created natural products in the name of a better environment, and 3). Stingless Bee Community Enterprise, Ban Thap Ma: A group of community elders became stingless beekeepers in order to generate better income in line with good environmental practices. SCGC helped them expand the network of Chan Rong (stingless bees) farmers to



205 hives and helped create a network of beekeepers in five different districts of Rayong province.

Promoting community skills

SCGC promotes training within local communities by bringing in experts from government and educational institutions to help design and innovate products with online and offline marketing potential. 210 people participated in the training sessions.

COMMUNITY MANAGEMENT AROUND THE FACTORY

SCGC focuses on caring for communities and all stakeholders around our factories by supporting ways of living together happily, and sharing and resolving problems effectively. Various social development projects have been implemented, such as "One Manager, One Community" (OMOC), in which all managers play a role in caring for the communities around factory sites. In 2024, there are plans to expand OMOC project activities by providing necessary knowledge to local communities, increasing participation in community problem-solving and sending employees to support community operations.

For more information, please visit <u>Community engagement</u>.

Sustainability Performance Data





<u>Sustainability</u> <u>Performance Data</u>

Appendix

Economic Performance

Performance Data	Unit	2020	2021	2022	2023	GRI Standard	SASB
Revenue from sales and service	THB Million	146,870	238,390	236,587	191,482	GRI 201-1	
Total revenue	THB Million	148,850	239,180	240,562	193,345	GRI 201-1	
Profit for the year	THB Million	15,341	27,068	5,901	589	GRI 201-1	
EBITDA	THB Million	31,565	46,681	11,633	11,924	GRI 201-1	
Employee compensation comprising salary, wage, welfare and regular contributions	THB Million	10,396	10,425	10,517	11,134	GRI 201-1	
Dividend from shareholders	THB Million	11,942	85,841	10,587	-	GRI 201-1	
Interest and financial expenses to lender	THB Million	908	1,748	2,288	3,945		
Taxes to government and local government authorities such as income tax, local maintenance tax, property tax and other specific taxes	THB Million	3,178	3,818	2,151	1,838	GRI 201-1	
Tax privilege and others from investment promotion, and research and development	THB Million	414	949	451	531	GRI 201-4	
Contributions to organizations ⁽¹⁾	THB Million	NA	NA	17.29	11.81		



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GRI Standard

GRI 415-1

GRI 308-1

GRI 308-2

SASB

RT-CH-410a.1

Performance Data Unit 2020 2021 2022 2023 Contributions to political activities⁽²⁾ THB Million 0 0 0 0 53.533 86.170 74,073 THB Million 85.460 Revenue from sales of High Value Added products and Services (Subsidiary)

Services (Subsidiary)

resource efficiency benefits during their use phase to

customers and consumers (Subsidiary)

Revenue from sales of SCG Green Choice Products and

THE

Revenue from sales of products and services providing THE

%

%	36.45	35.85	36.42	38.68	
3 Million	54,682	107,585	133,524	107,271	
%	37	45	56	56	
3 Million	490	5 302	27 457	32.655	

11.6

100

1,961

17.0

100

1,980

2.1

% of New suppliers that were screened using environmental Procurement 99 99 criteria Spend Suppliers assessed for environmental impacts Suppliers NA NA

negative environmental impacts	Suppliers	NA	NA	0	0	GRI 308-2	
Suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment	%	NA	NA	0	0	GRI 308-2	
Suppliers identified as having significant actual and potential negative environmental impacts with which relationships	%	NA	NA	0	0	GRI 308-2	

0.31

were terminated as a result of assessment



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Performance Data	Unit	2020	2021	2022	2023	GRI Standard	SASB
New suppliers that were screened using social criteria	%	99	99	100	100	GRI 414-1	
Suppliers assessed for social impacts	Suppliers	NA	NA	1,961	1,980	GRI 414-2	
Suppliers identified as having significant actual and potential negative social impacts	Suppliers	NA	NA	0	0	GRI 414-2	
Suppliers identified as having significant actual and potential negative social impacts with which improvements were agreed upon as a result of assessment	%	NA	NA	0	0	GRI 414-2	
Suppliers identified as having significant actual and potential negative social impacts with which relationships were terminated as a result of assessment	%	NA	NA	0	0	GRI 414-2	
Procurement Spending by Geography (Proportion of spending on suppliers) • Domestic • Regional	% %	78 22	80 20	80 20	82 18	GRI 204-1	
All executives and employees acknowledges the business ethic	%	100	100	100	100	GRI 205-2	
Non-compliance case through SCG Whistleblowing System	Case	2	8	6	1	GRI 205-3	
Average Customer Satisfaction	%	88	87	87	88		

⁽¹⁾ The first three organizations contributed by SCGC are Alliance to End Plastic Waste (AEPW), The Federation of Thai Industries, and The Thai Chamber of Commerce.

⁽²⁾ SCG Chemicals remains politically neutral, and set a policy which does not give financial or any kind of supports to any political party, political group, or candidates in local, regional or national levels or person with political influence or lobbying or interest representation or similar and other categories (such as election campaign, spending related to ballot.

NA = Not Available







Environmental Performance

Production and Raw Material

Performance Data	Unit	2020	2021(1)	2022	2023	GRI Standard	SASB
Production	Thousand Tons	7,906	9,420	7,517	7,772		RT-CH-000.A
Raw Materials	Thousand Tons	6,519	8,948	8,586	8,241	GRI 301-1	
Non-Renewable Materials	Thousand Tons	6,519	8,948	8,586	8,241	GRI 301-1	
Renewable Materials	Thousand Tons	0	0	0	0	GRI 301-1	
Recycled Materials	Thousand Tons	32.0	53.0	31.5	46.1	GRI 301-2	

 $^{(\mathrm{I})}\,\mathrm{I^{st}}\,$ year to incorporate environmental performance from abroad operation



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Greenhouse Gas Emissions

Performance Data	Unit	2020	2021 ⁽¹⁾	2022	2023	GRI Standard	SASB
GHGs Scope 1 and 2	Million Ton CO ₂ e	4.02	4.73	3.62	3.62		
GHG Scope 1 ⁽²⁾	Million Ton CO ₂ e	3.15	3.71	2.89	2.84	GRI 305-1	RT.CH-110a.1
Biogenic CO ₂ Emissions	Million Ton CO ₂ e	0.00	0.00	0.00	0.00	GRI 305-1	
GHG Scope 2 ⁽²⁾	Million Ton CO ₂ e	0.87	1.02	0.72	0.78	GRI 305-2	
• Market Base	Million Ton CO ₂ e	NA	1.02	0.72	0.78		
Location Base	Million Ton CO ₂ e	NA	1.15	0.87	0.82		
GHG Scope 3 ⁽³⁾	Million Ton CO ₂ e	NA	5.04	4.73	4.60	GRI 305-3	
GHG Emission Intensity (Scope 1+2)	Ton CO ₂ e/Ton Production	0.51	0.50	0.48	0.47	GRI 305-4	
GHG Emission Reduction	Thousand Ton CO ₂ e	29.78	46.21	52.99	51.09	GRI 305-5	
• GHG emissions reduced as a direct result of reduction initiatives	Thousand Ton CO ₂ e	29.78	46.21	52.99	51.09		
• Offsets	Thousand Ton CO ₂ e	0.00	0.00	0.00	0.00		

⁽¹⁾ 1st year to incorporate environmental performance from abroad operation

⁽²⁾ Within SGS's limited assurance scope (Page 176)

⁽³⁾ Scope 3 greenhouse gas calculation and report are based on the GHG Protocol including 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, Catagory 6 : Business travel, Catagory 7 : Employee commuting, Category 9 : Downstream Transportation and Distribution, Category 13 : Downstream leased assets, Catagory 14 : Franchises and Category 15 : Investments

NA = Not Available



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Greenhouse Gas Emission (GRI 305-1, GRI 305-2)



⁽¹⁾ 1st year to incorporate environmental performance from abroad operation.

⁽²⁾ In 2022, there are shutdown activities in some plants,

resulted in lower GHG emission than normal operation.





⁽¹⁾ 1st year to incorporate environmental performance from abroad operation.



in Focus

Energy Consumption

Performance Data	Unit	2020	2021	2022	2023	GRI Standard	SASB
a) Total Fuel Consumption within the Organization from Non-Renewable Sources ⁽¹⁾	Petajoules	56.96	68.45	57.47	55.57	GRI 302-1a	
b) Total Fuel Consumption within the Organization from Renewable Sources	Petajoules	0.00	0.00	0.00	0.00	GRI 302-1b	
c) Total Purchased Energy Consumption ⁽²⁾	Petajoules	7.65	8.58	6.56	6.66	GRI 302-1c	
Non-Renewable							
• Electricity ⁽¹⁾	Petajoules	5.63	6.28	5.12	5.18		RT-CH-130a.1.
• Heating	Petajoules	0.00	0.00	0.00	0.00		
• Cooling	Petajoules	0.00	0.00	0.00	0.00		
• Steam ⁽¹⁾	Petajoules	2.02	2.30	1.44	1.48		
Renewable							
• Solar Cell	Petajoules	0.00	0.00	0.00	0.00		
d) Total Self Generate		0.01	0.20	0.27	0.14		RT-CH-130a.1.
Non-Renewable	Petajoules	0.00	0.19	0.26	0.12		
Renewable	Petajoules	0.01	0.01	0.01	0.02		
e) Total Energy (electricity and heating & cooling) Sold	Petajoules	0.00	0.00	0.82	0.89	GRI 302-1d	
• Electricity	Petajoules	0.00	0.00	0.00	0.00		
• Heating	Petajoules	0.00	0.00	0.00	0.00	63.48	
• Cooling	Petajoules	0.00	0.00	0.00	0.00		
• Steam	Petajoules	0.00	0.00	0.82	0.89		
Total Energy Consumption within the Organization $(a+b+c+d-e)^{(2)}$	Petajoules	64.62	77.24	63.48	61.49	GRI 302-1e	RT-CH-130a.1.
Energy Intensity	Gigajoules/ Ton Production	8.17	8.20	8.45	7.91	GRI 302-3	
Amount of Reductions in Energy Consumption	Petajoules	0.55	0.66	0.80	0.85	GRI 302-4	

 $^{\scriptscriptstyle (1)}$ 1st year to incorporate environmental performance from abroad operation

⁽²⁾ Within SGS's limited assurance scope (Page 176)



Total Energy Consumption (GRI 302-5), (SASB RT-CH-130a.1)

Non-Renewable Renewable Petajoules 100.00 80.00 0.01 77.22 0.01 0.01 0.02 64.61 60.00 63.47 61.49 40.00 20.00 0.00 2020 2021⁽¹⁾ 2022 2023

⁽¹⁾ 1st year to incorporate environmental performance from abroad operation

Amount of Reductions in Energy Consumption (GRI 302-4)



⁽¹⁾ 1st year to incorporate environmental performance from abroad operation



ESG

Appendix

Water Withdrawal and Effluent Quality

Performance Data	Unit	2020	20)21 ⁽¹⁾	2022		2023		GRI Standard	SASB
Water Withdrawal			All Area	Area With Water Stress	All Area	Area With Water Stress	All Area	Area With Water Stress		
Water Withdrawal by Source										
Surface Water ⁽²⁾										
• Freshwater TDS < 1,000 mg/l	Million Cubic Meters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CH-140a.1
• Other Water TDS > 1,000 mg/l		0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ground Water ⁽²⁾										
• Freshwater TDS < 1,000 mg/l	Million Cubic Meters	0.00		0.00	0.37	0.00	0.00	0.00	GRI 303-3	RT-CH-140a.1
• Other Water TDS > 1,000 mg/l		0.00	0.00	0.00	0.00	0.00	0.28	0.00		
Third-Party Water (Total) ⁽²⁾										
• Freshwater TDS < 1,000 mg/l	Million Cubic Meters	26.07	30.31	0.00	23.73	0.00	23.74	0.00	GRI 303-3	RT-CH-140a.1
• Other Water TDS > 1,000 mg/l		0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total Water Withdrawal ⁽²⁾	Million Cubic Meters	26.07	30).79	24	.10	24	.02		
Recycled Water ⁽²⁾	Million Cubic Meters %	1.27 4.9	1. 2	46 1.9	1.6 6	54 .8	1. 7	80 .5		

⁽¹⁾ 1st Year to Incorporate Environmental Performance from Abroad Operation ⁽²⁾ Within SGS's Limited Assurance Scope (Page 176)



in Focus

Appendix

Performance Data	Unit	2020	202	21 ⁽¹⁾	20	22	20	23	GRI Standard	SASB
Water Discharge			All Area	Area With Water Stress	All Area	Area With Water Stress	All Area	Area With Water Stress		
Water Discharge by Destination ⁽²⁾										
Surface Water	Million Cubic Meters	4.62	5.62	0.00	5.15	0.00	5.15	0.00	GRI 303-4	
• Ground Water	Million Cubic Meters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	GRI 303-4	
• Sea Water					0.15		0.12	0.00		
• Third-Party Water (Total)	Million Cubic Meters	0.03	0.06	0.00	0.02	0.00	0.07	0.00	GRI 303-4	
Third-Party Water Sent for Use to Other	Million Cubic Meters	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total Water Discharge ⁽²⁾	Million Cubic Meters	4.65	5.69	0.00	5.31	0.10	5.34	0.00	GRI 303-4	
Water Discharge by Freshwater and Other Water ⁽²⁾										
• Freshwater TDS < 1,000 mg/l	Million Cubic Meters	1.05	0.57	0.00	1.11	0.00	1.06	0.00	GRI 303-4	
• Other Water TDS > 1,000 mg/l	Million Cubic Meters	3.60	5.12	0.00	4.20	0.00	4.29	0.00		
BOD	Tons	20	19	0.00	29	0.00	34	0.00		
COD	Tons	241	275	0.00	225	0.00	242	0.00		
TSS	Tons	41	43	0.00	42	0.00	43	0.00		
Water Consumption	Million Cubic Meters	21.42	25	.10	18.	79	18	.68	GRI 303-5	

⁽¹⁾ 1st year to incorporate environmental performance from abroad operation ⁽²⁾ Within SGS's limited assurance scope (Page 176)

	SCGC at A Glance	Sustainability Approach	Good Governance	Material Topics in Focus	ESG in Action	<u>Sustainability</u> <u>Performance Data</u>	Appendix
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Performance Data	Unit	2020	2021 ⁽¹⁾	2022	2023	GRI Standard	SASB
Water Discharge			Area with All area water stress	Area with All area water stress	Area with All area water stress		
Water Discharge by freshwater and other water ⁽²⁾							
Water Intensity	Cubic Meters/Ton	2.71	2.66	2.50	2.40		
Number of violations of legal environmental obligations/ regulations	Number of Cases	0	0	0	0		RT-CH-140a.2

⁽¹⁾ 1st year to incorporate environmental performance from abroad operation ⁽²⁾ Within SGS's limited assurance scope (Page 176)



Million Cubic Meters



 $^{(1)}\,\, \rm 1^{st}$ year to incorporate environmental performance from abroad operation

Total Water Intensity

Cubic Meters / Ton



 $^{(1)}\,{\rm 1^{st}}\,{\rm year}$ to incorporate environmental performance from abroad operation



in Focus

Waste Management

Performance Data	Unit	2020	20	21	20	122 ¹⁾	20	23 ⁽¹⁾	GRI Standard	SASB
Hazardous Waste Generation ⁽²⁾	Tons	11,120	6,5	59	10,	,835	8,	870	GRI 306-3 (2020)	RT-CH-150a.1
Hazardous Waste Management ⁽²⁾			Within SCGC	Outside SCGC	Within SCGC	Outside SCGC	Within SCGC	Outside SCGC		
Diverted from Disposal ⁽²⁾		10,950	5	1,895	0	7,169	0	6,435	GRI 306-4 (2020)	RT-CH-150a.1
• Reuse	Tons		0	0	0	0	Ο	0		
• Recycled	Tons		5	1,782	0	7,084	Ο	4,264		
• Other Recovery	Tons		0	113	0	85	Ο	100		
• Treatment	Tons		0		0		Ο	2,070		
Directed to Disposal ⁽²⁾		136	0	4,407	0	3,626	Ο	2,368	GRI 306-5 (2020)	
 Incinerated with Energy Recovery 	Tons		0	4,391	0	3,435	Ο	2,244		
 Incinerated without Energy Recovery 	Tons		0	16	0	190	Ο	125		
• Other Disposal	Tons		0	0	0	0	ο	0		
• Landfilled	Tons		0	0	0	0.55	0	0		
Hazardous Waste in the Storage at the End of the Year ⁽²⁾	Tons	180	22	25	1	92	2	58		
Non-Hazardous Waste Generation ⁽²⁾	Tons	23,783	19,9	978	17,	.401	17	,995	GRI 306-3 (2020)	RT-CH-150a.1



Material Topics ESG in Action

in Focus

Sustainability Performance Data

Appendix

Performance Data	Unit	2020	20	21	20)22 ¹⁾	20	23 ⁽¹⁾	GRI Standard	SASB
Non-Hazardous Waste Management ⁽²⁾			Within SCGC	Outside SCGC	Within SCGC	Outside SCGC	Within SCGC	Outside SCGC		
Diverted from Disposal ⁽²⁾	Tons	24,702	134	18,921	150	16,345	163	16,617	GRI 306-4 (2020)	RT-CH-150a.1
• Reuse	Tons		0	0	0	26	0	0		
• Recycled	Tons		134	18,921	150	16,319	163	16,617		
• Other Recovery	Tons		0	0	0	0	0	0		
• Treatment	Tons		0	0	0	0	0	0		
Directed to Disposal ⁽²⁾	Tons	93	0	992	160	801	0	484		
Incinerated with Energy Recovery	Tons		0	696	160	262	0	68	GRI 306-4 (2020)	
Incinerated without Energy Recovery	Tons		0	296	0	197	0	10		
• Other Disposal	Tons		0	0	0	0	0	0		
• Landfilled	Tons		0	0	0	341	0	406		
Non-Hazardous Waste in the Storage at the End of the Year ⁽²⁾	Tons	699	6	21	7.	49	4	37		
Total Waste Generated and Being Managed ⁽²⁾	Tons	229	139	26,215	310	27,941	163	26,617		
Reuse/Recycled/Other Recovery	Tons	-	139	20,816	150	23,514	163	23,765		
 Incinerated without Energy Recovery/ Other Disposal/Landfilled/Incinerated within and outside Energy Recovery 	Tons	229	0	5,398	160	4,427	0	2,852		

⁽¹⁾ 1st year to incorporate environmental performance from abroad operation ⁽²⁾ Within SGS's limited assurance scope (Page 176)







at A Glance

in Focus

Appendix

Air Emission

Performance Data	Unit	2020	2021	2022(1)	2023	GRI Standard	SASB
Oxides of Nitrogen ⁽²⁾	Thousand Tons	1.29	1.52	1.42	1.44	GRI 305-7	RT-CH-120a.1
Oxides of Sulfur ⁽²⁾	Thousand Tons	0.01	0.01	0.03	0.01	GRI 305-7	RT-CH-120a.1
Dust ⁽²⁾	Thousand Tons	0.02	0.01	0.04	0.03	GRI 305-7	RT-CH-120a.2
VOCs ⁽²⁾	Thousand Tons	0.60	0.66	0.55	0.56	GRI 305-7	RT-CH-120a.1

⁽¹⁾ 1st year to incorporate environmental performance from abroad operation

⁽²⁾ Within SGS's limited assurance scope (Page 176)

Environmental Expenditures and Benefits/Violations of Legal Obligations and Regulations

Performance Data (Only Thailand Operations)	Unit	2020	2021	2022	2023	GRI Standard	SASB
Operating Expenses - Environmental	THB Million	768	717	878	725		
Capital Investment - Environmental	THB Million	110	276	172	53		
Total Expenses – Environmental (Capital Investment + Operating Expenses)	THB Million	879	993	1,050	778		
Savings, Cost Avoidance and Tax Incentives Linked to Environment Investment	THB Million	223	237	520	656		
Number of Violations of Legal Environmental Obligations/Regulation	No of Cases	0	0	0	0	GRI 2-27,GRI 307-1	



Appendix

Health and Safety

Performance Data	Unit	2020	2021 ⁽¹⁾	2022	2023	GRI Standard	SASB
From Workplace							
Workers Covered by an Occupational Health							
Workers Covered by an Occupational Health and Safety Management System Covered by an Occupational Health and Safety	Person	NA	NA	6,516	7,815		
Management System	%	NA	NA	100	100		
Workers Covered by Such a System That Line Deep	Person	NA	NA	6,516	7,815	GRI 403-8	
Internally Audited	%	NA	NA	100	100		
Workers Covered by Such a System That Has Been	Person	NA	NA	6,516	7,815		
Audited or Certified by an External Party	%	NA	NA	100	100		
Hours Worked ⁽²⁾ • Employee • Contractor	Million Hours Worked	14.64 24.09	17.49 21.76	15.71 20.92	15.67 23.34	GRI 403-9	

	SCGC at A Glance	Sustainability Approach	Good Governance	Material Topics in Focus	ESG in Action	<u>Sustainability</u> Performance Data	Appendix
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Performance Data	Unit	2020	2021 ⁽¹⁾	2022	2023	GRI Standard	SASB
From Workplace							
Total Recordable Work-Related Injury and Occupational Illness & Disease Rate • Employee ⁽²⁾ • Contractor	Cases/1,000,000 Hours Works	0.205 0.208	0.114 0.414	0.064 0.096	0.255 0.257		RT-CH-320a.1
Fatality Work-Related Injury and Occupational Illness& Disease Rate • Employee ⁽²⁾ • Contractor	Cases/1,000,000 Hours Works	0.000 0.000	0.000 0.138	0.000 0.000	0.000 0.000		RT-CH-320a.1
Total Number of Recordable Work-Related Injury ⁽²⁾ • Employee • Contractor	Cases	3 5	2 9	1 2	4 6	GRI 403-9	
Total Recordable Work-Related Injury Rate ⁽²⁾ • Employee • Contractor	Cases/1,000,000 Hours Works	0.205 0.208	0.114 0.414	0.064 0.096	0.255 0.257	GRI 403-9	
Number of Fatality Work-Related Injury ⁽²⁾ • Employee (Male : Female) • Contractor (Male : Female)	Cases	0 : 0 0 : 0	0:0 3:0	0:0 0:0	0:0 0:0	GRI 403-9	

	SCGC at A Glance	Sustainability Approach	Good Governance	Material Topics in Focus	ESG in Action	<u>Sustainability</u> <u>Performance Data</u>	Appendix	
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Performance Data	Unit	2020	2021 ⁽¹⁾	2022	2023	GRI Standard	SASB
From Workplace							
Fatality Work-Related Injury Rate ⁽²⁾ • Employee • Contractor	Cases/1,000,000 Hours Works	0.000 0.000	0.000 0.138	0.000 0.000	0.000 0.000	GRI 403-9	RT-CH-302a.1
Number of High-Consequence Work-Related Injury ⁽²⁾ • Employee • Contractor	Cases	0 0	0 0	0 1	0 0	GRI 403-9	
High-Consequence Work-Related Injury Rate ⁽²⁾ • Employee • Contractor	Cases/1,000,000 Hours Works	0.000 0.000	0.000 0.000	0.000 0.048	0.000 0.000	GRI 403-9	
Lost Time Injury Frequency Rate ⁽²⁾ • Employee • Contractor	Cases/1,000,000 Hours Works	0.000 0.000	0.000 0.092	0.000 0.096	0.000 0.000		
Severity Work-Related Injury Rate • Employee • Contractor	Days/1,000,000 Hours Works	0.000 0.000	0.000 2.390	0.000 11.997	0.000 0.000		

	SCGC at A Glance	Sustainability Approach	Good Governance	Material Topics in Focus	ESG in Action	<u>Sustainability</u> <u>Performance Data</u>	Appendix
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Performance Data	Unit	2020	2021 ⁽¹⁾	2022	2023	GRI Standard	SASB
From Workplace							
Total Number of Recordable Occupational Illness & Disease ⁽²⁾ • Employee • Contractor	Cases	0 0	0 0	0 0	0 0	GRI 403-10	
Occupational Illness Frequency Rate • Employee • Contractor	Cases/1,000,000 Hours Works	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000		
Number of Fatality Occupational Illness & Disease • Employee • Contractor	Cases	0 0	0 0	0 0	0 0	GRI 403-9	
Process Safety Incidents Count (PSIC)	Cases	0	0	0	0		RT-CH-540a.1
Process Safety Total Incident Rate (PSTIR)	Cases/200,000 Hours Works	0	0	0	0		RT-CH-540a.1
Process Safety Incident Severity Rate (PSISR)	Cases/200,000 Hours Works	0	0	0	0		RT-CH-540a.1



Performance Data	Unit	2020	2021 ⁽¹⁾	2022	2023	GRI Standard	SASB
From Travelling and Transportation							
 Number of Fatality Work-Related Injury⁽²⁾ Employee (Male : Female) Direct Transportation Contractor (Male : Female) Other Transportation Contractor (Male : Female) 	Cases Cases Cases	0:0 0:0 0:0	0:0 0:0 0:0	0:0 0:0 0:0	0:0 0:0 0:0	GRI 403-9	
Number of Transport Incidents	Cases	2	1	0	0		RT-CH-540a.2
From Workplace, Travelling and Transportation							
Number of Fatality Work-Related Injury ⁽²⁾ • Employee (Male : Female) • Contractor (Male : Female)	Cases Cases	0:0 0:0	0:0 3:0	0:0 0:0	0:0 0:0	GRI 403-9	
Others							
Product That Have Undergone a Hazard Assessment	%	100	100	100	100	GRI 416-1	RT-CH-410b.1
Revenue from Products That Contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS)	%	100	100	100	100		RT-CH-410b.1





Contractor : Persons who work for the company under full-time employment contracts, including employees at operational, (supervisory and management levels, and including probationary employees and special contract employees

Workplace Contractor : Business partners who perform work for the company, whose work and/or work location is controlled by the company (Excluding business partners from transportation activities)

Direct Transportation Contractor : Transport business partners managed under SCGC

Other Transportation Contractor : Other transport business partners managed under SCGC

 $^{\scriptscriptstyle (1)}$ Started to consolidate overseas factory operation data.



ESG

Social Performance

LABOR AND SOCIAL DEVELOPMENT

Performance Data	Unit	2020	2021	2022	2023	GRI Standard	SASB
Number of Employees	Persons	5,856	6,168	6,516	7,815	GRI 2-7	
Relevant Ratio of the Entry Level Wage by Gender at Significant Locations of Operation to the Minimum Wage						GRI 202-1	
• Female	Ratio	NA	NA	2.17	2.17		
• Male	Ratio	NA	NA	2.17	2.17		
Proportion of Local Senior Management ⁽¹⁾	%	1.9	1.7	6.0	0.0	GRI 202-2	
Number of New Employees Hire	Persons	36	152	655	502	GRI 401-1a	
Percentage of Total Employees	%	3.34	11.06	10.05	8.02		
• By Gender (Female : Male)	%	8 : 92	20: 80	29 : 71	20:80		
• By Employee Level (Management Level : Other Level)	%	0 : 100	0 : 100	0.2 : 99.8	0.6 : 99.4		
• By Age Group (under 30 yr : 30 - 50 yr : over 50 yr)	%	94:6:0	90 : 10 : 0	77:23:0	79:21:0		



in Focus

Sustainability Performance Data

Performance Data	Unit	2020	2021	2022	2023	GRI Standard	SASB
Voluntary Employee Turnover	Persons	151	128	309	371	GRI 401-1b	
Percentage of Total Employees	%	3.6	3.6	4.7	4.7		
• By Gender (Female : Male)	Ratio	25 : 75	23 : 77	15 : 85	22 : 78		
• By Employee Level (Management Level : Other Level)	Ratio	6:94	3:97	2:98	2:98		
• By Age Group(under 30 yr : 30 - 50 yr : over 50 yr)	Ratio	25 : 55 : 20	39 : 57 : 4	46 : 52 : 2	39:59:2		
Total Employee Turnover	Persons	174	156	336	376	GRI 401-1b	
Percentage of Total Employees	%	3.6	3.3	5.2	4.8		
• By Gender (Female : Male)	Ratio	23:77	23 : 77	16 : 84	21 : 79		
• By Employee Level (Management Level : Other Level)	Ratio	6:94	8: 92	2:98	3:97		
• By Age Group (under 30 yr : 30 - 50 yr : over 50 yr)	Ratio	22 : 48 : 30	33 : 47 : 20	45 : 52 : 3	39:59:2		
Return to Work after Parental Leave ⁽²⁾							
Number of Employees Taken Parental Leave	Persons	13	16	40	23	GRI 401-3	
• Number of Employees Returned to Work after Parental Leave	Persons	13	16	39	23		
Female Share of Total Workforce	%	20.3	20.5	20.6	20.3	GRI 405-1	
Female in All Management Positions	%	21.2	23.0	25.4	28.7		



Sustainability

in Focus

Performance Data

Performance Data	Unit	2020	2021	2022	2023	GRI Standard	SASB
Female in Junior Management Positions	%	22.7	24.4	26.5	29.0		
Female in Top Management Positions	%	13.3	16.7	19.5	17.6		
Female in Management Positions in Revenue-Generating Functions ⁽³⁾	%	9.8	11.9	22.7	22.0	GRI 405-1	
Number of Employees with Disability ⁽⁴⁾	Persons	2	2	1	1	GRI 405-1	
Total Number of Incidents of Discrimination	case	NA	NA	0	0	GRI 406-1	
Percentage of Security Personnel Who Have Received Formal Training in the Organization's Human Rights Policies	%	NA	NA	100	100	GRI 410-1	
Number of Sites Where Human Rights Risks Have Been Identified with Mitigation Plans	No. of site	NA	NA	NA	NA		
Employees Represented by an Independent Trade Union or Covered by Collective Bargaining Agreements ⁽⁵⁾	%	100	100	93.5	93.2		
Number of Positions Filled by Internal Candidates (Rotation/Promotion)	Persons	194	432	1,464	1,141		
Percentage of Total Employees	%	4.1	9	22	15		
• By Gender (Female : Male)	%	20 : 80	26 :74	32 : 68	24:76		
• By Employee Level (Management Level : Other Level)	%	12 : 88	16 : 84	12 : 88	14 : 86		
• By Age Group (under 30 yr : 30 - 50 yr : over 50 yr)	%	23:73:4	28:69:3	28:66:6	19:72:9		



in Focus

Material Topics ESG in Action **Sustainability** Performance Data Appendix

Performance Data	Unit	2020	2021	2022	2023	GRI Standard	SASB
Average Hiring Cost Per Employee	Baht/Person	191,200	72,000	55,300	33,000		
Employee Engagement Level	%	69	58	65	72		
• By Gender (Female : Male)	%	62 : 71	52:60	53 : 68	62:74		
• By Employee Level (Management Level : Other Level)	%	78 : 67	69 : 57	71 : 65	73 : 72		
• By Service Year (0-5 yr/over 5-20 yr/over 20 yr)	%	66 : 67 : 76	52 : 55 : 69	62 : 63 : 72	69 : 70 : 78		
Employee Engagement Level by Ethnic Group of Employees (Thai : Others)	%	69 : 66	N/A	64:77	67 : 86		
Proportion of Absence by Type							
• Sick Leave	%	13.20	11.84	20.02	11.63		
• Work-Related Leave	%	0	0	0.46	0		
• Others	%	99.32	99.47	65.18	88.37		
• Ratio of Average Salary of Female to Male (Executive Level) (Base Salary only) ⁽⁶⁾	Ratio	1.285	1.148	1.102	1.356	GRI 405-2	
• Ratio of Average Salary of Female to Male (Executive Level) (Base Salary + Other Cash Incentives) ⁽⁶⁾	Ratio	1.216	1.181	1.015	1.397	GRI 405-2	
• Ratio of Average Salary of Female to Male (Management Level) (Base Salary Only) ⁽⁶⁾	Ratio	0.971	1.045	0.935	0.999	GRI 405-2	



Material TopicsESGin Focusin Action

<u>Sustainability</u> Performance Data

Appendix

Performance Data	Unit	2020	2021	2022	2023	GRI Standard	SASB
• Ratio of Average Salary of Female to Male (Management Level) (Base Salary + Other Cash Incentives) ⁽⁶⁾	Ratio	0.990	1.011	0.906	1.006	GRI 405-2	
• Ratio of Average Salary of Female to Male (Non-Management Level) (Base Salary Only) ⁽⁶⁾	Ratio	1.224	1.301	1.201	1.248	GRI 405-2	
• Ratio of Average Salary of Female to Male (Non-Management Level) (Base Salary + Other Cash Incentives) ⁽⁶⁾	THB Thousand	1.030	1.049	0.985	1.008	GRI 405-2	
Average Hours of Training and Development	Hours/Person	85	51	120	25 ⁽⁷⁾	GRI 404-1	
• Female	Hours/Person	NA	NA	NA	NA		
• Male	Hours/Person	NA	NA	NA	NA		
• Mandatory	Hours/Person	NA	NA	80	16		
Non-Mandatory	Hours/Person	NA	NA	40	9		
Percentage of Employees Receiving Regular Performance and Career Development Reviews						GRI 404-3	
• By Gender (Female : Male)	%	NA	NA	100	100		
• By Employee Level (Management Level : Other Level)	%	NA	NA	100	100		
• By Age Group (Under 30 yr : 30 - 50 yr : Over 50 yr)	%	NA	NA	100	100		



Performance Data	Unit	2020	2021	2022	2023	GRI Standard	SASB
Average Amount Spent on Training and Development	Baht/Person	62,200	10,880	32,900	18,897		
Social Contribution							
Contribution for Social and Community Development	THB Million	NA	14.79	25.60	18.00	GRI 201-1	
Employee Volunteering During Paid Working Hours	THB Million	NA	3.84	6.30	6.00		
In-Kind Giving: Products or Services donations, Projects/Partnerships or Similar	THB Million	NA	NA	20.00	NA		
Management Overheads Related to CSR Activity	THB Million	NA	38.93	36.15	33.00		

 $^{\scriptscriptstyle (1)}$ Calculate from percentage of local Management Level over total management staff

⁽² Under Thai laws, only female employees can take parental leave

⁽³⁾ Revenue-generating functions e.g. marketing, sales, production

⁽⁴⁾ Visual and physical impairment and movement disability or other, e.g. hearing impairment, mental disability, communication disability

⁽⁵⁾ Employee joining trade union or working with companies covered by Welfare Committee

⁽⁶⁾ Within SGS's limited assurance scope (Page 176)

⁽⁷⁾ This does not include On the Job Training of LSP employees, approximately 85 hours per person.

NA = Not Available



<u>Sustainability</u> Performance Data Appendix

Graph Percentage of Employees by Nationality



Graph Percentage of Management Level by Nationality





Graph Percentage of New Employee Hired by Nationality



Graph Percentage of Employees by Age




ESG

in Action

Subsidiaries included in Sustainability Report 2023 (Thailand)

			Raw	Mate	rials						Env	vironr	nent							
			_	cled	able	Ene	rgy			Air					Wateı					ess
	Business /Company	Production	Total Rawmateria	Raw Material Recy	Raw Material Renew	Thermal	Electrical	Dust	SO	N N N	DHD	VOCs	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	Safety	Occupational Illn
1	SCG Chemicals Public Company Limited	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	\checkmark	\checkmark
2	Rayong Engineering & Plant Service Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	\checkmark	\checkmark
3	Protech Outsourcing Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	\checkmark	\checkmark
4	Repco Maintenance Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	\checkmark	\checkmark
5	Texplore Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	\checkmark	\checkmark
6	Vina SCG Chemicals Co., Ltd.																			
7	WTE Company Limited																			
8	SMH Co., Ltd.																			
9	Total Plant Service Co., Ltd.																			



	Raw Material										Env	vironn	nent							
			_	cled	able	Ene	rgy			Air				,	Water	•				ess
	Business /Company	Production	Total Rawmateria	Raw Material Recy	Raw Material Renew	Thermal	Electrical	Dust	SO	N N N	DHD	VOCs	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	Safety	Occupational Illne
10	Rayong Pipeline Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	\checkmark	\checkmark
11	Kation Power Co., Ltd.																			
12	Flowlab & Service Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	\checkmark	\checkmark
13	SENFI Ventures Company Limited																			
14	Thai Polyethylene Co., Ltd.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR	NR	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
15	RIL 1996 Co., Ltd.	NR	NR	NR	NR	NR	\checkmark	NR	NR	NR	\checkmark	NR	NR	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
16	Thai Plastic and Chemicals Public Company Limited	\checkmark	~	~	~	~	\checkmark	NR	NR	√	√	√	√	√	√	√	√	\checkmark	\checkmark	\checkmark
17	TPC Paste Resin Co., Ltd.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
18	Nawaplastic Industries Co., Ltd. (Rayong/ Saraburi)	\checkmark	~	\checkmark	~	~	\checkmark	NR	NR	NR	\checkmark	NR	✓	✓	✓	✓	√	\checkmark	\checkmark	\checkmark
19	Nawa Intertech Co., Ltd.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR	NR	NR	\checkmark	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark



Sustainability Approach

Good Governance Material TopicsESGin Focusin Action

<u>Appendix</u>

			Raw	Mate	rials						Env	vironn	nent							
			_	cled	able	Ene	rgy			Air				,	Wate	r				ess
	Business /Company	Production	Total Rawmateria	Raw Material Recy	Raw Material Renew	Thermal	Electrical	Dust	SO	NO	DHD	VOCs	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	Safety	Occupational Illn
20	SCG ICO Polymers Company Limited	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR	NR	NR	\checkmark	NR	\checkmark	\checkmark	NR	NR	NR	\checkmark	\checkmark	\checkmark
21	Map Ta Phut Tank Terminal Co., Ltd.	NR	NR	NR	NR	\checkmark	√	NR	NR	NR	\checkmark	~	~	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
22	Rayong Olefins Co., Ltd.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	~	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
23	Map Ta Phut Olefins Co., Ltd.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
24	Circular Plas Company Limited	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		

Office/Investment/Sales/Service where the collection data is not necessary

Greenfield (less than 3 years) or newly acquired companies (less than 4 years) is not required to incorporate data into SCG

NR = Non Relevance (The data is not relevant or has no significance to the overall performance of SCG or is not included this year)



Appendix

Subsidiaries Included in Sustainability Report 2023 (Abroad)

				Rav	w Mate	rials							Env	ironm	ent						
					pe	e	Ene	ergy			Air				,	Water					S
	Business / Company	Country	Production	Total Rawmaterial	Raw Material Recycle	Raw Material Renewab	Thermal	Electrical	Dust	Sov	NO	CHC	VOCs	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	Safety	Occupational Illnes
1	Recycling Holding Volendam B.V.	The Netherlands																			
2	Kras Investments B.V.	The Netherlands																			
3	Krasgroup Vastgoed B.V.	The Netherlands																			
4	Kras Belgium B.V.	Belgium																			
5	Kras Asia Ltd.	Hongkong																			
6	Kras Gemert B.V.	The Netherlands																			
7	Kras Hoek van Holland B.V.	The Netherlands																			
8	Kras Polymers B.V.	The Netherlands																			
9	Kras Recycling B.V.	The Netherlands																			



<u>Appendix</u>

				Rav	v Mate	rials							Env	vironm	ent						
					led	ble	Ene	rgy			Air					Water					SS
	Business / Company	Country	Production	Total Rawmaterial	Raw Material Recyc	Raw Material Renewa	Thermal	Electrical	Dust	SO	No.	DHD	VOCs	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	Safety	Occupational Illne
10	Sirplaste - Sociedade Industrial de Recuperados de Plástico, S.A.	Portugal																			
11	REPCO NEX (Vietnam) Company Limited	Vietnam																			
12	Long Son Petrochemicals Co., Ltd.	Vietnam																			
13	Norner AS	Norway																			
14	Norner Research AS	Norway																			
15	PT TPC Indo Plastic and Chemicals	Indonesia	~	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	~	\checkmark	\checkmark	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR
16	Chemtech Co., Ltd.	Vietnam	✓	\checkmark	\checkmark	\checkmark	NR	\checkmark	NR	NR	NR	\checkmark	NR	\checkmark	NR	NR	NR	NR	\checkmark	\checkmark	NR
17	Xplore S.R.L. (Formerly: HTExplore S.R.L.)	Italy																			
18	SENFI UK Limited	UK																			
19	Grand Nawaplastic Myanmar Co., Ltd.	Myanmar																			
20	Viet-Thai Plastchem Co., Ltd.	Vietnam	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR	NR	NR	\checkmark	NR	\checkmark	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR
21	TPC Vina Plastic and Chemical Corporation Ltd.	Vietnam	~	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR



Raw Materia										Env	ironm	ent						
		cled	able	Ene	ergy			Air					Water					SS
Production	Total Rawmaterial	Raw Material Recyc	Raw Material Renewa	Thermal	Electrical	Dust	SO	N	GHG	VOCs	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	Safety	Occupational Illne
✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR	NR	NR	\checkmark	NR	\checkmark	NR	NR	NR	NR	NR	\checkmark	NR
~	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR	NR	\checkmark	NR	\checkmark	NR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NR
	Production	Local Rawmaterial	Anterial Recycled Raw Material For a conduction For a conductio	Raw Materials Image: state stat	Raw Materials End Image: state sta	Raw Materials Energy Image: state	Raw Materials Energy Long Andrew Material Revenues	Raw Materials Energy Lange boodroction Image: second seco	Raw Materials Energy Air Air Air Loop Air Image: Colspan="6">Image: Colspan="6">Air Image: Colspan="6">Image: Colspa	Raw Materials Energy Air Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control Joint Control	Raw Materials Energy Air Image: constraint of the second se	Raw Materials Environm Baw Materials Energy Air Jond Colspan="6">Jond Colspan="6" Jond Colspan="5" Jond Colspan="5" Jond Colspan="6" Jond Colspan="6" Jond Cols	Raw Materials Environment Environment Environment Point Point	Raw Materials Environment bootstand Energy Air Value bootstand Energy Air Value Value bootstand Energy Value Value Value Value bootstand Energy Value Value Value Value Value bootstand Value Value	Raw Materials Envroyment Image: state st	Raw Materials Environment Image: second secon	Raw Materials Environment Environment Page 1 Page 2 Page 2	Raw Materials Image: second colspan="6">Image: second colspan="6" Image: second colsp

Office/Investment/Sales/Service where the collection data is not necessary

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Appendix





Material TopicsESGin Focusin Action

Appendix

GRI Content index in accordance

Statement of use	SCG Chemicals Public Company Limited
GRI 1 used	GRI 1: Foundation 2021

				OMISSION	
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
General disclosures					
GRI 2: General Disclosures 2021	2-1 Organizational details	SR Front cover, SR Back cover			
	2-2 Entities included in the organization's sustainability reporting	SR 145-150	A gray cell indic	or omission are	
	2-3 Reporting period, frequency and contact point	SR 8	Standard ref	erence number is r	not available.
	2-4 Restatements of information	SR 8			
	2-5 External assurance	SR 176			
	2-6 Activities, value chain and other business relationships	SR 9-13			

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				OMISSION	
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
General disclosures					
	2-7 Employees	SR 137			
	2-8 Workers who are not employees	-	a, b, c	Confidentiality constraints	This information is for internal use.
	2-9 Governance structure and composition	SR 39-44			
	2-10 Nomination and selection of the highest governance body	https://www.scgchemicals.com/en/ sustainability/governance-economy/ corporate-governance			
	2-11 Chair of the highest governance body	https://www.scgchemicals.com/en/ sustainability/governance-economy/ corporate-governance			
	2-12 Role of the highest governance body in overseeing the management of impacts	https://www.scgchemicals.com/en/ sustainability/governance-economy/ corporate-governance			
	2-13 Delegation of responsibility for managing impacts	SR 44			
	2-14 Role of the highest governance body in sustainability reporting	SR 33-35			

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				OMISSION	
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
General disclosures					
	2-15 Conflicts of interest	https://www.scgchemicals.com/en/ sustainability/governance-economy/ ethics-compliance			
	2-16 Communication of critical concerns	SR 24-29			
	2-17 Collective knowledge of the highest governance body	SR 42			
	2-18 Evaluation of the performance of the highest governance body	SR 42-43			
	2-19 Remuneration policies	https://www.scgchemicals.com/en/ sustainability/report?sub=20			
	2-20 Process to determine remuneration	https://www.scgchemicals.com/en/ sustainability/report?sub=20			
	2-21 Annual total compensation ratio	-	a, b, c	Confidentiality constraints	This information is confidential
	2-22 Statement on sustainable development strategy	SR 36			



				OMISSION		
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
General disclosures						
	2-23 Policy commitments	https://www.scgchemicals.com/en/ sustainability/society/human-rights https://www.scgchemicals.com/en/ sustainability/report?sub=22				
	2-24 Embedding policy commitments	SR 39-41, 44-45				
	2-25 Processes to remediate negative impacts	SR 46-53				
	2-26 Mechanisms for seeking advice and raising concerns	SR 24-29, 46-50				
	2-27 Compliance with laws and regulations	SR 51-53				
	2-28 Membership associations	SR 17, 115				
	2-29 Approach to stakeholder engagement	SR 46-50				
	2-30 Collective bargaining agreements	SR 139				
Material topics						
GRI 3: Material Topics 2021	3-1 Process to determine material topics	SR 31-35	A gray cell indica not permitted for	ates that reasons f	for omission are that a GRI Sector	
	3-2 List of material topics	SR 31-35	Standard refe	erence number is r	not available.	

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				OMISSION	
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Economic performan	ce				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 6-7, 14-16			
	201-1 Direct economic value generated and distributed	SR 115-117			
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	SR 27-28 https://file.scgsustaina- bility.com/wp-content/ uploads/2023/07/25134251/ TCFD-Report-2023.pdf			
	201-3 Defined benefit plan obligations and other retirement plans	-		Confidentiality constraints	This information is for internal use.
	201-4 Financial assistance received from government	SR 115-118			
Market presence					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 6-7, 9-16			
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	SR 137-142			
	202-2 Proportion of senior management hired from the local community	SR 137-142			

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			OMISSION		
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Indirect economic im	pacts				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 6-7, 9-16			
GRI 203: Indirect Economic Impacts	203-1 Infrastructure investments and services supported	https://www.scgchemicals.com/en/ sustainability/society/community-in- volvement-program			
2016	203-2 Significant indirect economic impacts	SR 30			

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			OMISSION		
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Procurement practice	25				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 79-82			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	SR 116-117			
Anti-corruption					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 51-53			
	205-1 Operations assessed for risks related to corruption	SR 29, 51-53			
GRI 205: Anti- corruption 2016	205-2 Communication and training about anti- corruption policies and procedures	SR 51-53			
	205-3 Confirmed incidents of corruption and actions taken	SR 117			

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				OMISSION	
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Anti-competitive beh	avior				
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.scgchemicals.com/ uploads/3-6_SCGC_Antitrust_ Policy-EN.pdf			
GRI 206: Anti- competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	SR 51-53			
Тах					
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.scgchemicals.com/ uploads/3-16_SCGC-Tax_Policy-EN.pdf			
	207-1 Approach to tax	https://www.scgchemicals.com/ uploads/3-16_SCGC-Tax_Policy-EN.pdf			
GRI 207: Tax 2019	207-2 Tax governance, control, and risk management	https://www.scgchemicals.com/ uploads/3-16_SCGC-Tax_Policy-EN.pdf			
	207-3 Stakeholder engagement and management of concerns related to tax	SR 49			
	207-4 Country-by-country reporting	SR 115-118			

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			OMISSION			
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Materials						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 79-82				
GRI 301: Materials 2016	301-1 Materials used by weight or volume	SR 119				
	301-2 Recycled input materials used	SR 119				
	301-3 Reclaimed products and their packaging materials	-		Information unavailable/ incomplete	SCGC has a collective process but this process cannot identify the number of company's product.	

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			OMISSION			
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Energy						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 64-71				
GRI 302: Energy 2016	302-1 Energy consumption within the organization	SR 122-123				
	302-2 Energy consumption outside of the organization	-	a, b, c, d	Confidentiality constraints	Energy data are very complexity of suppliers, transporters, customers and related stakeholders in value chain.	
	302-3 Energy intensity	SR 122-123				
	302-4 Reduction of energy consumption	SR 64-66				
	302-5 Reductions in energy requirements of products and services	SR 67, 69-71, 73-75				

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Water and effluents					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 92-94			
	303-1 Interactions with water as a shared resource	SR 92-94			
GRI 303: Water and	303-2 Management of water discharge-related impacts	SR 92-94			
Effluents 2018	303-3 Water withdrawal	SR 92-94, 124-126			
	303-4 Water discharge	SR 92-94, 124-126			
	303-5 Water consumption	SR 92-94, 124-126			



				OMISSION			
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION		
Biodiversity							
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 99-101					
GRI 304: Biodi- versity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SR 99-101					
	304-2 Significant impacts of activities, products and services on biodiversity	SR 99-101					
	304-3 Habitats protected or restored	SR 99-101					
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	SR 99-101					



			OMISSION		
GRI STANDARD/ OTHER SOURCE	GRI STANDARD/ OTHER SOURCE DISCLOSURE		REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Emissions					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 62-71			
	305-1 Direct (Scope 1) GHG emissions	SR 120-121			
	305-2 Energy indirect (Scope 2) GHG emissions	SR 120-121			
	305-3 Other indirect (Scope 3) GHG emissions	SR 120-121			
	305-4 GHG emissions intensity	SR 120-121			
GRI 305: Emissions	305-5 Reduction of GHG emissions	SR 120-121			
2010	305-6 Emissions of ozone-depleting substances (ODS)	-	a, b, c, d	Information unavailable/ incomplete	Collection of data is not required by Thai law.
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	SR 130			

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				OMISSION			
GRI STANDARD/ OTHER SOURCE	GRI STANDARD/ OTHER SOURCE DISCLOSURE		REQUIREMENT(S) OMITTED	REASON	EXPLANATION		
Waste							
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 98					
GRI 306: Waste	306-1 Waste generation and significant waste-related impacts	SR 98					
	306-2 Management of significant waste-related impacts	SR 98					
2020	306-3 Waste generated	SR 127-129					
	306-4 Waste diverted from disposal	SR 127-129					
	306-5 Waste directed to disposal	SR 127-129					
Supplier environment	tal assessment						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 79-82					
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	SR 116-117					
	308-2 Negative environmental impacts in the supply chain and actions taken	SR 116-117					

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				OMISSION		
GRI STANDARD/ OTHER SOURCE DISCLOSURE		LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Employment						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 104 -105				
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	SR 137-138				
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	-	a, b	Confidentiality constraints	The benefit vary by country and type of employment.	
	401-3 Parental leave	SR 138				
Labor/management	relations					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 79-82				
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods regarding operational changes	-	a, b	Information unavailable/ incomplete	Under Labor Protection Act	

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			OMISSION		
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Occupational health	and safety				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 106-110			
	403-1 Occupational health and safety management system	SR 106 https://www.scgchemicals.com/en/ sustainability/society/occupation- al-health-safety			
GRI 403: Occupational	403-2 Hazard identification, risk assessment, and incident investigation	SR 106-108 https://www.scgchemicals.com/en/ sustainability/society/occupation- al-health-safety			
Health and Safety 2018	403-3 Occupational health services	SR 110 https://www.scgchemicals.com/en/ sustainability/society/occupation- al-health-safety			
	403-4 Worker participation, consultation, and communication on occupational health and safety	SR 107-108 https://www.scgchemicals.com/en/ sustainability/society/occupation- al-health-safety			

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			OMISSION			
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Occupational health	and safety					
	403-5 Worker training on occupational health and safety	SR 107-108 https://www.scgchemicals.com/en/ sustainability/society/occupation- al-health-safety				
GRI 403:	403-6 Promotion of worker health	SR 106-109 https://www.scgchemicals.com/en/ sustainability/society/occupation- al-health-safety				
Occupational Health and Safety 2018	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SR 27, 46 https://www.scgchemicals.com/en/ sustainability/society/occupation- al-health-safety				
	403-8 Workers covered by an occupational health and safety management system	SR 131-136				
	403-9 Work-related injuries	SR 131-136				
	403-10 Work-related ill health	SR 131-136				

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			OMISSION		
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Training and education	on				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 104-105			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	SR 141			
	404-2 Programs for upgrading employee skills and transition assistance programs	SR 104-105			
	404-3 Percentage of employees receiving regular performance and career development reviews	SR 141			
Diversity and equal o	pportunity				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 102-103			
GRI 405: Diversity	405-1 Diversity of governance bodies and employees	SR 138			
and Equal Opportunity 2016	405-2 Ratio of basic salary and remuneration of women to men	SR 140-141			

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			OMISSION		
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Non-discrimination					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 102-103 https://www.scgchemicals.com/en/ sustainability/society/human-rights			
GRI 406: Non- discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	SR 139			
Freedom of association	on and collective bargaining				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 102 https://www.scgchemicals.com/en/ sustainability/society/human-rights			
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	SR 47, 53, 79-80 <u>https://www.scgchemicals.com/en/</u> <u>sustainability/society/human-rights</u>			
Child labor					
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.scgchemicals.com/en/ sustainability/society/human-rights			
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	SR 80, 103			

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			OMISSION		
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Forced or compulsory	labor				
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.scgchemicals.com/en/ sustainability/society/human-rights			
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	SR 47, 53, 79, 102-103			
Security practices					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 103 https://www.scgchemicals.com/en/ sustainability/society/human-rights			
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	100% of security personnel were trained by contracted company in accordance with SCG Supplier Code of Conduct			
Rights of indigenous	peoples				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 103 https://www.scgchemicals.com/en/ sustainability/society/human-rights			
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	No case found			

	SCGC at A Glance	Sustainability Approach	Good Governance	Material Topics in Focus	ESG in Action	Sustainability Performance Data	<u>Appendix</u>
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			OMISSION			
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Local communities						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 111-113				
GRI 413: Local	413-1 Operations with local community engagement, impact assessments, and development programs	SR 111-113				
Communities 2016	413-2 Operations with significant actual and potential negative impacts on local communities	No case found				
Supplier social assess	ment					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 80-82				
GRI 414: Supplier	414-1 New suppliers that were screened using social criteria	SR 116-117				
Social Assessment 2016	414-2 Negative social impacts in the supply chain and actions taken	No case found				

	SCGC at A Glance	Sustainability Go Approach Go	Good Governance	Material Topics in Focus	ESG in Action	Sustainability Performance Data	<u>Ap</u>	<u>pendix</u>		
									OMISSION	
GRI OTI	STANDARD/ HER SOURCE	DISCLOSURE			LOCATION		REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Public	policy									
GRI 3: Topic:	Material s 2021	3-3 Management of r	material topic	S	<u>https://ww</u> sustainabi	ww.scgchemicals.com/e lity/report?sub=19	en/			SCG Chemicals remains politically neutral, and set policy which does not give financial or any kind of supports to any political party, political group, or candidates in local, regional or national levels or person with political influence or lobbying or interest representation or similar and other categories (such e.g. election campaign, spending related to ballot).

	SCGC at A Glance	Sustainability Approach	Good Governance	Material Topics in Focus	ESG in Action	Sustainability Performance Data	<u>Appendix</u>
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			OMISSION		
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Public policy					
GRI 415: Public Policy 2016	415-1 Political contributions	SR 82-83			
Customer health and	safety				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 73-75 https://www.scgchemicals.com/ en/sustainability/environment/ product-stewardship			
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	SR 74, 135			
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	No case found			

	SCGC at A Glance	Sustainability Approach	Good Governance	Material Topics in Focus	ESG in Action	Sustainability Performance Data	<u>Appendix</u>
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				OMISSION	
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Marketing and labelin	ng				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 73-75			
	417-1 Requirements for product and service information and labeling	https://www.scgchemicals.com/ en/sustainability/environment/ product-stewardship			
GRI 417: Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling	No case found			
	417-3 Incidents of non-compliance concerning marketing communications	No case found			
Customer privacy					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 28, 47, 87-89 https://www.scgchemicals.com/en/ sustainability/society/customer-ex- perience			
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	SR 76, 117			



ASSURANC

ASSURANCE STATEMENT

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

NATURE OF THE ASSURANCE/VERIFICATION

SGS(Thailand) Limited (hereinafter referred to as SGS) was commissioned by SGG Chemicals Public Company Limited (hereinafter referred to as SCGC) to conduct an independent assurance of the SCGC 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 SCGC'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 SCCC. SCS 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 SCCC's stateholders.

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 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 Stattements

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)
- WBCSD/WRI Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard
 Sustainability Accounting Standards Board (SASB)
- SPECIFIED PERFORMANCE INFORMATION AND DISCLOSURES INCLUDED IN SCOPE

SCGC'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:

- a) Environmental dimension performance indicators expressed numerically or in descriptive text
 - Energy consumption (petajoules)
 - Greenhouse gas emissions scope 1 & 2 & 3 (million tons CO₂ equivalent)
 Water withdrawal (million cubic meters) and recycled water (million cubic meters)
 - Water windo awar (million cubic meters) and recycled water (million cubic meters)
 Water discharge (million cubic meters)
 - Water discharge by guality (BOD, COD and TSS (tons))
 - Oxides of Nitrogen (NOx), Oxides of Sulfur (SOx), dust and other significant air emissions data including
 - VOCs (tons)
 - Total weight of waste by type and disposal method (tons)
 Waste management (waste generated, waste diverted from disposal, waste directed to disposal) (tons)
- b) 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
- c) Governance dimension performance indicators or in descriptive text
 - Double materiality assessment

SCGC Sustainability Report 2023

- Total number of Tier 1 supplier, the proportion spend of Tier 1 supplier who acknowledge Supplier Code
 of Conduct the proportion of domestic nurchase value from Tier 1 total number of Tier 1 significant
- supplier, the proportion spend of Tier 1 significant supplier who acknowledge Supplier Code of Conduct,

total number of Non- Tier 1 Significant suppliers

Total number of supplier assessed via desk assessment/on-site assessment, % of significant suppliers
assessed, number of supplier assessed with substantial actual/potential negative impacts,
% on unber of supplier assessed with substantial actual/potential negative impacts
that were terminated

ASSURANCE METHODOLOGY

SGS's assurance engagements are carried out in accordance with assurance procedure.

- The assurance comprised a combination of
- SCGC's Management interviews, including the Sustainable Development 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
- Document review or 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:
 - Map Ta Phut Olefins Co., Ltd.
 - Binh Minh Plastics Joint Stock Company

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 miligate 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 SCGC, being free from bias and conflicts of interest with the organisation, its subuisdances and stakeholders. The assurance testimate was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 9001, ISO 14001, ISO 45001, ISO 14061-1, ISO 14067, ISO 26000, WFP; SA 8000 and experience on the SRA Assurance service provisions.

ASSURANCE/VERIFICATION OPINION

On the basis of the methodoby 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 organization has chosen an appropriate level of assurance for the selected indicators for the year ended December 31, 2023 included in their reporting.

Signed:

For and on behalf of SGS (Thailand) Limited

Montrue T.

Montree Tangtermsirikul General Manager 100 Nanglinchee Road Chongnonsee Yannawa, Bangkok 10120 Thailand

21 February 2024

WWW.SGS.COM

Summary of Scope 3 GHG Emissions Report 2023

The emission is described as below:

Category	GHG emissions
1. Purchased goods & services	3,979,614
3. Fuel and energy-related activiities	177,616
4. Upstream transporatation & distribution	173,869
5. Waste generated in operations	2,186
6. Business travel	271
7. Employee commuting	3,473
9. Downstream transportation & distribution	114,881
13. Downstream leased assets	N/A
14. Franchises	N/A
15. Investment	149,743
Total emissions	4,601,654

attached sheet

Unit: tonnes of CO2e

Remark: The greenhouse gas emission report does not encompass Scope 3 categories 2, 8, 10, 11, and 12.



Sustainablility Accounting Standards Board Response (SASB)

Торіс	Metric	Category	Unit Of Measure	Code	Response/Reference
Activity Metrics	Production by reportable segment	Quantitative	Metric tons (t)	RT-CH-000.A	SR 119
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO2-e, Percentage (%)	RT-CH-110a.1	SR 120-121
	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	Discussion and Analysis	n/a	RT-CH-110a.2	SR 62-71
Air Quality	Air emissions of the following pollutants: (1) Nox (excluding N2O), (2) SOx, (3) Volatile organic compounds (VOCs), and (4) Hazardous Air Pollutants (HAPs)	Quantitative	Metric tons (t)	RT-CH-120a.1	SR 130 (4) Data not available
Energy Management	 (1) Total energy consumed, (2) Percentage grid electricity, (3) Percentage renewable, (4) Total self-generated energy 	Quantitative	Gigajoules (GJ), Percentage (%)	RT-CH-130a.1	SR 122
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m3), Percentage (%)	RT-CH-140a.1	SR 124-126
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	RT-CH-140a.2	SR 126
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	RT-CH-140a.3	SR 27, 92-94
Waste Management	Amount of waste generated, percentage hazardous, percentage recycled*	Quantitative	Metric tons (t), Percentage (%)	RT-CH-150a.1	SR 127



Торіс	Metric	Category	Unit Of Measure	Code	Response/Reference
Community Relations	Discussion of engagement processes to manage risks and opportunities associated with community interests	Discussion and Analysis	n/a	RT-CH-210a.1	SR 48, 99-101
Workforce Health & Safety	 (1) Total recordable incident rate (TRIR)* and (2) Fatality rate for (a) direct employees and (b) contract employees 	Quantitative	Rate	RT-CH-320a.1	TRIR: Case/200,000 manhours Employee 0.051 Contractor 0.051 Fatality: Case/200,000 manhours Employee 0.000 Contractor 0.000
	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	Discussion and Analysis	n/a	RT-CH-320a.2	SR 106-110
Product Design for Use-phase Efficiency	Revenue from products designed for use-phase resource efficiency	Quantitative	Reporting currency	RT-CH-410a.1	SR 115-118
Safety & Environmental Stewardship of Chemicals	 Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, Percentage of such products that have undergone a hazard assessment 	Quantitative	Percentage (%) by revenue, Percentage (%)	RT-CH-410b.1	SR 135
	Discussion of strategy to (1) Manage chemicals of concern and (2) Develop alternatives with reduced human and/or environmental impact	Discussion and Analysis	n/a	RT-CH-410b.2	SR 73-75



<u>Appendix</u>

Торіс	Metric	Category	Unit Of Measure	Code	Response/Reference
Genetically Modified Organisms	Percentage of products by revenue that contain genetically modified organisms (GMOs)	Quantitative	Percentage (%) by revenue	RT-CH-410c.1	Not Applicable
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environ- mental and social factors affecting the industry	Discussion and Analysis	n/a	RT-CH-530a.1	SR 51-53
Operational Safety, Emergency Preparedness & Response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Quantitative	Number, Rate	RT-CH-530a.1	SR 131-136
·	Number of transport incidents	Quantitative	Number	RT-CH-530a.2	SR 135



at A Glance

in Focus

Implementation of Guidelines

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

	Disclose				
		SCGC SR			
	Disclose the organization's governance around climate-related risks and opportunities.				
GOVERNANCE	a) Describe the board's oversight of climate-related risks and opportunities.				
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	SK 39-41, 44-45			
	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.				
STRATECY	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	SB 27, 34-35, 62-71			
STRATEOT	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.				
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	5.127, 54 55, 62 71			
	Disclose how the organization identifies, assesses, and manages climate-related risks.				
DISK	a) Describe the organization's processes for identifying and assessing climate-related risks.				
MANAGEMENT	b) Describe the organization's processes for managing climate related risks.	SR 24-29, 62-71			
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.				
	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such inform	nation is material.			
METRICS	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	SR 24-29, 62-71, 120-121			
AND TARGETS	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.				
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	SR 120-121			
