SUSTAINABLE POLYMERS AND SOLUTIONS FOR A BETTER TOMORROW



EXECUTIVE SUMMARY I SUSTAINABILITY REPORT 2024 SCG CHEMICALS PUBLIC COMPANY LIMITED



# **Message from the Chief Executive Officer and President**

The year 2024 marks another challenging period for the global petrochemical industry due to prolonged downturns and the incomplete recovery of the global economy. These factors directly impact the demand and prices of plastic pellets. SCG Chemicals Public Company Limited (SCGC) recognizes these changing contexts and has proactively adjusted its strategies to maintain competitiveness and achieve sustainable growth.

SCGC has efficiently managed raw materials and production processes to reduce costs and increase returns, while focusing on developing high value-added (HVA) products and applying digital technology and artificial intelligence (AI) to enhance the organization's capabilities in all dimensions.

In terms of sustainability, the Company has accelerated its recycling business under the Circular Economy concept according to ESG (Environmental, Social, and Governance) principles, while expanding the machinery maintenance service business and improving the Long Son Petrochemicals Plant (LSP) to accommodate the use of ethane gas feedstock. This is part of the strategy to reduce carbon emissions in the production process. SCGC is committed to enhancing the quality of life of people, reducing social inequality, and creating a low-carbon society in a tangible way to support the restoration of ecosystem and make the transition towards sustainable future a reality.

This executive edition of the 2024 Sustainable Development Report (SD Report) of SCG Chemicals Public Company Limited (SCGC) reflects the Company's commitment and progress toward sustainable growth under the concept of "Sustainable Polymers and Solutions for a Better Tomorrow." Such concept aims to pursue development that is aligned with the Sustainable Development Goals (SDGs),

SCGC is committed to conducting business according to the sustainable development approach, integrating ESG (Environmental, Social, and Governance) principles into the organization's operational goals, and driving innovations to develop products and services that promote health, well-being, and environmental friendliness. The Company has defined a clear ESG strategic framework covering three key approaches:

## 1) Reduce greenhouse gas emissions by 700,000 tons of carbon dioxide equivalent by 2030 to be on the path towards carbon neutrality by 2050.

This will be achieved by continuously improving energy efficiency, increasing the proportion of renewable energy use, promoting the use of low-carbon energy and raw materials, applying technology to capture and reuse carbon dioxide, and encouraging partners and suppliers to access carbon reduction technologies. Additionally, the approach will include the restoration and management of ecosystems to ensure that they yield benefits to both humans and nature at the same time.

2) Bring 500,000 tons of used plastics per year into the circular economy

**by 2030** by promoting the creation of basic infrastructures and sorting from the source to efficiently collect used plastics and developing plastic recycling technology to achieve maximum efficiency.

3) Committed to being socially responsible, taking into account all stakeholders involved and promoting participation in efforts to improve the quality of life of communities where the Company conducts its business operations. This includes supporting the transition to a low-carbon society by applying circular economy principles and enhancing the capabilities of communities surrounding plants, including vulnerable groups, to reduce social inequality through various projects such as education, career development, and promotion of health and well-being activities.

Last year, SCGC achieved significant success in various areas, reflecting its ongoing commitment to sustainable business practices amid global economic and environmental challenges. Measures were implemented to reduce greenhouse gas emissions through the use of clean energy and enhanced production efficiency. Additionally, innovations in recyclable plastic materials (Post-consumer Recycled: PCR) were developed to support the circular economy in a tangible manner.

Furthermore, we focus on the efficient use of raw materials to mitigate risks associated with the shortage of natural resources. We also enhance our management of occupational health and safety and employees' welfare to foster a sustainable and positive working environment. SCGC continues to maintain good relations with the communities around the operational areas, with the belief that "shared growth" is the foundation for long-term sustainability.

In a rapidly changing world, managing climate change risks has become a crucial issue that organizations cannot overlook. We have adapted ourselves to ensure that our operations align with new legal frameworks and regulations both at the national and international levels, such as Extended Producer Responsibility (EPR), to enhance competitiveness sustainably.

SCGC firmly believes that sustainability is not just a trend but a critical mission that we must fulfill for our society and the environment. Integrating approaches on Decarbonization, Circular Economy, and Social Inclusion into our operations not only helps reduce environmental impacts but also creates shared value for employees, customers, shareholders, and all stakeholders.

In 2025 and beyond, we will continue to create innovations, invest in sustainable technology, and expand collaborations with various sectors both domestically and internationally to create a positive impact on a wider scale. We would like to thank all our employees, partners, shareholders, and communities for being part of our success in the past year. The cooperation and support from all sectors are the key to SCGC's steady progress on the path towards a sustainable future.

Mr. Sakchai Patiparnpreechavud Chief Executive Officer & President SCG Chemicals Public Company Limited

# **Key Achievements in Sustainable Development in 2024**

In 2024, SCGC continued to drive its business with a commitment to creating shared value for the economy, society, and the environment through a concrete sustainable development approach based on ESG (Environment, Social, and Governance). The Company has enhanced its operations in all dimensions to achieve valuable long-term outcomes while meeting the expectations of stakeholders and fostering confidence in being a business that grows on the foundation of responsibility, transparency, and sustainability.



## **SCGC Materiality Issues 2024**

**SCGC** recognizes the importance of identifying material issues through a Materiality Assessment that considers impacts on both the business and stakeholders. The Double Materiality approach has been adopted under the global GRI Standards 2021, taking into account both positive and negative factors that may affect or be affected by the economy, society, and the environment. This assessment also comprehensively considers the stakeholders' human rights. In 2024, SCGC focused on key issues such as Carbon Tax, Greenhouse Gas Management, Extended Producer Responsibility (EPR) regulations, Post-Consumer Recycled, Resource Usage, and Occupational Health and Safety.

At the same time, we faced challenges such as fluctuating energy costs, evolving international environmental regulations, and growing stakeholder expectations for sustainable practices. To ensure SCGC can mitigate risks, create opportunities, and maintain competitiveness throughout the value chain, we have identified and prioritized significant sustainability issues in order to shape strategies and set targets that align with relevant action plans. Material sustainability issues are reviewed at least annually to ensure continued relevance in a rapidly evolving landscape.





Level of impacts from ESG issues on SCGC, Economy, Society, and Environment

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## Success in the Area of Environment in 2024

Driving sustainability through systematic and integrated environmental management throughout 2024, SCG Chemicals Public Company Limited (SCGC) has demonstrated its commitment to conducting business while taking care of the environment. This was carried out by the Company adhering to systematic management principles, aligning with international standards, and meeting the expectations of stakeholders both domestically and internationally.

**SCGC** emphasizes enhancing the efficiency of environmentrelated undertakings in all dimensions. We have continuously determined ways to further improve such undertakings both at the organizational and operational levels through the establishment of a comprehensive environment management framework, efficient resource management, and comprehensive control of impacts from the production process. The focus is on balancing business growth with environmental care to achieve long-term sustainable development goals.

From such guidelines, SCGC has achieved significant successes in many areas, including developing environmental management standards across all units, improving production processes to reduce water usage, enhancing waste management efficiency to create value, and systematically controlling emissions from various sources.

These reflect the organization's genuine commitment to driving business operations under the sustainability framework and continuously contributing to environmental stewardship for society and the country as a whole.



# **Developing Sustainable Products** to Advance Circular Economy

**SCGC** is committed to driving the organization toward a sustainable future, firmly believing that business operations must go hand in hand with environmental and social responsibilities, and good governance, especially in the chemical and plastics industries, which play a significant role in both the economy and the global environment.

One of the key innovations reflecting SCGC's vision for sustainability is the development of SCG GREEN POLYMER<sup>™</sup>, a polymer resin designed to be ecofriendly. The resin seeks to optimize resource utilization, minimize environmental impact, and promote the Circular Economy.

The Company prioritizes advancing the circular economy throughout every stage of the production process, collaborating with both domestic and international industrial partners to develop technologies and approaches that increase the efficiency and proportion of recycled materials in plastic products. Furthermore, SCGC focuses on creating innovations that meet global sustainability standards and expanding

positive outcomes to communities and society. This is accomplished while maintaining a balance between business growth and environmental responsibility.

collaborations with global partners such as Braskem from Brazil to produce bioplastics (Bio-Polyethylene) derived from sustainable agricultural products, thereby reducing greenhouse gas emissions. SCGC has also invested with Avantium from the Netherlands to develop technology that converts carbon dioxide into polymers with a negative carbon footprint (Carbon-Negative Plastic). This marks a new perspective on plastics as materials that can help solve environmental problems.

collaboration with all sectors.

SCGC is determined to lead the transition towards sustainable production systems, encompassing economic, social, and environmental aspects. This aligns with the global objective to reduce the impacts of climate change and to create shared value in

In addition, the Company has initiated strategic



#### **Key Projects to Advance Circular Economy**



PP Recycled (PCDP02JN) for sustainable packaging: In collaboration with Unilever, a leading global consumer goods producer, SCGC developed Flip-top bottle caps made from recycled materials for "Sunlight" dishwashing liquid products.

In collaboration with Haad Thip Public Company Limited (Coca-Cola), SCGC has developed lightweight carbonated beverage bottle caps using SX002JA resin produced with SMX™ technology. This innovation enables a reduction in material usage by up to 28% while maintaining the same quality and helps reduce greenhouse gas emissions by as much as 26%.





Using recycled HDPE to produce packaging for personal care products. SCGC has partnered with Kao Industrial (Thailand) Co., Ltd., a leading producer of consumer goods and chemicals from Japan, to develop sustainable recycled

packaging for "Feather" hair care products. This packaging is 100% recyclable and features a low carbon footprint.

In collaboration with Bangchak and Panjawattana, SCGC has developed eco-friendly packaging for the premium diesel fuel additive product "FURIO Ultra HD". This packaging is made from high-guality recycled HDPE resin (PCRH01BN). It contains 30% post-consumer recycled plastic



(PCR), and is able to reduce greenhouse gas emissions by up to 26 tons per year.

Thailand's first eco-friendly vinyl tiles made from dialysis solution bags: SCGC, in collaboration with Principal Capital Public Company Limited (PRINC) and Baxter Healthcare, has launched Thailand's first eco-friendly vinyl tiles produced from used dialysis solution bags.

These tiles can replace up to 80% of pure PVC, significantly reducing greenhouse gas emissions and concretely promoting a low-carbon society.

# SCGC has set a target to recycle and add value to tons

of used plastic per year by 2030, marking a significant step toward reducing plastic waste and maximizing resource efficiency.



## SCGC

 Wake Up Waste: a startup that develops a platform to buy and sell recyclable waste. It also provides mobile garbage compressors. For buildings, hospitals, hotels, and condominiums, this initiative helps reduce waste before it enters the transportation stream, thereby increasing efficiency and lowering carbon emissions from logistics systems. Currently, Wake Up Waste serves more than 400 buildings and has already recycled over 2,000 tons of waste. The collaboration with Bangchak is expected to expand under "Reduce Waste at Source with Bangchak" project, starting with 50 petrol stations nationwide. This project is another key mechanism in establishing a comprehensive recycling system from origin to destination, utilizing technology and the participation of all sectors.



 NETS UP: a cooperation project aims at recycling fishing nets to reduce marine waste. SCGC has collaborated with partners from various sectors, including the Ministry of Natural Resources and Environment, the Youth Fund, and the Alliance To End Plastic Waste (AEPW) to join forces in the NETS UP project which collects and recycles old fishing nets from the shores of Rayong Province. In 2024, the project was able to gather more than 5.42 tons of fishing nets, which were processed into plastic pellets for the production of environmentally friendly clothing and household items. This initiative not only reduces the use of pure resources but also helps cut greenhouse gas emissions by over 30,569 kilograms of carbon dioxide equivalent. This project is another vital collaboration in reducing marine debris and promoting sustainable resource utilization.



# More than

of fishing nets, which were processed into plastic pellets for the production of environmentally friendly clothing and household items

tons

Reduce greenhouse gas emissions 30,569 kgCO<sub>2</sub>e





# **Development of Low-Carbon Businesses**

SCGC is committed to developing design and manufacturing processes that result in low-carbon products meeting consumer needs, services that promote health, well-being, and environmental friendliness, thereby addressing impacts that arise from activities throughout the value chain. The Company has established strategies and set the target to reduce greenhouse gas emissions by 700,000 tons of carbon dioxide equivalent by 2030, with the ultimate goal of achieving carbon neutrality by 2050.

## "Towards Carbon Neutrality by 2050"



Continuously increase energy efficiency

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Increase the proportion of renewable energy usage





Apply technology to capture and utilize carbon dioxide



Encourage partners and suppliers to adopt carbon reduction technologies



Collaboration at the international level to sustainably develop low-carbon technology

• CCU: Carbon Dioxide Capture and Utilization



**SCGC**, in collaboration with IHI Corporation, a leading Japanese manufacturer of machinery for power plants and large-scale construction, is studying and building a pilot plant to test  $CO_2$  capture technology in the production process and convert it into light olefins. These olefins can then be used as precursors in the production of PE and PP polymers with low to net-zero carbon footprints, thereby reducing  $CO_2$  emissions into the atmosphere. This provides an alternative raw material for the future. The project is currently in the construction phase of the pilot plant.

 Negative Carbon Footprint Polymers (Carbon-Negative Plastic)



**SCGC**, in collaboration with Avantium, has tested the use of  $CO_2$  to produce PLGA polymers, a negative carbon footprint polymer, which does not emit  $CO_2$  during the production process. PLGA polymers possess special properties, including excellent oxygen and moisture barrier performance, recyclability, compostable in natural environments, and degradable at sea. Currently, preparations are underway for a pilot plant with a production capacity of over 10 tons per year.



• PyroCO

**SCGC** has established a demonstration plant using CCU technology to convert CO<sub>2</sub> into acetone, an organic solvent widely used in industrial manufacturing processes. SCGC is the first Thai company to participate in this initiative under EU Commission funding and plays a key role in developing the process that transforms acetone into polypropylene.

**Creating Nature Positive and Biodiversity** 

SCGC has adopted the Kunming-Montreal Global Biodiversity Framework with a set goal of nature positive in 2050 to develop the Company's 3 action plans. Such plans are No Deforestation, No Net Loss, and Net Positive Impact through the prevention, restoration, compensation, conservation, and management of ecosystems for the benefits of human and nature.

SCGC took actions in terms of creating the positive ecological balance covering the upstream, midstream, and downstream of the ecosystems of forest areas, mountainous areas, and coastal and marine areas. Such efforts have been carried out through various important projects, such as the restoration of the Khao Yai Da watershed forest project, the Ban Pla project, and the

Project to increase CO, absorption source through the conversion of shrimp farm to mangrove forest in Rayong Province

**SCGC** is Thailand's first industrial (petrochemical) private company that was endorsed by Thailand Greenhouse Gas Management Organization (Public Company) - TGO committee to be registered in the Premium T-VER project for "Project to increase CO\_ absorption source of Thailand through sustainable mangrove forest management".

Moreover, in collaboration with a team of researchers from Marine Science Department, Faculty of Fisheries, Kasetsart University, the biodiversity research and study have been conducted in the project area prior to the mangrove reforestation; and the results would be monitored for 2 years (2024-2026). Such practice aimed to monitor the growth and an increase of biodiversity of the entire mangrove forest ecosystem from bacteria to living organisms, plants, and animals, in order to restore the ecosystem to its original condition. Furthermore, the study of mineral profile of the soil,

The first industrial company in Thailand (in petrochemical sector) that has been registered for Premium T-VER with Thailand Greenhouse Gas Management Organization (Public Organization)

which is essential to the growth of living things, has also been conducted.

 CERT<sup>+</sup> with forest-based carbon credit measurement technology

**SCGC** received CERT<sup>+</sup> startup in carbon credit measurement from the forest and reforestation management. With remote sensing technology and Artificial Intelligence (AI), they have transformed 2-dimensional photos into 3-dimensional data such as the width and the height of trees. Such technology has enabled the Company to calculate carbon credit precisely. In 2025, the Company would apply this technology to the restoration of the watershed forest project.

CERT<sup>+</sup> was certified by Thailand Greenhouse Gas Management Organization (Public Company) or TGO. It is used to evaluate the carbon storage of Eucalyptus plantation areas covering major species planted in Thailand and Asia Pacific, aged 1 - 17 years old with planting distances of 2x3 meters or 3x3 meters.



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Sustainability is not just a goal for SCGC but a mission we undertake with our business partners to create a better future. From raw material manufacturers to packaging suppliers, they are all playing crucial roles in the circular economy system while being key drivers of change. In 2024, SCGC took another step forward by developing ESG practices with business partners to create a stable, transparent, and growing ecosystem together for a truly sustainable future.

**SCGC** is committed to implementing sustainable partner management, focusing on ESG practices covering key issues such as reducing greenhouse gas emissions,

enhancing safety for business partners, applying international laws and standards in work processes, and continually communicating human rights policies to business partners.

Key projects on environmental management and management of business partners are as follows:

## Raising Awareness of Business Partners on Greenhouse Gas Reduction (Reduction of GHG Emissions)

**SCGC** is committed to reducing greenhouse gas emissions in the supply chain (GHG Emission Scope 3)

through collaboration with key raw material and packaging partners. We emphasize raising awareness on climate change, as well as providing support on the calculation of greenhouse gas emissions for business partners.

In 2024, SCGC conducted an audit of business partners' greenhouse gas emission calculations to ensure accuracy, completeness, and better alignment with international standards. This initiative has expanded to cover 14 business partners and continued to develop ongoing collaborations to establish sustainable greenhouse gas reduction methods.





**SCGC** has developed the SCGC Environmental Management Framework to improve the Company's environmental performance by integrating international environmental standards from Thailand and abroad, such as Green Industry, Eco Factory, Carbon Disclosure Project (CDP), and the Global Reporting Initiative (GRI), which is the same environmental standard adopted by SCGC. The objectives of such practice are as follows:

- 1) Elevate environmental management and performance;
- Prevent and mitigate environmental risks that may impact business operations;
- Enhance audit efficiency and reduce redundancy in the auditing process by integrating the One Enterprise Audit.

**SCGC** plans to audit all companies in Thailand and expand such practice to all international companies by 2028 in order to continually improve and elevate environmental management in alignment with the SCGC Environmental Management Framework. This pursuit is directed towards achieving excellence in sustainable business operations.





## Improvement of Production Processes to Enhance Efficiency of Water Usage

The Company prioritizes efficient water management to support sustainability goals and enhance operational efficiency. The focus is on reducing external water extraction by improving water usage efficiency in production processes, along with treating wastewater to meet standards and monitoring the quantity and quality of discharged water. Additionally, treated wastewater is reused to ensure resourceefficient water usage. The Company has set a long-term goal of reducing external water extraction by 2% by 2030 compared to the base year of 2020 and has set a target for 2024 to keep external water extraction below 3.16 cubic meters per ton of production. Various projects have been implemented to improve and increase the efficiency of production processes, including increasing the proportion of water reuse. The goal is to reduce water usage from these projects by a total of 83,000 cubic meters.

Examples of projects implemented include:

#### **Thai Polyethylene Company Limited**

- Reused part of return condensate water in the pellet cutting process, reducing water usage by 20,088 cubic meters.
- Changed the fill pack in the cooling tower system to reduce water turbidity, thereby reducing blowdown water discharge by 11,849 cubic meters.

#### Map Ta Phut Olefins Company Limited

- Reduced steam usage in the Header Steam Flare system by lowering the pressure setpoint, leading to a reduction in water usage by 34,686 cubic meters.
- Reduced the speed of cooling water pump turbines, which decreased high-pressure steam usage by 19,496 cubic meters.

These projects have enabled the Company to reduce water usage by 123,000 cubic meters and limit external water extraction to 3.14 cubic meters per ton of production, aligning with the set targets. However, the Company faces challenges from fluctuations in raw water quality, which impact the effectiveness of water reduction measures. As a result, the Company places great importance on continuously improving production processes and preparing to address water resource challenges to ensure sustainable operations in the long term.



## Risk Management and Efficient Waste Management Regulation

Creating value from waste based on circular economy principles is of great importance to SCGC. The Company carries out projects to reduce waste generation at its source and promote recycling in order to comply with stricter regulations that extend responsibilities of organizations to include final waste management. As a result, the Company has enhanced the development of risk management systems and waste management regulations. Waste processors must be certified according to the Eco Factory standard for waste processors and be listed in the Approved Vendors List to ensure high standards. Additionally, the SCGC Smart Waste Management platform has been developed to manage waste digitally from the beginning to final disposal, promoting efficient waste generation and recycling management.

One of the ways to generate value from waste (Waste to Value) is by avoiding incineration, such as recycling 112 tons of plastic waste from SCGC's production process. This waste is sent to Circular Plas Co., Ltd. to be recycled using Advanced Recycling technology, producing Circular Naphtha, a recycled feedstock used in the production process of Map Ta Phut Olefins Co., Ltd. This demonstrates the efficiency of waste management, focusing on creating added value from waste based on circular economy principles. This approach not only reduces environmental impact but also creates business opportunities, driving the organization towards long-term sustainability goals.



## Systematic Control of Air Pollutant Emissions from Sources

SCGC has implemented control measures for Volatile Organic Compounds (VOCs) before these pollutants are released into the atmosphere to prevent impacts on air quality, the environment, and the health of employees and surrounding communities. These measures include the design of plants using modern, environmentally friendly technology to control air pollutant emissions, the design of production processes, storage tanks for raw materials and products, product transfer processes, and closed wastewater treatment systems. Efficient technologies are used to reduce and control the release of VOCs, such as Vapor Recovery Units (VRU), high-efficiency equipment to reduce leakage like seal-less valves and double mechanical seal pumps.

**SCGC** has developed measures to manage volatile organic compounds (VOCs) as a standard for all SCGC factories. This includes monitoring, assessing, and controlling VOC emissions (VOCs Inventory), thereby becoming an International Operation Standard. These measures ensure efficient control of VOCs from various sources and activities, preventing environmental risks that could impact the business.

Additionally, SCGC has developed the SCGC SMART VOCs Management Platform to manage VOCs in realtime. This platform is used for controlling, monitoring, and managing VOCs to reduce their emissions. SCGC also collaborates with government and private agencies in the area to serve as a model for managing volatile organic compounds in the region.



## Long Son Petrochemicals – Vietnam's First Integrated Petrochemical Complex

Long Son Petrochemicals (LSP), a subsidiary of SCG Chemicals, successfully commenced commercial operations in September 2024. However, due to unprecedented market challenges, including oversupply, weak demand, and rising costs, the company has been forced to temporarily suspend operations since the middle of October 2024.

Nonetheless, the company's state-of-the-art \$5 billion integrated petrochemical complex has garnered widespread recognition for its high-quality products and operational excellence. Since its inception, LSP has been committed to conducting its business in alignment with sustainable development principles. The company prioritizes Environmental, Social, and Governance (ESG) criteria, striving to advance a sustainable future for Vietnam's petrochemical industry.

#### Environmentally Friendly Petrochemical Complex

LSP has successfully maintained a zero record of official complaints related to environmental issues by implementing world-class technology and advanced early detection systems.

• Enclosure Ground Flare (EGF): LSP is the first company in Vietnam to implement world-class scale Enclosure Ground Flare (EGF) technology. This system significantly reduces steam noise, ensures more complete combustion without smoke, and contains the flame within a combustion chamber, eliminating visible light and heat emissions into the atmosphere. This advanced technology is considered one of the most effective solutions for environmental protection and minimizing impact on surrounding communities.



 Advanced Air Quality Monitoring Systems: To mitigate air pollution impacts on nearby communities, LSP has deployed cutting-edge monitoring systems, including E-Nose technology and a VOC (Volatile Organic Compounds) online monitoring system, providing real-time data and early detection for swift responses.



• Wastewater Management: LSP ensures all discharged wastewater meets stringent quality standards through its Complex Wastewater Treatment Unit. This unit incorporates a Real-Time Automatic Continuous Monitoring System (ACMS) and periodic testing by authorized laboratories to uphold environmental compliance.



# Human Rights Operations

At SCGC, we stress the importance of respect for human rights and living together in equality, which we regard as a foundation of sustainable organizational development. As a result, the Company has implemented various projects and activities that reflect our commitment to human rights in a concrete manner. Such efforts are as follows.

- SCGC has announced a human rights policy and a diversity and inclusion policy, as well as international standards under United Nations Global Compact (UNGC), Declaration on Fundamental Principles and Rights at Work of the International Labour Organization (ILO), and other international standards to drive the continual implementation of such policies.
- SCGC has performed human rights risk assessment across the value chain, covering the operations of both SCGC and its business partners. Such practice focused on operations to monitor and prevent human rights violations to ensure that all stakeholders across the value chain are treated fairly.
- In case of human rights violations, SCGC has a complaint handling and response mechanism and established measures to mitigate impacts through stakeholder participation.
- SCGC continually communicates and provides training for its employees at every level to foster awareness, understanding, and knowledge of respect for human rights.



As a result, in 2024, SCGC employee engagement survey on work environment that embraces individual differences scored

4.19 out of a maximum of 5

# Respecting Diversity and Embracing Differences

In light of respecting diversity and embracing differences, SCGC has continually instilled the sense of such perceptions in its employees at every level. For example,

- "The Leadership Development" by implementing various training projects for management and supervisors to foster understanding of diversity, equality, and non-discrimination issues. The Company is willing to promote management skills of teams with diversity in gender, age, and cultural backgrounds.
- "Pride Month Celebration" and "Inclusion Days" activities to make all employees feel that they are part of organization.





# **Personnel Care and Safety Culture Promotion**

**SCGC** gives utmost importance to our personnel who are deemed most valuable asset of the company. The Company strictly adheres to business practice that uphold human rights and give utmost importance to occupational safety, health, and employee and business partners' well-being, as well as promoting an equitable work environment that promotes sustainable development.

**SCGC** has comprehensively managed occupational health, safety, stability, and emergency covering the design, procurement, production, and transportation of goods. Our goal is to attain an incident-free business operation.

In response to such goal, SCGC has developed occupational health and safety policy and established strategy that is in line with business risk context. The operational guidelines are as follows.

- Promote safety culture at organizational level the Company has encouraged its employee at every level to be safety leader and fostered operational discipline, together with urging them to be observant to prevent accidents.
- 2. Raise the standard of occupational health and safety management system covering the entire manufacturing process, the provision of service, and transportation. Such practice aimed to enhance the safety of business operation in every dimension.
- **3. Apply digital technology** to enhance risk assessment effectiveness, surveillance and prediction of events that might lead to operational incidents.

4. Expand the outcomes of occupational health and safety (OHS) to new businesses both within and outside the country so as to establish a safety standard in every business unit under SCGC business conglomerate. Such practice reflected SCGC's commitment to provide holistic care for human resources and foster continual and sustainable safe work environment for every personnel and business partner.



In the end of 2024, SCGC has launched "Safety Reform" campaign which is an initiative project to raise the standard of personnel safety behavior. By focusing on "Check Before Act" approach, it actively strengthened the Company's safety culture. This campaign is based on root cause analysis and comprises 2 principles as follows:

- Process Sarety Management (PSM): it is the safety management in manufacturing process to prevent incidents that could have severe impact.
- **Operational Discipline:** it is the strict compliance with standards and the adherence to safe operating procedures.





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# Success in the Path Towards Sustainability with Business Partners in Social and Occupational Health and Safety

• Strengthening Human Rights Standards together with Business Partners

SCGC is committed to sustainable business practices, emphasizing the respect and promotion of human rights throughout the supply chain. Since 2024, SCGC has communicated its human rights policy to business partners to build understanding and raise awareness of the importance of adhering to international standards. Furthermore, SCGC has established concrete criteria for working processes within the business partner evaluation framework that includes human rights issues. This ensures SCGC can effectively identify and manage risks.

From its performance in the previous year, SCGC has assessed human rights risks among 193 key business partners and mitigated initial human rights risks. The goal is to complete these plans by 2026.

90%

comply with basic human rights laws



have developed improvement plans to enhance operational standards

## • Promoting a Safety Culture: SCGC Safety Practice Day 2024

**SCGC** places a strong emphasis on occupational health and safety (OHS) and remains committed to continuously fostering a safety culture among its business partners. This commitment aims to ensure safe working conditions, uphold standards, and minimize workplace accident risks.

In 2024, SCGC organized the SCGC Safety Practice Day 2024, under the theme "Moving Forward" – advancing with care towards sustainable safety. The event aims to raise awareness among business partners about the importance of safety practices and create opportunities for sharing knowledge and best practices on safety standards between SCGC and its partners.

By organizing a seminar and presenting awards to outstanding business partners demonstrating exceptional safety performance and procurement excellence, these recognitions are designed to honor achievements and motivate continuous development.



## **World-Class Safety Standards and Stakeholder Commitment**

LSP is committed to ensuring the highest level of safety and well-being for its employees, stakeholders, and surrounding communities. The company is dedicated to learning, growing, and living alongside local communities, with the goal of creating a better tomorrow for everyone.

#### • Occupational Health & Safety

LSP has successfully achieved its "Zero Incident" target during the startup phase by implementing proactive risk management strategies alongside a robust Process Safety Management (PSM) system. These measures focus on the early identification and mitigation of critical risks to ensure sustained safe operations. In line with this commitment, the company also conducted a comprehensive and rigorous Pre-Startup Safety Review (PSSR) to verify safety preparedness across all operational aspects.

#### Advanced Leak Detection

LSP utilizes VOC cameras for leak detection and early response, minimizing potential consequences.



#### Emergency Preparedness

LSP conducted a Level 3 Emergency Chemical Drill in collaboration with the province and competent authorities, involving over 240 participants, including fire and rescue teams, military forces, and community representatives, to ensure emergency readiness.



## • Fire Risk Management for Chemical Storage Tanks

To mitigate the risk of fire at chemical storage tank areas, LSP has invested in large-capacity mobile high-pressure fire monitors (Big Gun) along with firefighting foam. The company has also collaborated with the Ba Ria – Vung Tau Provincial Fire Department to conduct emergency response drills and

has become a member of the Emergency Mutual Aid Group (EMAG) to ensure effective mutual support in the event of an emergency.



#### Community Contribution

LSP also always does our best of strengthening trust and fostering community support through transparent communication and proactive participation besides that, LSP has focused on sustainable community development through 6 pillars as our key strategic consist of "Culture – Youth – Well-being – Green – Safety – Wealth".

- Before Startup: LSP organized comprehensive communications regarding plant startup activities with all stakeholders, particularly the surrounding communities. The company held briefing sessions with 195 households located near the plant and distributed informational leaflets to over 500 additional households. Furthermore, mobile loudspeaker announcements were conducted throughout nearby communities to enhance public understanding and gather community feedback.
- During Startup: LSP deployed day-and-night patrols to help manage and find solutions to minimize impacts on the community, as well as to promptly address any concerns raised.



This demonstrates the company's commitment to being a good and responsible neighbor to the surrounding society.



# **Community and Social Participation**

**SCGC** is committed to operating business that provides benefits to the society at large. Therefore, the flagship CSR projects have been designed with the prime focus on creating business ecosystem that develops and expands from a small group to the stakeholder network of various levels. Such practice has been carried out through 3 key approaches that are Low Waste, Low Carbon, and Reduced Inequity, as follows:

## 1. Low Waste – through sustainable waste management to restore environment

SCGC actively promotes circular economy concept and sustainable waste management through "The Sea Saver" project under the concept "3 readies for the ocean" as follows:

- Ready to do by promoting upstream garbage sorting in the community
- Ready to collect garbage in coastal area and water source by using floating trash boom innovation
- Ready to grow by creating biodiversity through SGCC Fish Homes which is an innovation using waste materials to restore the ocean.

In 2024, this project attracted 1,837 volunteers and was able to collect 3,700 kg. of garbage which could be divided into 3,377 kg. of general waste and 324 kg. of recyclable waste. It amounted to the reduction of greenhouse gas emissions of 337 kgCO\_e.

#### 2. Low Carbon – create low carbon society through ecosystem and community forest

**SCGC** has implemented various environmental projects to reduce greenhouse gas emissions and restore ecosystem to foster the low carbon society. Key approaches are as follows:



#### The restoration of watershed forest of Yai Da mountain, Rayong

The prime focus of this decade-long project has been to solve drought problems through the "2 developments, 2 storages" model. For example, the development of people, as well as rules and regulations, and the storage of water and data. This project has revived and restored dried area to become fertile land again. 200 check dams were built and over 10,000 trees were planted. This project attracted over 4,760 participants and generated income from ecotourism over 479,000 baht.

Moreover, this project received an honorary award from Biodiversity-Based Economy Development Office (Public Organization) or BEDO, Ministry of Natural Resources and Environment for the successful implementation of payment for ecosystem services: PES concept.

#### "Plant with Love" Project – to develop sustainable carbon society

This project aimed to promote reforestation and growing seedlings among the Company's network nationwide, with the set target of planting 1,000,000 trees through the seeds that the Company distributed to its employees and general public. In 2024, over 415,602 trees were planted on the area of 1,044 rai, which is equivalent to the reduction of greenhouse gas emissions 4,460 ton CO<sub>2</sub> e (excluding the mangrove forest developed for carbon credit).

Furthermore, SCGC also supported the development of "low carbon community" by teaming up with Thailand Greenhouse Gas Management Organization (Public Organization) or TGO in Low Emission Support Scheme (LESS) project. As a result, 4 communities were accredited with 3,900 kgCO<sub>2</sub>e greenhouse gas emissions reduction and generated an income from ecotourism over 318,000 baht.

## 3. Reduce Inequity – to foster equality and improve the quality of life of people in the community

Throughout the past decade, **SCGC** has played a significant role in inequity reduction in Rayong province through the Company's social enterprise development projects. Their prime focus has been to enhance community potential to become self-reliance community in a sustainable manner under the **"strong community, strong society"** concept which is aligned with ESG social target. Key approaches are as follows:



· The development of social enterprise network

**SCGC** promoted the development of products that reflect local identity through the innovation that responds to bio-circular-green economy concept (BCG economy). The Company fully supported the development of value-driven careers, as well as implementing the **"Amazing Community"** project to showcase the potential of 3-power, 3-generation communities that are:

- 1. Map Chalood Homemaker Group cloth product social enterprise
- 2. BaanRalin Green Living Group new generation group that creates natural products.
- Ban Thap Ma Stingless Bee Farmers' Group senior citizens who transfer knowledge to the new generation.
- · The promotion of new skills and body knowledge for the community

SCGC regularly organized various training courses for the community enterprise covering production innovation, brand development, online and offline marketing. Only recently, the Company provided knowledge regarding generative AI to provide the community an opportunity to gain access to the new technology and enhance community's digital potential. Such practice focused on the practical application of technology to enhance work efficiency, data analysis, and marketing strategy development.

With this continual collaboration, SGCC has been able to generate income for communities in Rayong province through community enterprise network and various supporting activities at the amount of over THB 66 million per year.

**SCGC** has operated its business based on the sustainability principle by integrating environmental benefits such as greenhouse gas reduction with the reduction of inequity through the participation of employee, community, government network, and private sector network. Therefore, all projects clearly reflected the Company's leadership in driving ESG in a concrete manner, which could truly inspire change and create the difference in the locality.



# **Digital Solution for Sustainable Corporate Governance**

In the context of digital transformation, various leading organizations started to develop digital governance approach through the use of digital technology to enhance governance efficiency in terms of decision making, risk management, internal control, and ESG disclosure in a precise and timely manner. One of the striking examples SCGC in adopting such approach is **the smart solution called "DRS by REPCO NEX" (Digital Reliability Service Solutions by REPCO NEX)**, which is the world's first comprehensive digital solution developed from real-world experience within the organization and advanced technology to enhance asset performance management and support sustainability goals in the manufacturing process.

#### DRS comprises 3 key components that are

- 1. Smart maintenance with digital technology
- 2. Driving the organization through digital transformation
- 3. Implementing renewable energy management platform

An integration of such innovation with the governance system does not only enhance better risk management of the Company, but also enables more precise strategic decisions. Meanwhile, it is ready to respond to various new challenges such as greenhouse gas emission reduction, big data management, and cybersecurity.



# Enhancing Information Security and Digital Governance

At **SCGC**, we stress the importance of the continual development and improvement of business operation based on good governance principles. Furthermore, we realize the importance of information security in the digital era in order to boost our clients' and business partners' confidence.

SGCC digital unit has developed and improved the **information security management system** in accordance with the **international ISO/IEC 27001:2022 standard.** Such practice aimed to enhance work efficiency and elevate the security of the organization's information systems.

Furthermore, SCGC has passed the assessment by BSI (British Standard Institution) and has officially received **ISO/IEC 27001:2022** standard certification for cloud services management in November 2024.

Such undertaking has reflected the Company's commitment to enhance cybersecurity management approaches and processes in a transparent manner, under digital and information technology governance.

# **Responsible Business Practices Through Partner Oversight** in a Sustainable Manner

#### **Sanctions Screening**

In 2024, SCGC and its joint ventures companies implemented Sanction Screening measures to screen every business partner in their registry. This process ensures that no transactions are conducted with individuals, organizations, or countries subject to sanctions by international regulatory bodies such as the United States (OFAC), the European Union (EU), or the United Nations (UN). These measures allow SCGC to ensure that all operations with business partners comply with laws and international standards.

## Applying digital innovation for transparency and sustainability

**SCGC** is dedicated to enhancing procurement processes by adopting digital technologies to manage supply chains, improve work efficiency, reduce costs, and support fair practices within the procurement system.

# Management of Business Partners through VeNus System

Since 2023, SCGC has developed the Business Partner Management System (VeNus) and applied it to its operations. This platform brings all stages of managing business partners within a single system, from partner selection to performance evaluation, and partner capability development in a sustainable manner.

# VENUS

**SCGC** expanded the use of the Business Partner Management System (VeNus) to **Long Son Petrochemicals (LSP) in Vietnam.** It also organized seminars to educate partners about system usage and compliance guidelines, fostering understanding and enhancing supply chain management alignment across the organization.

# • Enhancing procurement system (The Arch) with online auction function (e-Auction)

Since 2021, SCGC has implemented The Arch system, driven by artificial intelligence (Al) and a centralized database, in its procurement processes. This system can analyze and recommend key information for procurement, enhancing the precision and comprehensiveness of decisionmaking by procurement personnel while effectively reducing operational risks.

**SCGC** enhanced its procurement system (The Arch) by integrating an online auction function (e-Auction). This feature, developed based on user experience and equipped with complete specifications adhering to international auction standards, promotes transparency and fairness in SCGC's business competition.





G

# **Upholding Integrity and Compliance**

LSP has achieved zero non-compliance by strictly adhering to laws, regulations, ethical business practices, and stakeholder engagement. By upholding the highest standards of integrity, LSP ensures shared value creation for all stakeholders. With the successful startup of its integrated petrochemical complex, LSP has set a new benchmark for sustainable industrial development in Vietnam.

• Environmental: Throughout its operations, LSP has received no environmental complaints. The company has implemented advanced environmental monitoring systems and adopted various eco-friendly innovations in its operations.



- Social: LSP has maintained zero incidents through strict safety management practices. The company also ensures close and active engagement with surrounding communities.
- Governance: LSP has maintained full compliance with all applicable laws and regulations, with no violations. The company is committed to conducting its business responsibly, transparently, and fairly.

![](_page_21_Picture_8.jpeg)

![](_page_21_Picture_9.jpeg)

## **Economic Performance**

Performance Data	Unit	2021	2022	2023	2024	GRI Standard	SASB
Revenue from sales and service	THB million	238,390	236,587	191,482	210,298	GRI 201-1	
Total revenue	THB million	239,180	240,562	193,345	215,346	GRI 201-1	
Profit for the year	THB million	27,068	5,901	589	- 7,990	GRI 201-1	
EBITDA	THB million	46,681	11,633	11,924	5,004	GRI 201-1	
Employee compensation comprising salary, wage, welfare, and regular contributions	THB million	10,425	10,523	11,134	12,127	GRI 201-1	
Dividend from shareholders	THB million	85,841	10,587	-	-	GRI 201-1	
Interest and financial expenses to lender	THB million	1,748	2,288	3,945	5,732		
Taxes to government and local government authorities such as income tax, local maintenance tax, property tax, and other specific taxes	THB million	3,818	2,151	1,838	1,666	GRI 201-1	
Tax privilege and others from investment promotion and research and development	THB million	949	451	531	471	GRI 201-4	
Contributions to organizations <sup>(1)</sup>	THB million	NA	17.29	11.81	18.54		
Contributions to political activities <sup>(2)</sup>	THB million	0	0	0		GRI 415-1	
Pavanua from cales of high value-added products and convices (subsidiary)	THB million	85,460	86,170	74,073	67,624		
Revenue from sales of high value-added products and services (subsidiary)	%	35.85	36.42	38.68	32.16		
Powonus from cales of ECC groon choice products and convises (subsidiary)	THB million	107,585	133,524	107,271	111,348		
Revenue from sales of SCG green choice products and services (subsidiary)	%	45	56	56	53		
Revenue from sales of products and services provide resource efficiency benefits	THB million	5,302	27,457	32,655	40,878		RT-CH-410a.1
during their use phase to customers and consumers (subsidiary)	%	2.10	11.60	17.00	16.00		
New suppliers that were screened using environmental criteria	% of supply value	99	100	100	100	GRI 308-1	
Suppliers assessed for environmental impacts	Suppliers	NA	1,961	1,980	2,027	GRI 308-2	
Suppliers identified as having significant actual and potential negative environmental impacts	Suppliers	NA	0	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	0	0	0	GRI 308-2	
Suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment	%	NA	0	0	0	GRI 308-2	
New suppliers that were screened using social criteria	%	99	100	100	100	GRI 414-1	
Suppliers assessed for social impacts	Suppliers	NA	1,961	1,980	2,027	GRI 414-2	
Suppliers identified as having significant actual and potential negative social impacts	Suppliers	NA	0	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	0	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	0	0	0	GRI 414-2	
Procurement spending by geography (proportion of spending on suppliers)							
• Domestic	%	80	80	82	83	CRI 204-1	
• Regional	%	20	20	18	17	Ghi 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	8	6	1	4	GRI 205-3	
Average customer satisfaction	%	87	87	88	89		

![](_page_22_Figure_3.jpeg)

![](_page_22_Figure_4.jpeg)

![](_page_22_Figure_5.jpeg)

<sup>10</sup> The first third organizations contributed by SCGC are Alliance to End Plastic Waste (AEPW), the Federation of Thai Industries, and the Thai Chamber of Commerce.

<sup>(2)</sup> 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 (e.g. election campaign, spending related to ballot).

NA = Not Available

#### **Environmental Performance**

#### **Greenhouse Gas Emissions**

Performance Data	Unit	2021(1)	2022	2023	2024	GRI Standard	SASB
GHGs Scope 1 and 2	Million ton CO <sub>2</sub> e	4.73	3.62	3.62	3.53		
GHG Scope 1 <sup>(2)</sup>	Million ton CO <sub>2</sub> e	3.71	2.89	2.84	2.81	GRI 305-1	RT.CH- 110a.1
Biogenic CO <sub>2</sub> emissions	Million ton CO <sub>2</sub> e	0.00	0.00	0.00	0.00	GRI 305-1	
GHG Scope 2 <sup>(2)</sup>	Million ton CO <sub>2</sub> e	1.02	0.72	0.78	0.73	GRI 305-2	
• Market Base	Million ton CO <sub>2</sub> e	1.02	0.72	0.78	0.73		
Location Base	Million ton CO <sub>2</sub> e	1.15	0.87	0.82	0.79		
GHG Scope 3 <sup>(3)</sup>	Million ton CO <sub>2</sub> e	5.04	4.73	4.60	4.38	GRI 305-3	
GHG emissions intensity (scope 1 and 2)		0.50	0.48	0.47	0.48	GRI 305-4	
GHG emissions reduction	Thousand ton $\rm CO_2e$	46.21	52.99	51.09	48.86	GRI 305-5	
GHG emissions reduced as a direct result of reduction initiatives	Thousand ton CO <sub>2</sub> e	46.21	52.99	51.09	48.86		
• Offsets	Thousand ton CO <sub>2</sub> e	0.00	0.00	0.00	0.00		

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

(2) Within SGS's limited assurance scope (Page 29)

<sup>(2)</sup> 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, Category 6: Business Travel, Category 7: Employee Commuting, Category 9: Downstream Transportation and Distribution, Category 13: Downstream Leased Assets, Category 14: Franchises, and Category 15: Investments.

![](_page_23_Figure_7.jpeg)

<sup>(2)</sup> In 2022, there were shutdown activities in some plants, resulting in lower GHG emissions than normal operation.

![](_page_23_Figure_9.jpeg)

![](_page_23_Figure_10.jpeg)

![](_page_23_Figure_11.jpeg)

2023

2024

![](_page_23_Figure_12.jpeg)

![](_page_23_Figure_13.jpeg)

<sup>(1)</sup> 1<sup>st</sup> year to incorporate environmental performance from abroad operation

2022 <sup>(I)</sup> 1<sup>st</sup> year to incorporate environmental performance from abroad operation

0.80

0.85

2023

#### **Energy Consumption**

Perfo	ormance Data	Unit	2021	2022	2023	2024	GRI Standard	SASB
a) Total fuel consu organization fre	mption within the om non-renewable sources <sup>(1)</sup>	Petajoules	68.45	57.47	55.57	55.26	GRI 302-1a	
b) Total fuel consu organization fro	Imption within the om renewable sources	Petajoules	0.00	0.00	0.00	0.00	GRI 302-1b	
c) Total purchased	l energy consumption <sup>(2)</sup>	Petajoules	8.58	6.56	6.66	6.35	GRI 302-1c	
Non-renewable	Electricity	Petajoules	6.28	5.12	5.18	4.92		
	• Heating	Petajoules	0.00	0.00	0.00	0.00		
	• Cooling	Petajoules	0.00	0.00	0.00	0.00		
	• Steam	Petajoules	2.30	1.44	1.48	1.43		
Renewable	• Solar Cell	Petajoules	0.00	0.00	0.00	0.00		
d) Total self gener	ate		0.20	0.27	0.14	0.26		
Non-renewable		Petajoules	0.19	0.26	0.12	0.24		
Renewable		Petajoules	0.01	0.01	0.02	0.02		
e) Total energy (el & cooling) sold	ectricity and heating	Petajoules	0.00	0.82	0.89	0.67	GRI 302-1d	
Electricity		Petajoules	0.00	0.00	0.00	0.00		
Heating		Petajoules	0.00	0.00	0.00	0.00		
Cooling		Petajoules	0.00	0.00	0.00	0.00		
• Steam		Petajoules	0.00	0.82	0.89	0.67		
Total energy const the organization (	umption within a+b+c+d-e) <sup>(2)</sup>	Petajoules	77.24	63.48	61.49	61.20	GRI 302-1e	
Energy intensity		Gigajoules/ Ton production	8.20	8.45	7.91	8.24	GRI 302-3	
Amount of reduct	ions in energy consumption	Petaioules	0.66	0.80	0.85	1.02	GRI 302-4	

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

**Total Energy Consumption** 

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

<sup>(2)</sup> Within SGS's limited assurance scope (Page 29)

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

1.00

0.75

0.50

0.25

0.66

2021(1)

1.02

2024

## **Production and Raw Material**

Performance Data	Unit	2021(1)	2022	2023	2024	GRI Standard	SASB
Production	Thousand tons	9,420	7,517	7,772	7,421		
Raw materials	Thousand tons	8,948	8,586	8,241	7,849	GRI 301-1	RT-CH-000.A
Non-renewable materials	Thousand tons	8,948	8,586	8,241	7,849	GRI 301-1	
Renewable materials	Thousand tons	0	0	0	0	GRI 301-1	
Recycled materials	Thousand tons	53.0	31.5	46.1	22.3	GRI 301-2	

<sup>(0)</sup> 1<sup>st</sup> year to incorporate environmental performance from abroad operation

## Water Withdrawal and Effluent Quality

			20	<b>21</b> <sup>(1)</sup>	20	022	20	023	20	)24		
Performa	ance Data	Unit	All area	Area with water stress	GRI Standard	SASB						
Water Withdrawal												
Water withdrawal by source												
Surface water <sup>(2)</sup>	<ul> <li>Freshwater TDS ≤ 1,000 mg/l</li> </ul>		0.00	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	Million cubic meters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Groundwater <sup>(2)</sup>	<ul> <li>Freshwater TDS ≤ 1,000 mg/l</li> </ul>		0.48	0.00	0.37	0.00	0.00	0.00	0.00	0.00	GRI 303-3	RT-CH-140a.1
	• Other water TDS > 1,000 mg/l	Million cubic meters	0.00	0.00	0.00	0.00	0.28	0.00	0.23	0.00		
Third-party water (total) <sup>(2)</sup>	<ul> <li>Freshwater TDS ≤ 1,000 mg/l</li> </ul>	A AND S S S S S S S S S S S S S S S S S S S	30.31	0.00	23.73	0.00	23.74	0.00	22.60	21.99	GRI 303-3	RT-CH-140a.1
	• Other water TDS > 1,000 mg/l	Million cubic meters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total water withdrawal <sup>(2)</sup>		Million cubic meters	30	.79	24	1.10	24	.02	22.83	21.99		
Recycled water <sup>(2)</sup>		Million cubic meters	1. 4.	46 94	1. 6	64 .82	1. 7.	80 50	1. 6.	.57 .89		
Water Discharge												
Water discharge by destination <sup>(2)</sup>	Surface water	Million cubic meters	5.62	0.00	5.15	0.00	5.15	0.00	4.79	4.51	GRI 303-4	
	Ground water	Million cubic meters	0.00	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	0.12	0.05		
	Third-party water (total)	Million cubic meters	0.06	0.00	0.02	0.00	0.07	0.00	0.09	0.02	GRI 303-4	
	Third-party water sent for use to other organizations	Million cubic meters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	Total water discharge <sup>(2)</sup>	Million cubic meters	5.69	0.00	5.31	0.10	5.34	0.00	5.00	4.57	GRI 303-4	
Water discharge by freshwater and other water <sup>(2)</sup>	• Freshwater TDS ≤ 1,000 mg/l	Million cubic meters	0.57	0.00	1.11	0.00	1.06	0.00	1.22	0.85	GRI 303-4	
	• Other water TDS > 1,000 mg/l	Million cubic meters	5.12	0.00	4.20	0.00	4.29	0.00	3.78	3.73		
	BOD	Tons	19	0.00	29	0.00	34	0.00	29	17		
	COD	Tons	275	0.00	225	0.00	242	0.00	234	203		
	TSS	Tons	43	0.00	42	0.00	43	0.00	51	42		
	Water consumption	Million cubic meters	25	.10	18	.79	18	.68	17	.83	GRI 303-5	
	Water intensity	Cubic meters/Ton	2.	66	2	.50	2	.40	2.	.40		
	Number of violations of legal environmental obligations/ regulations	Number of cases		C		0		0		0		RT-CH-140a.2

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

<sup>(2)</sup> Within SGS's limited assurance scope (Page 29)

NA = Not Available

Total Water Withdrawal
Million cubic meters

![](_page_24_Figure_10.jpeg)

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

![](_page_24_Figure_12.jpeg)

<sup>(1)</sup> 1<sup>st</sup> year to incorporate environmental performance from abroad operation

#### Waste Management

Performance Data	Unit	20	21	202	22 <sup>(1)</sup>	20	23	20	24	GRI Standard	SASB
Hazardous waste generation <sup>(2)</sup>	Tons		6,559		10,835		8,870		33,335	GRI 306-3 (2020)	RT-CH- 150a.1
Hazardous waste management <sup>(2)</sup>	Tons	Within SCGC	Outside SCGC	Within SCGC	Outside SCGC	Within SCGC	Outside SCGC	Within SCGC	Outside SCGC		
Diverted from disposal <sup>(2)</sup>		5	1,895	0	7,169	0	6,435	0	17,629		
• Reuse	Tons	0	0	0	0	0	0	0	32		
Recycled	Tons	5	1,782	0	7,084	0	4,264	0	15,403		
Other recovery	Tons	0	113	0	85	0	100	0	86		
Treatment	Tons	0		0		0	2,070	0	2,108		
Directed to disposal <sup>(2)</sup>		0	4,407	0	3,626	0	2,368	0	15,695	GRI 306-5 (2020)	
<ul> <li>Incinerated with energy recovery</li> </ul>	Tons	0	4,391	0	3,435	0	2,244	0	13,005		
<ul> <li>Incinerated without energy recovery</li> </ul>	Tons	0	16	0	190	0	125	0	2,691		
Other disposal	Tons	0	0	0	0	0	0	0	0		
• Landfilled	Tons	0	0	0	0.55	0	0	0	0		
Hazardous waste in the storage at the end of the year <sup>(2)</sup>	Tons		225		192		258		196		
Non-hazardous waste generation <sup>(2)</sup>	Tons		19,978		17,401		17,995		16,890	GRI 306-3 (2020)	RT-CH- 150a.1
Non-hazardous waste management <sup>(2)</sup>		Within SCGC	Outside SCGC	Within SCGC	Outside SCGC	Within SCGC	Outside SCGC	Within SCGC	Outside SCGC		
Diverted from disposal <sup>(2)</sup>		134	18,921	150	0.00	163	16,617	201	16,485	GRI 306-4 (2020)	RT-CH- 150a.1
Reuse	Tons	0	0	0	26	0	0	0	17		
Recycled	Tons	134	18,921	150	16,319	163	16,617	201	16,015		
Other recovery	Tons	0	0	0	0	0	0	0	0		
Treatment	Tons	0	0	0	0	0	0	0	453		
Directed to disposal <sup>(2)</sup>		0	992	160	801	0	484	0	104		
Incinerated with energy recovery	Tons	0	696	160	262	0	68	0	47	GRI 306-4 (2020)	
<ul> <li>Incinerated without energy recovery</li> </ul>	Tons	0	296	0	197	0	10	0	5		
Other disposal	Tons	0	0	0	0	0	0	0	0		
Landfilled	Tons	0	0	0	341	0	406	0	52		
Non-hazardous waste in the storage at the end of the year <sup>(2)</sup>	Tons		621		749		437		392		
Total waste generated and being managed <sup>(2)</sup>	Tons	139	26,215	310	27,941	163	26,617	201	49,913		
Reuse/Recycled/Other recovery	Tons	139	20,816	150	23,514	163	23,765	201	34,114		
Incinerated without energy recovery/Other disposal/ Landfilled/Incinerated with energy recovery	Tons	0	5,398	160	4,427	0	2,852	0	15,799		

<sup>(0)</sup> 1<sup>st</sup> year to incorporate environmental performance from abroad operation

<sup>(2)</sup> Within SGS's limited assurance scope (Page 29)

#### **Air Emission**

Performance Data	Unit	2021(1)	2022	2023	2024	GRI Standard	SASB
Oxides of nitrogen <sup>(2)</sup>	Thousand tons	1.52	1.42	1.44	1.17	GRI 305-7	RT-CH-120a.1
Oxides of sulfur <sup>(2)</sup>	Thousand tons	0.01	0.03	0.01	0.01	GRI 305-7	RT-CH-120a.1
Dust <sup>(2)</sup>	Thousand tons	0.01	0.04	0.03	0.04	GRI 305-7	RT-CH-120a.2
VOCs <sup>(2)</sup>	Thousand tons	0.66	0.55	0.56	0.44	GRI 305-7	RT-CH-120a.1

<sup>(0)</sup> 1<sup>st</sup> year to incorporate environmental performance from abroad operation

<sup>(2)</sup> Within SGS's limited assurance scope (Page 29)

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

Performance Data	Unit	2021(1)	2022	2023	2024	GRI Standard	SASB
Operating Expenses – Environmental	THB Million	717	878	725	475		
Capital Investment - Environmental	THB Million	276	172	53	27		
Total Expenses – Environmental (Capital Investment + Operating Expenses)	THB Million	993	1,050	778	501		
Savings, cost avoidance, and tax incentives linked to environment investment	THB Million	237	520	656	416		
Number of violations of legal environmental obligations/regulation	Number of cases	0	0	0	0	GRI 2-27, GRI 307-1	

NA = Not Available

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![](_page_25_Figure_12.jpeg)

![](_page_25_Figure_13.jpeg)

![](_page_25_Figure_14.jpeg)

## **Social Performance: Health and Safety**

Performance Data	Unit	<b>2021</b> <sup>(1)</sup>	2022	2023	2024	GRI Standard	SASB
From Workplace							
Workers covered by an occupational health and safety							
management system covered by an occupational health and safety management system	Person	NA	6,516	7,815	8,034	GRI 403-8	
Workers covered by such a system that has been internally audited	Person %	NA NA	6,516 100	7,815 100	8,034 100		
Workers covered by such a system that has been audited or certified by an external party	Person %	NA NA	6,516 100	7,815 100	8,034 100		
Hours worked <sup>(2)</sup> • Employee	Million hours worked	17.490	15.710	15.673	16.289	GRI 403-9	
		21.759	20.921	23.342	24.835		
Illness & disease rate • Employee <sup>20</sup>	Cases/1,000,000 hours worked	0.114	0.064	0.255	0.184		RT-CH-320a.
Contractor		0.414	0.096	0.257	0.362		
Fatality work-related injury and occupational illness							
& disease rate	Cases/1,000,000						RT-CH-320a.
Employee <sup>(2)</sup> Contractor	hours worked	0.000	0.000	0.000	0.061		
Total number of recordable work-related injury <sup>(2)</sup>							
• Employee	Cases	2	1	4	3	GRI 403-9	
	Cases	9	2	0	9		
• Employee	Cases/1,000,000	0 114	0.064	0.255	0 184	CRI 403-9	
Contractor	hours worked	0.414	0.096	0.255	0.362	0111405 5	
Number of fatality work-related injury <sup>(2)</sup>							
Employee (Male : Female)	Cases	0:0	0:0	0:0	1:0	GRI 403-9	
Contractor (Male : Female)	Cases	3:0	0:0	0:0	0:0		
Fatality work-related injury rate <sup>(2)</sup>							
• Employee	Cases/1,000,000	0.000	0.000	0.000	0.061	GRI 403-9	RT-CH-302a.
Contractor	nours worked	0.138	0.000	0.000	0.000		
Number of high-consequence work-related injury <sup>(2)</sup>							
Employee	Cases	0	0	0	0	GRI 403-9	
Contractor	Cases	0	1	0	0		
High-consequence work-related injury rate <sup>(2)</sup>	Cases/1,000,000						
• Employee	hours worked	0.000	0.000	0.000	0.000	GRI 403-9	
• Contractor		0.000	0.048	0.000	0.000		
Lost time injury frequency rate <sup>(2)</sup>	Cases/1,000,000	0.000	0.000	0.000	0.000		
Contractor	hours worked	0.092	0.096	0.000	0.000		
Severity work-related injury rate							
• Employee	Days/1,000,000	0.000	0.000	0.000	0.000		
Contractor	hours worked	2.390	11.997	0.000	18.200		
Total number of recordable occupational illness & disease <sup>(2)</sup>							
Employee	Cases	0	0	0	0	GRI 403-10	
Contractor	Cases	0	0	0	0		
Occupational illness frequency rate	Cases/1.000.000						
Employee <sup>(2)</sup>	hours worked	0.000	0.000	0.000	0.000		
• Contractor		0.000	0.000	0.000	0.000		
Number of fatality occupational illness & disease	Casas	0	0	0		CPI 402-10	
Contractor	Cases	0	0	0	0	Ghi 405*10	
Process safety incidents count (PSIC)	Cases	0	0	0	2		RT-CH-540a
Process safety total incident rate (PSTIR)	Cases/200,000	0	0	0	0.009		RT-CH-540a.
Process safety incident severity rate (PSISR)	Cases/200,000	0	0	0	0.443		RT-CH-540a.
	nours worked						

Performance Data	Unit	2021(1)	2022	2023	2024	GRI Standard	SASB
From Travelling and Transportation							
Number of fatality work-related injury <sup>(2)</sup>							
Employee (Male : Female)	Cases	0:0	0:0	0:0	0:0	CDI 402.0	
Direct transportation contractor (Male : Female)	Cases	0:0	0:0	0:0	0:0	GRI 403-9	
Other transportation contractor (Male : Female)	Cases	0:0	0:0	0:0	0:0		
Number of Transport Incidents	Cases	1	0	0	0		RT-CH-540a.2
From Workplace, Travelling, and Transportation							
Number of fatality work-related injury <sup>(2)</sup>							
Employee (Male : Female)	Cases	0:0	0:0	0:0	0:0	GRI 403-9	
Contractor (Male : Female)	Cases	3:0	0:0	0:0	0:0		
Others							
Product that have under gone 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

<sup>(1)</sup> 1<sup>st</sup> year to incorporate environmental performance from abroad operation

<sup>(2)</sup> Within SGS's limited assurance scope (Page 29)

![](_page_26_Figure_6.jpeg)

Employees: Individuals working full time for the Company under respective employment contract, including operational-level staff, supervisory-level staff, managementlevel staff, probationary staff, and special contract employees.

Business partners within the work area: Business partners working for the Company, whose tasks and/or workspaces are under the Company's control (excluding transportation partners).

Direct transportation partners: Transportation partners managed under the SCGC brand.

Other transportation partners: Transportation partners not managed under the SCGC brand.

#### **Social Performance: Labor and Social Development**

Performance Data	Unit	2021	2022	2023	2024	GRI Standard	SASB
Number of employees	Persons	6,168	6,516	7,815	8,034	GRI 2-7	
Relevant ratio of the entry level wage by gender at significant locations of operation to the minimum wage • Female	Ratio	NA	2.17	2.17	2.17	GRI 202-1	
Proportion of local senior management <sup>(1)</sup>	%	1.7	6.0	0.0	3.7	GBI 202-2	
Number of new employees hire	Persons	150	655	502	496	011120212	
Percentage of total employees     By gender (Female : Male)     By amployee level (Management level : Other level)     By age group (under 30 yr : 30 - 50 yr : over 50 yr)	% % %	11.06 20: 80 0 : 100 90 : 10 : 0	10.05 29 : 71 0.2 : 99.8 77 : 23 : 0	8.02 20 : 80 0.6 : 99.4 79 : 21 : 0	6.17 24 : 76 0.8 : 99.2 83 : 17 : 0	GRI 401-1a	
Voluntary employee turnover • Percentage of total employees • By gender (Female : Male) • By employee level (Management level : Other level) • By ane group (under 30 vr : 30 - 50 vr : over 50 vr)	Persons % Ratio Ratio Batio	128 3.6 23 : 77 3 : 97 39 : 57 : 4	309 4.7 15 : 85 2 : 98 46 : 52 : 2	371 4.7 22 : 78 2 : 98 39 · 59 · 2	352 4.4 19 : 81 2 : 98 44 : 53 : 3	GRI 401-1b	
By age group (under 30 yr. 30 yr	Persons % Ratio Ratio Ratio Ratio	156 3.3 23 : 77 8: 92 33 : 47 : 20	336 5.2 16 : 84 2 : 98 45 : 52 : 3	376 4.8 21:79 3:97 39:59:2	44 . 53 . 3 457 5.7 18 : 82 6 : 94 49 : 45 : 21	GRI 401-1b	
Return to work after parental leave <sup>(2)</sup> • Number of employees taken parental leave • Number of employees returned to work after parental leave	Persons Persons	16 16	40 39	23 23	61 58	GRI 401-3	
Female share of total workforce Female in all management positions Female in junior management positions Female in top management positions	% % %	20.5 23.0 24.4 16.7	20.6 25.4 26.5 19.5	20.3 28.7 29.0 17.6	20.1 24.1 18.0 20.9	GRI 405-1	
Female in management positions in revenue-generating functions <sup>(3)</sup>	%	11.9	22.7	22.0	18.3	GRI 405-1	
Number of employees with disability (4)	Persons	2	1	1	4	GRI 405-1	
Total number of incidents of discrimination	Case	NA	0	0	0	GRI 406-1	
Percentage of security personnel who have received formal training in the organization's human rights policies	%	NA	100	100	100	GRI 410-1	
Number of sites where human rights risks have been identified with mitigation plans	Number of site	NA	NA	NA	NA		
Employees represented by an independent trade union or covered by collective bargaining agreements <sup>(5)</sup>	%	100	93.5	93.2	98.2		
Number of positions filled by internal candidates (Rotation/Promotion) • Percentage of total employees • By gender (Female : Male) • By employee level (Management level : Other level)	Persons % % %	432 9 26 : 74 16 : 84	1,464 22 32 : 68 12 : 88	1,141 15 24 : 76 14 : 86	764 10 35 : 65 10 : 90		
• By age group (under 30 yr : 30 - 50 yr : over 50 yr)	%	28:69:3	28:66:6	19 : 72 : 9	19:76:5		
Average hiring cost per employee Employee engagement level • By gender (Female : Male) • By employee level (Management level : Other level) • By service year (0 - 5 yr : over 5 - 20 yr : over 20 yr)	Baht/Person % % %	72,000 58 52 : 60 69 : 57 52 : 55 : 69	55,300 65 53 : 68 71 : 65 62 : 63 : 72	33,000 72 62 : 74 73 : 72 69 : 70 : 78	72,900 4.09 4.13 : 3.97 4.07 : 4.09 4.12 : 4.09 : 4.09		
Employee engagement level by ethnic group of employees (Thai : Others)	%	N/A	64 : 77	67 : 86	3.95: 4.22		
Proportion of absence by type  • Sick leave  • Work-related leave • Others • Batio of average salary of famile to male	% % %	11.84 0 99.47	20.02 0.46 65.18	11.63 0 88.37	18.01 0.69 81.30		
(Executive level) (base salary on female to male (Executive level) (base salary only) <sup>(6)</sup>	Ratio	1.148	1.102	1.356	0.000	GRI 405-2	
level) (base salary + other cash incentives) (6)	Ratio	1.181	1.015	1.397	-	GRI 405-2	

Performance Data	Unit	2021	2022	2023	2024	GRI Standard	SASB
<ul> <li>Ratio of average salary of female to male (Management level) (base salary only) <sup>(6)</sup></li> </ul>	Ratio	1.045	0.935	0.999	0.860	GRI 405-2	
Ratio of average salary of female to male (Management level) (base salary + other cash incentives) <sup>(6)</sup>	Ratio	1.011	0.906	1.006	0.966	GRI 405-2	
<ul> <li>Ratio of average salary of female to male (Non-management level) (base salary only)<sup>(6)</sup></li> </ul>	Ratio	1.301	1.201	1.248	1.155	GRI 405-2	
<ul> <li>Ratio of average salary of female to male (Non-management Level) (base salary + other cash incentives)<sup>(6)</sup></li> </ul>	Thousand Baht	1.049	0.985	1.008	0.930	GRI 405-2	
Average hours of training and development	Hours/Person	51	120	25 (7)	42		
Female	Hours/Person	NA	NA	NA	42		
• Male	Hours/Person	NA	NA	NA	43	GRI 404-1	
Mandatory	Hours/Person	NA	80	16	28		
Non-mandatory	Hours/Person	NA	40	9	14		
Percentage of employees receiving regular							
performance and career development reviews							
By gender (Female : Male)	%	NA	100	100	100	GRI 404-3	
By employee level (Management level : Other level)	%	NA	100	100	100		
<ul> <li>By age group (under 30 yr : 30 - 50 yr : over 50 yr)</li> </ul>	%	NA	100	100	100		
Average amount spent on training and development	Baht/Person	10,880	32,900	18,897	30,550		
Social Contribution							
Contribution for social and community development	THB million	14.79	25.60	18.00	9.20	GRI 201-1	
Employee volunteering during paid working hours	THB million	3.84	6.30	6.00	3.59		
In-kind giving: products, services, donations, projects/partnerships or similar	THB million	NA	20.00	NA	NA		
Management overheads related to CSR activity	THB million	38.93	36.15	33.00	20.00		

<sup>(0)</sup> Calculate from percentage of local Management level over total management staff.

<sup>(2)</sup> Under Thai laws, only female employees can take parental leave.

<sup>(3)</sup> 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

<sup>(5)</sup> Employee joining trade union or working with companies covered by Welfare Committee

<sup>(6)</sup> Within SGS's limited assurance scope (Page 29)

<sup>(7)</sup> There is no include on-the-job training of LSP employees, approximately 85 hours per person.

NA = Not Available

![](_page_27_Figure_12.jpeg)

Executive Summary I Sustainability Report 2024

attached sheet

Unit: tonnes of CO2e

GHG emissions

# SGS

## ASSURANCE STATEMENT

#### SGS (THAILAND) LIMITED'S REPORT ON SUSTAINABILITY ACTIVITIES IN SCG CHEMICALS PUBLIC COMPANY LIMITED'S FOR 2024

#### NATURE OF THE ASSURANCE/VERIFICATION

SGS (Thailand) Limited (hereinafter referred to as SGS) was commissioned by SCG Chemicals Public Company Limited (hereinafter referred to as SCG Chemicals (SCCC)) to conduct an independent assurance of SCG Chemicals Sustainability Report 2024 and the Sustainability Report webpage (hereinafter referred to as the Sustainability Report) the year ended December 31, 2024 in accordance with the reporting criteria.

#### INTENDED USERS OF THIS ASSURANCE STATEMENT

This Assurance Statement is provided with the intention of informing all SCG Chemicals (SCGC)'s Stakeholders.

#### RESPONSIBILITIES

GP5024 Jesue

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

#### ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE

The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognised assurance guidance and standards. Assurance has been conducted at a limited level of level of scrutiny. The assurance of this report has been conducted according to the following Assurance Standards:

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

#### SCOPE OF ASSURANCE AND REPORTING CRITERIA

The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

- GRI Standards 2021 (in Accordance with)
- WBCSD/WRI Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard
   Sustainability Accounting Standards Board (SASB)
- SPECIFIED PERFORMANCE INFORMATION AND DISCLOSURES INCLUDED IN SCOPE

SCG'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 (tons CO<sub>2</sub> equivalent)
   Water withdrawal (million cubic meters) and recycled water (million cubic meters)
- Water discharge (million cubic meters)
- Water discharge (millior cubic meters)
   Water discharge by quality (BOD, COD and TSS (tons))
- o Oxides of Nitrogen (NOx), Oxides of Sulfur (SOx), dust and other significant air emissions data including VOCs
- (tons)
- Production and raw materials (thousand tons)
- Total weight of waste by type and disposal method (thousand tons)
   Waste management (waste generated, waste diverted from disposal, waste directed to disposal) (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 and number of hours worked
  - Number and rate of Process Safety Events Tier 1
  - Ratio of the basic salary and remuneration of women to men and gender pay gap

Governance dimension performance indicators or in descriptive text
 Business ethics assessment

#### Double materiality assessment

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

#### ASSURANCE METHODOLOGY

- SGS's assurance engagements are carried out in accordance with assurance procedure.
- The assurance comprised a combination of
- The assurance comprised a combination
- SCG Chemicals (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
- 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:
   Rayong Olefins Co., Ltd
   O PT TPC Indo Plastic and Chemicals
- 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 laken to mitigate those limitation. Some statements and data within the scope were not assured due to lack of accessible records during the timescale alowed for assurance. and these are clearly marked throughout the Record.

#### 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 SGG Chemicals (SCGC), being free from bias and conflict of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 9001, ISO 14001, ISO 40001, ISO 14064-1, ISO 14067, ISO 26000, WFP, SA 8000 and experience on the SRA Assurance service provisions.

#### ASSURANCE/VERIFICATION OPINION

On the basis of the methodoky described and the verification work performed, we are satisfied that the specified performance information included in the scope of assurance is accurate, reliable, has been in all valued and that been prepared, in all material respects, in accordance with the reporting criteria. For future reporting, more descriptions of SCG Chemicals (SCGC) and subsidiaries' involvement with reconsidering data collection tool and establish mechanism for internal audit on the data performance and should maintain the system in place.

We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting.

#### Signed:

For and on behalf of SGS (Thailand) Limited

## Montru T.

Montree Tangtermsirikul

#### General Manager

238 TRR Tower, 19<sup>th</sup>-21<sup>44</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120, Thailand 20 February 2025

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#### Category

Total emissions	4,384,464
15. Investment	142,482
12. End-of-life treatment of sold products	N/A
10. Processing of sold products	N/A
9. Downstream transportation & distribution	110,088
7. Employee commuting	3,904
6. Business travel	450
5. Waste generated in operations	1,835
4. Upstream transporatation & distribution	164,378
3. Fuel and energy-related activiities	183,230
1. Purchased goods & services	3,778,097

Summary of Scope 3 GHG Emissions Report 2024

The emission is described as below

 Categories 2, 11 and 14 are not reported as GHG emissions because the organization's activites are not relevant to the context

 Categories 8 and 13 – The total GHG emissions are negligible, close to zero, and thus not significant to assurance reporting. Therefore is excluded.

![](_page_29_Picture_0.jpeg)

![](_page_29_Picture_1.jpeg)

## SCG Chemicals Public Company Limited

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