



# **SCG 4 Core Values** SCG adheres to the '4 Core Values' in conducting business in accordance with good governance principles and responsibility towards society and the environment. The Board of Directors, management, and employees at all levels have upheld these core values over the years, establishing SCG as a leading organization that conducts business with openness, transparency, and accountability while ensuring fairness for all stakeholders. SCG Passion for Inclusive Green Growth

# **SCG Net Zero Roadmap 2050**

SCG has outlined its transition pathway to achieve net zero by 2050 as follows:

**Based Year** 



**Achieved Net Zero** 

#### Phase 1: Short-Term

**2020-2030** – Transition to a low-carbon society and reduce Scope 1 and 2 greenhouse gas emissions as The Science Based Targets initiative (SBTi) goal by 25% by 2030 compared to the 2020 base year, and shift from fossil fuel energy sources to renewable and clean energy, while promoting the green product market.

#### • Phase 2: Mid-Term

**2031-2049** — Focus on expanding environmentally friendly low-carbon production technologies (Greening Process and Technology), including investing in innovation and research to discover advanced technologies (Deep Tech) to prepare for net zero. Key technologies include carbon capture, hydrogen technology, and Carbon Capture Utilization and Storage (CCUS), including expanding clean energy systems and renewable energy to foster a sustainable industrial future.

#### 2050 - Achieved net zero.

Net Zero means that SCG has transformed its production technology and supply chain systems into green processes entirely. The adoption of flexible and competitive clean technologies will strengthen the business. Negative Carbon production systems such as bio-based processes with negative carbon, and Carbon Capture Utilization and Storage (CCUS CCS) will play a crucial role to achieve the Net Zero target.













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# Message from President & CEO and SCG Sustainable Development Committee

2024 was another year where businesses continued to grapple with global economic slowdown, while geopolitical conflicts and global boiling grew increasingly intensified, leading to natural disasters, depletion of natural resources, and widening social inequality. In response, SCG joined hands with all sectors to accelerate a green transition following the Inclusive Green Growth approach and strive towards achieving the net-zero greenhouse gas emissions target by 2050.

This 2024 Sustainability Report seeks to capture SCG's principles, strategies, and adaptations made in pursuit of such goals, including investments in green businesses, development of innovations and technologies for low-carbon products, increasing clean energy usage, and ecosystem restoration, all carried out in collaboration with every sector, including the government and private sectors and civil society.

Based on assessments of risks and opportunities across the value chain, which take into account both outside-in and inside-out impacts, with its material issues integrated, SCG has established business strategies and direction for both short and long-term in line with the Regenerative Transformation approach, comprising three main pillars:

**1) Net-Zero 2050:** SCG is committed to developing technologies for energy transition from fossil fuels to clean energy by increasing the proportion of alternative and renewable

energy, developing low-carbon and environmentally friendly products, and driving progress in carbon capture, utilization and storage (CCUS) research and technology. These initiatives are carried out in pursuit of the Company's goal of achieving net-zero emissions by 2050 and SCG's near-term SBTI-validated targets to reduce Scope 1 and 2 greenhouse gas emissions by 25% by 2030 compared to the 2020 baseline and to lower Scope 3 greenhouse gas emissions from fossil fuel sales to external customers by at least 25% by 2031 compared to the 2021 baseline.



"The Environmental Sustainability
Development Committee plays a pivotal role
in formulating decarbonization policies and
strategies and ensuring good corporate
governance to drive SCG in accordance
with the Inclusive Green Growth approach
towards the net-zero 2050 goal with
transparency, accountability, and efficiency."

## Chonlanat Yanaranop

Chairman of the Environmental Sustainability Development Committee

In 2024, SCG successfully reduced greenhouse gas emissions by 25.6%, showing significant progress relative to the SBTi targets. In addition, the Board of Directors appointed an Environmental Sustainability Development Committee to oversee and support initiatives in pursuit of the net-zero goals.

2) Nature Positive: This involves prompt adaptation and response to various disasters, as well as nature conservation through ecosystem restoration, biodiversity preservation, and sustainable resource utilization. To drive these initiatives, SCG has established a Nature Positive Committee Working Group to work alongside the SCG Sustainable Development Committee. The working group is charged with developing innovations to minimize environmental impact and promoting a circular economy by converting waste materials into alternative raw materials. recycling them into new value-added products, and reducing waste at its source to achieve the Company's nature positive goal by 2030.

3) Inclusive Society: SCG is pursuing a just transition to a low-carbon economy, guided by respect for diversity, equality, and participation. To this end, the Company actively develops the potential of its personnel, business partners, SMEs, and communities to create an ecosystem where all sectors have capabilities and equal opportunities to contribute to a just transition to an inclusive society. An example is **the Go Together Project**, launched in collaboration with the Federation of Thai Industries to develop SMEs' capabilities for an efficient transition to low-carbon business operations. SCG aims to reduce social inequality for 50,000 people by 2030.

The 2024 was also marked by a milestone partnership in the form of the **ESG Symposium 2024: Driving Inclusive Green Transition**, where insights and suggestions were gathered from over 3,500 participants across all sectors, focusing on two main issues: 1) a clean energy transition and driving a circular economy, and 2) advancing **the Saraburi Sandbox** as a model low-carbon city, propelled through

four key mechanisms: 1) unlocking laws on a low-carbon economic transition, 2) promoting access to green financing, 3) developing green technology and infrastructure, and 4) enhancing SME capabilities and competitiveness.

The Saraburi Sandbox serves as a microcosm of Thailand and a blueprint for the development of a low-carbon city through a public-privatepeople partnership using an area-based approach. Accomplishments in 2024 include the promotion of low-carbon cement usage in government construction projects in place of Portland cement, with over 80% substitution rate, the installation of solar carports at the Saraburi Government Center; research and development of low-carbon agricultural technology through wet-dry rice farming; and promotion of energy crop cultivation, such as Napier grass, in communities for industrial operators to purchase and use as alternative energy in their plants. These achievements demonstrate tangible progress and represent a hopeful prospect for the future transition to a low-carbon society.

Despite various crises brought on by uncertainty and volatility, SCG remains confident in the capabilities of its personnel as key drivers in adaptation and transition and has continued to foster awareness of the importance of sustainable development while also instilling SCG's code of ethics and core values, passed down through generations as corporate culture, to bring about "empowerment from within" as the starting point of true transformation. Guided by good corporate governance, all these initiatives are conducted with fairness, transparency, and accountability to instill stakeholder confidence and steer the organization and the global community through crises towards sustainable and balanced economic, social, and environmental development, in line with the Inclusive Green Growth approach.

Performance

8/5 Idouson

Thammasak Sethaudom

President & CEO, SCG Chairman of the SCG Sustainable Development Committee





#### Chana Poomee

Chief Sustainability Officer, SCG Co-Chairman of the SCG Sustainable Development Committee

# **SCG At a Glance**

## **Business Purpose**

**Inclusive Green Growth Driving** Low Carbon Society,

**Creating** Sustainable Competitiveness,

And **Fostering** Inclusive Prosperity

SCG was founded in 1913 following a royal decree of His Majesty King Rama VI to produce cement and construction materials in order to reduce reliance on imports. For more than 110 years, the company has continuously grown and garnered recognition as a role model in business operations at the national, ASEAN, and global levels. This success stems from SCG's adaptability, commitment to sustainable development and corporate governance, and the application of technology to develop innovative products, services, and solutions that meet diverse needs while remaining agile in response to change.

Currently, SCG operates through its core businesses, which include SCG Cement and Green Solutions (CGS), SCG Smart Living and SCG Distribution & Retail (Smart Living and D&R), SCG Decor, SCGC (Chemicals Business), and SCGP (Packaging Business).



**Total employees** 53,730 employees

Thailand 29,384 employees Vietnam 15,025 employees

Indonesia 6,310

employees

Cambodia

employees Myanmar 176 employees

Philippines 1,017 employees

672

206 employees Malaysia

155 employees

Others 785 employees

Lao PDR

Our Business **Governance for Sustainable Growth SCG Cement and Green Solutions** CGS develops low-carbon products (C through environmentally friendly production process (Green Process), supports the use of renewable energy and alternative fuels, and promotes green solutions by integrating digital technology into construction (Green Construction). CGS drives toward a sustainable

society (Green Society) by collaborative actions across



**SCG Smart Living** and SCG Distribution & Retail Enhancing production efficiency, a low-carbon society for a better quality of life and a sustainable

Road to Inclusive Green Growth

Revenue from Sales 81,891 million baht

all sectors.

Number of Employees 7.452

Domestic 5,220 Overseas 2,232

**Total Assets** 

105,388 million baht

Production



Manufacturing Plants Domestic 770 plants Overseas 73 plants

Cement

10 plants

Ready-Mixed Concrete

833 plants



140,165 million baht

Strategy & Risk Management

**Total Assets** 109,488 million baht

Services and Others



Distribution & Retail

Home-related platforms, such as SCG Home Online



Number of Employees 6.449

Domestic 5,022

Overseas 1,427

Manufacturing Plants



Landscape **7** plants

Performance

Insulation 1 plants

plants

Domestic 26 plants Overseas 6 plants

**6** plants

ALC

Roof, Ceiling, and Wall

18 plants





Number of Employees

21,198

Revenue from Sales

25,563 million baht

> **Total Assets** 39,823

million baht



Distribution & Retail

915 outlets

Domestic 572 outlets Overseas 343 outlets

7,921

Domestic 4,090 Overseas 3,831

Manufacturing Plants



Plants Domestic 7 plants Overseas 8 plants

Ceramic tile 12 plants

Sanitaryware

**2** plants

Water faucet

1 plants

750 outlets 12 outlets

Distributor

Modern trade retailers

The company's distribution channels

153 outlets

Revenue

from Sales

million baht

210,298

in alignment with ESG principles.

Our Business

**SCG Chemicals** 

(SCGC)

The leading integrated polymer

Number of Employees 8.154

Domestic 4,952

Overseas 3,202



**Total Assets** 382,698

million baht

(Italy, UK, Norway, Thailand)

R&D centers

4 centers

i2P Center (Ideas to Product)

plants Domestic 23 plants Overseas 16 plants

Olefins **3** plants Polyolefins

12 plants

products

3 plants

Manufacturing Plants



PVC and related

21 plants

PCR

Revenue

from Sales 132,784

million baht

**Total Assets** 

188,580 million baht

Domestic

Overseas

13,498

7,700

Services and Others



SCGP Inspired Solutions Studio

Online shopping platforms, such as https://festforfood. com https://www.doozyonline. com https://holisbyscgp.com localpack.co/th

Production

Manufacturing Plants



plants Domestic 61 plants Overseas 110 plants

Packaging paper

**8** plants

Medical equipment

**5** plants

Recycling facilities (Balers)

104 plants

Fiber packaging

32 plants

Consumer and performance packaging

13 plants

Pulp and paper and food packaging

**8** plants

Packaging material recycling

1 plants

Remark: 2,556 other employees

Sustainability Report 2024 | 006 |

# **Environment**



8.76

million tons carbon dioxide 25.59% **Emissions Reduction** (compared with the base year of 2020)



Volume of **Recycled and** Renewable **Materials** 

8.93 million tons



رد **SCGP Products** 

are Recyclable, Reusable, or Compostable

99.7%







**Alternative Fuels** 

**28.59**%



**Recycled Water** 

13.10%



Conserve, Restore, and Increase Green **Spaces** 

**318,863** rai



Introduction

**Hazardous and Non-Hazardous** Waste to Landfill

O<sub>ton</sub>





**Environmental Expense and** Investment

7,029 million baht

1.38%

of revenue from sales

# **Social**



2024 Target ( 0

Our Business

**Number of Fatality Work-Related Injury from** Workplace, Travelling and **Direct Transportation** employee/contractor

**2/7** cases

127,618

**Promoting Water** 

Management

2,307

households

for Community

units



**Lost Time Injury Frequency Rate** employee/contractor

0.186/0.205

cases/1,000,000 hours worked



**Governance for Sustainable Growth** 

2024 Target

0

**Occupational Illness Frequency Rate** employee

employee

0.132 cases/1,000,000 hours worked





**Number of Check Dam** Female in all **Management Positions** 

**27.9**%



RIGHTS pay

**Human Rights** Violation

O case

2024 Target

0



**Social Contribution** 

381 million baht



**Reduce Social** Inequalities

24,543 persons



# **Governance & Economic**



"Green Choice" **Products and Services** 

**54.0**%

of revenue from sales

**Circular Economy** 

of revenue from sales

**Products** 

23.0%



Spending

million baht

0.9%



**High Value Added Products and Services** 

38.0%

of revenue from sales

(HVA)



**Carbon Label Certified** 

891

items



**Research and Innovation** 

4,847

of revenue from sale



**ESG Investment** 

5,680

million baht



**Recover and Recycle** the Used Plastic

185,200 tons



2024 Target 100%

**Suppliers Processed** through ESG Risk **Assessments** 

100%

of suppliers with procurement spend over million baht



**Green Procurement Purchased** 

8,183

million baht



**Contributions to Organizations** 

36.43 million baht



**Employees Learned** and Passed Ethics e-Testing

100%







NOMINES SUSTAINALYTICS

Score and Risk Category

19.9 Low Risk

As of April 2024, SCG was ranked No. 1 among 131 companies in the Industrial Conglomerates category and received an ESG Risk Rating of 19.9 (Low Risk) from Morningstar Sustainalytics.



SCG has been rated at Level Ain climate change, Level A- in water security in the chemicals sector, and Level B in forest management by the Carbon Disclosure Project (CDP).



SCG received the A rating on the MSCI ESG Ratings in the Construction Materials Industry from Morgan Stanley Capital International (MSCI), the world's leading stock index provider.



SCG has been recognized as a globally sustainable company in The 2025 Sustainability Yearbook by S&P Global in the Construction Materials industry (as of February 5, 2025).



of the FTSE4Good Index Series by FTSE Russell based on an assessment of its capabilities to operate in adherence to Environmental, Social and Governance

(ESG) practices.

SCG has been recognized as member



SCG's sustainability report and disclosure have been recognized by the World Business Council for Sustainable Development (WBCSD), ranking as a Top Performer in the Reporting Matters 2024 report for the first time.



SCG was rated AAA in the SET ESG Ratings by the Stock Exchange of Thailand - the first year SET announced assessment results in the form of ratings by integrating key sustainability issues into business operations. Taking into account risk management, preparing for emerging risks, and dealing with social and environmental change factors to increase long-term competitiveness and prioritize the needs of all stakeholders.



SCG received HRH Princess Maha Chakri
Sirindhorn's Trophies in four categories,
namely Leadership Excellence, Human
Resource Management Excellence
(for the 22<sup>nd</sup> consecutive year), Innovation
Excellence, and Sustainable Development
Excellence, from the Thailand Management
Association (TMA) in collaboration
with Sasin Graduate Institute of Business
Administration of Chulalongkorn University.



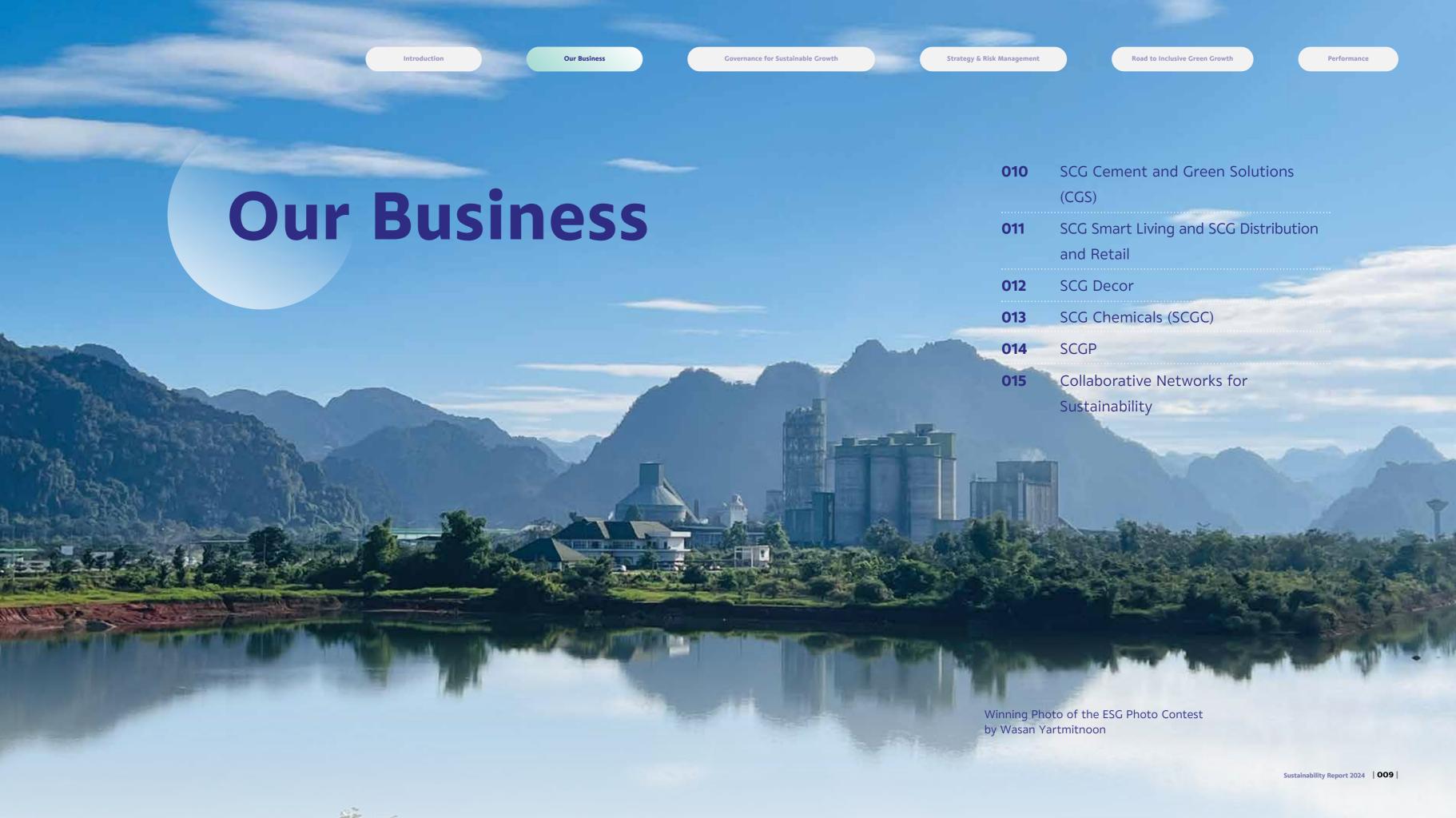
in the Large Enterprise Category at the Human Rights Awards for a fifth consecutive year by the Rights and Liberties Protection Department under the Ministry of Justice in recognition of its dedication to human rights risk management across the value chain and its role in promoting diversity and inclusivity and reducing disparities in society.



SCG won a Sustainability Excellence Award for the ninth consecutive year in recognition of its exemplary sustainability practices and a Sustainability Award of Honor for the seventh consecutive year from the Stock Exchange of Thailand.

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# **SCG Cement and Green Solutions** (CGS)



While the global economy continues to slow down, compounded by high household debt levels and the severe impacts of global warming and natural

disasters, SCG Cement and Green Solutions is accelerating enhancements to its business strategies. The company is focusing on low- arbon products and innovations

aimed at improving customer well-being and promoting environmentally friendly solutions. Altogether, the company is increasing its use of alternative fuels and renewable energy in its production processes to support the growth of a low carbon society, which is becoming a global mega-trend.

# **Operating Results**

**Greenhouse Gas Emissions** 

16.74

million tCO₂eq

Specific CO<sub>2</sub> Gross/Net

570/539 kgCO<sub>2</sub>/ton cementitious

**Alternative Fuel Consumption** 

43.52%

**Energy Consumption** 

81.85 petajoules

**Revenue from Sales of Green Choice Products. Services and Solutions** 

**10**%

**Lost Time Injury Frequency Rate** for Employees and Contractors

0.127

cases/1,000,000 hours worked



# **Sustainable Business in alignment** with the Inclusive Green Growth



• SCG continues its development of Low Carbon Cement through innovations in materials science and new production technology standards. Low Carbon Cement Gen II helps reduce greenhouse gas emissions by 15-20% compared to OPC cement. SCG also promotes the use of Low Carbon Cement among all business partner groups. Currently, 87% of traditional cement usage has been replaced with low-carbon cement



• The first company in Thailand to receive Environmental Product Declaration (EPD) eco-label certification from International EPD for all cement categories, including ready-mixed concrete, mortar, Portland cement, and tile adhesives.



CGS sustainably sources biomass fuels, particularly Napier grass, as a substitute for coal. The company is also exploring the economic feasibility of cultivating Sang-Mon bamboo (Dendrocalamus sericeus Munro) as a long-term alternative energy source. In 2024, the use of alternative fuel (AF) derived from biomass and waste materials in cement production plants in Thailand increased by 5%, reaching 45%



• The 'Saraburi Sandbox' project takes part in the World Economic Forum's Transitioning Industrial Clusters Initiative with the aim of driving economic growth while reducing carbon emissions through collaboration across all sectors.

# **SCG Smart Living** and SCG Distribution and Retail



In response to declining consumer purchasing power due to high household debt and the challenges posed by low-cost imports, SCG Smart Living and SCG Distribution and Retail have strategically prioritized the development of products and services tailored to customer groups with sustained purchasing power.

Emphasis is also placed on the advancement of high-valueadded (HVA) products and new product development (NPD) with a focus on environmental sustainability, the continuous exploration of growth opportunities in new customer segments and markets, and the development of innovations that contribute to sustainable social development.

# **Operating Results**

**Greenhouse Gas Emissions** 

0.21

million tCO2eq

**Alternative Fuel Consumption** 

29.00%

**Energy Consumption** 

12.64 petajoules

**Revenue from Sales of Green Choice Products. Services and Solutions** 

Strategy & Risk Management

3 %

**Lost Time Injury Frequency Rate** for Employees and Contractors

0.122

cases/1,000,000 hours worked



# **Sustainable Business in alignment** with the Inclusive Green Growth



is used in flooring materials to help minimize

environmental impact.

 SCG Smart Living has SCG Smart Living has developed its products achieved Carbon Footprint using recycled and waste of Products (CFP) certification for more materials as components, such as floor tiles made than 50% of its products from industrial waste and manufactured in Thailand from the Thailand decorative wall panels Greenhouse Gas produced from coffee Management Organization grounds, as part of its carbon emission reduction (TGO). The Company aims to obtain CFP certification goals. Additionally, bamboo, a fast-growing for all its products by 2027. and durable resource,



SCG Smart Living has implemented green procurement as a tool to encourage its suppliers to source environmentally friendly raw materials. The Company also organized training for its suppliers on disclosing environmental data through CFP labeling.



SCG D&R has enhanced professional standards for skilled technicians through the Q-Chang Academy training center and has supported their earning opportunities through the Q-Chang platform.



SCG D&R is continuously developing the Prompt Plus online platform to optimize the efficiency of cost and inventory management for over 10,000 small retailers in SCG's network.



# **Operating Results**

**Governance for Sustainable Growth** 

**Greenhouse Gas Emissions** 

0.87 million tCO₂eq

**Alternative Fuel Consumption** 

**19.87**%

**Energy Consumption** 

3.25 petajoules

**Revenue from Sales of Green Choice Products, Services and Solutions** 

4 %

**Lost Time Injury Frequency Rate** for Employees and Contractors

0.226 cases/1,000,000 hours worked

# **Sustainable Business in alignment** with the Inclusive Green Growth



• SCG Decor upholds its commitment to achieving its Net Zero goal by 2050, with a short-term goal of reducing absolute Scope 1 and 2 GHG emissions by 25% by 2030 from the 2020 base year. This is achieved by increasing the proportion of biomass energy to 46% of its total thermal energy usage in production and the proportion of solar energy to 15% of its total electricity usage in production.



SCG Decor continues to develop products in line with the circular economy principle to minimize the consumption of finite resources. One such product is COTTO's ECO Collection tiles, made with up to 80% recycled materials. This tile collection is produced by reusing waste from internal processes and other factories as a substitute for natural clay. As a result, its carbon footprint is at least 10% lower than that of conventional tiles.



SCG Decor continues its product development with the aim of helping customers save on household expenses while upholding an eco-friendly concept. An example of this is the C10207 VERZO water-saving sanitary ware model, which uses 36% less water than the industry standard. In 2024, the sanitary ware delivered to customers contributed to a total reduction of 35 million liters of water consumption per year.



• COTTO Upcycling Candle is a collaboration with the Dan Kwian community in Nakhon Ratchasima province. The product is a Premium Gift crafted from Dan Kwian clay mixed with sediment clay, a byproduct of ceramic tile production, in a 70:30 ratio. This process helps reduce energy consumption during the firing process and minimizes breakage, cracking, and damage that may occur after firing. The product not only preserves the identity of local wisdom but also marks as a foundation for a sustainable source of income for the community.



# **Challenges and Goals**

In the past year, the overall trend of both domestic and international markets has continued to slow down. Therefore, SCG Decor has been continuously enhancing its competitiveness. This includes initiatives such as a solar energy project for electricity generation and a biomass project for heat generation. These projects contribute to both cost reduction

and greenhouse gas emission reduction. Additionally, SCG Decor has accelerated the development of high-value-added (HVA) products and services that cater to customer needs for better and more sustainable lifestyles in order to achieve sustainable growth.

Introduction

**Our Business** 





**SCG Chemicals** (SCGC)

**Challenges and Goals** 

The petrochemical industry has been experiencing a prolonged affected the demand and pricing of plastic pellets. In response, management to boost profits and reduce costs. It has also accelerated the development of high-value-added products maintenance services. The LSP plants have been upgraded to support ethane gas operations, further strengthening the business. Beyond and initiatives aimed at improving quality of life, reducing social

# **Operating Results**

**Greenhouse Gas Emissions** 

3.53

million tCO2eq

**Energy Consumption** 

**Governance for Sustainable Growth** 

61.15 petajoules

**Revenue from Sales of Green Choice Products, Services and Solutions** 

**22**%

**Lost Time Injury Frequency Rate** for Employees and Contractors

0.097

cases/1,000,000 hours worked

The amount of recycled plastic being reintegrated to create added value.

185,200 tons





• Set a goal to reduce greenhouse gas emissions by 700,000 tons of CO<sub>2</sub> equivalent by 2030 and to integrate 500,000 tons of used plastic into its production process annually by 2030. The company also continues to focus on its projects to add value to recycled plastics through joint ventures with leading partners. These include a collaboration with Braskem in Brazil for the production of "bioplastics" (Bio-Polyethylene) and a partnership with Avantium in the Netherlands to develop a process for converting carbon dioxide into carbon-negative plastic.



Develop innovative products that reduce greenhouse gas emissions and and incorporate recycled materials such as lightweight plastic pellets for automotive parts, lightweight and easy-torecycle soft drink bottle caps, high-quality recycled plastic pellets for water bottle caps, dishwashing liquid bottles, building paint buckets, and shampoo bottles, as well as hospital-grade plastic bags made from used hemodialysis solution gallons.



Adopt the Kunming-Montreal Global Biodiversity Framework, which aims for Nature Positive by 2050, to establish three key Biodiversity Commitments: No Net Loss, Net Positive Impact, and No Deforestation. SCGC is the first private business in Thailand's industrial (or petro chemical) sector to receive approval from the TGO committee to attain registered Premium T-VER project status for the "Increasing Thailand's Carbon Sequestration through Sustainable Mangrove Forest Management" project.





 Foster a society of opportunity and equality through two key initiatives. The first focuses on value-added waste management to create income opportunities for local communities. This includes laying a knowledge foundation through the Waste Wittaya project, which develops educational materials and activities to promote waste management awareness among youth in schools, based on the principles of circular economy. Another initiative is the Nets Up project, which focuses on collecting and sorting discarded fishing nets and recycling them into eco-friendly clothing.

**Our Business** 



# **SCGP**

# **Challenges and Goals**

The demand for packaging in the ASEAN region continues to grow, while the export sector is showing signs of gradual recovery. However, the economic recovery in China remains slower than expected. In response, SCGP is strengthening its business by enhancing supply chain management efficiency and developing

eco-friendly packaging innovations and solutions, with recycled materials playing a key role in adhering to circular economy principles and the ESG framework. This effort reinforces its goal of achieving net zero greenhouse gas emissions by 2050.

# **Operating Results**

**Greenhouse Gas Emissions** 

4.12

million tCO2eq

**Alternative Fuel Consumption** 

38.48%

**Energy Consumption** 

62.05 petajoules

**Revenue from Sales of Green Choice Products, Services and Solutions** 

**15**%

**Lost Time Injury Frequency Rate** for Employees and Contractors

0.308 cases/1,000,000 hours worked



# **Sustainable Business in alignment** with the Inclusive Green Growth



• SCGP has developed a new hybrid eucalyptus strain for sustainability, achieving a 40% increase in yield in areas with low to normal rainfall. This success earned SCGP the Best Innovative Company Award in the SET Awards of Honor category from the Stock Exchange of Thailand.



In 2024, 161 products obtained Carbon Footprint of Product (CFP) certification for products manufactured in Thailand from the Thailand Greenhouse Gas Management Organization (Public Organization) or TGO, while 42 items were awarded Carbon Footprint labels for circular economy

products.



SCGP has continued to develop green packaging innovations like bundle packaging, recycled paper beverage cans, and Paper-Ready-Pack which uses natural fibers as raw materials and heat sealing similar to polymer films.



SCGP, in collaboration with government agencies and communities, has continuously organized the "SCGP Plant the Trees to Beat the Heat" project to promote tree planting in Ratchaburi, Kanchanaburi, Prachinburi, and Khon Kaen provinces.



SCGP promotes circular

economy principles by expanding its Zero Waste Community initiative, now in its fifth year, through the "SCGP Community LIKE (Zero) Waste" project. It has successfully established 100% model communities for waste management under the "Ban Pong Model" across all 183 communities in Ban Pong District.

# **Collaborative Networks for Sustainability**

DRIVING INCLUSIVE

GREEN TRANSITION

ยิ่ง "เร่งเปลี่ยน" ยิ่ง "เพิ่มโอทาส"

SCG is committed to developing partnerships across all sectors, including business partners, government agencies, SMEs, educational institutions, as well as civil society and society at large, to create an extensive network of allies at national, regional, and global levels, working together to enhance capabilities and transition toward a low-carbon society.

# **ESG Symposium 2024: Driving Inclusive Green Transition**

To collaboratively accelerating Thailand's transition to a low-carbon society, SCG, together with government agencies, private sector representatives, CEOs of leading companies, and civil society, has been organizing the ESG Symposium to build networks for developing

3 SX

Thailand's economic capabilities for sustainable growth and enhancing international competitiveness alongside decarbonization efforts in alignment with Thailand's net zero goals.

In 2024, SCG and its network organized the ESG Symposium 2024: Driving Inclusive Green Transition, where network partners across all sectors brainstormed to find ways to accelerate the transition to a low-carbon society in order to build competitive capabilities and promote sustainable economic growth through two main issues: 1) the transition to clean energy alongside the promotion of a circular economy and 2) the advancement of the "Saraburi Sandbox" as an area-based approach

SCG

for developing a low-carbon city model. The symposium also presented four key mechanisms: 1) unlocking legal & regulatory barriers 2) promoting access to green finance 3) upgrading technology & green infrastructure and 4) strengthening SME's adaptability and capability.

The network partners' recommendations were compiled into a white paper "Accelerating Thailand's Transition to a Low-Carbon Society" and presented to the government on September 30, 2024.

# **Sharing National and Global Perspectives and Practices for Driving Business Sustainability**

- Global Perspective on Green Transition presented by Niamh Collier-Smith, UNDP Resident Representative to Thailand
- Future Competitiveness of Energy Transition presented by Roberto Bocca, Head of the Center for Energy and Materials at the World Economic Forum
- Regenerative Case Sharing from China presented by Dr. Cai Guan, Vice-general Manager, Wuhan Carbon Peaking & Carbon Neutrality Industry **Development Service**
- Thailand's Potential for Sustainable Transition showcasing the nation's capabilities across key areas in transitioning to a low-carbon economy, presented by

- **Energy Transition:** Dr. Eric Larson, Research Professor at Princeton University, USA
- Agriculture: Dr. Nana Kuenkel, Director and Coordinator of Agriculture and Food Group, GIZ, Germany
- Regenerative Waste Management: Belinda Knox, Deputy Managing Director, I-Environment Investment Ltd. (IEI) Itochu, United Kingdom
- The key drivers for inclusive green transition in Thailand
  - 1. Technology for Decarbonization Technologies that help reduce carbon emissions and enhance clean energy capabilities to support the country's energy transition, presented by Assoc. Prof. Dr. Janya Chanchaichujit, Director of the Center for Sustainable Logistics and Supply Chain Management, Faculty of Environmental Management, Prince of Songkla University
  - **2. Circular Economy** Implementation of circular economy concepts in industries and businesses to increase resource efficiency and reduce environmental impact; and Sustainable Packaging **Value Chain** – Sustainable systemic collaboration in packaging management, presented by Patinya Silsupadol, Head of Sustainability at Tetra Pak (Thailand) Limited
  - **3. Just Transition** Striking a balance between economic development, labor impact mitigation, and public welfare considerations, presented by Sangchai Theerakulvanich, President of the Federation of Thai SMEs, discussing approaches to fair transition
  - **4. Saraburi Sandbox** A model for green industry development and low-carbon economy in Saraburi, presented by Bancha Chaowarin, **Governor of Saraburi Province**



# **Key Progress on Network** Collaborations in 2024

- 1. Technology for Decarbonization: Promoting decarbonization technologies that enhance clean energy capabilities:
- · Unlocking restrictions on clean energy usage: In collaboration with the Provincial Electricity Authority, The installation of a solar carport system at the Saraburi Provincial Government Center is currently underway using the ESCO Model. It is expected to generate more than 412 kilowatts of clean energy, reducing energy costs by 15% or approximately 155,134 THB per year.
- Continuous promotion of low-carbon cement in government construction projects: Currently, low-carbon cement is used to replace over 80% of Portland cement in government infrastructure projects, significantly contributing to carbon reduction efforts. This initiative plays a crucial role in enhancing environmental sustainability and supporting Saraburi Province's transition to a low-carbon economy.

**Our Business Governance for Sustainable Growth** Strategy & Risk Management Road to Inclusive Green Growth

- 2. Circular Economy: Implementing circular economy principles in industry and business:
  - Launching Thailand's first "Closed-Loop Circular Appliances": SCGC has collaborated with HomePro to divert used electronics to a comprehensive closed-loop recycling process and convert them into high-quality PCR (Post-Consumer Recycled) green polymer, thus promoting circularity in a tangible way.
  - Supporting community food waste management through the Wet Waste Bins for Global Warming Mitigation Project: The Ministry of Interior is advancing at-source waste reduction and conversion into soil conditioner or compost to enhance soil fertility and reduce greenhouse gas emissions. Currently, Saraburi's carbon credits certified by the Thailand Greenhouse Gas Management Organization (TGO) amount to 3,495 ton CO<sub>2</sub>e, which is purchased by the Thai Cement Manufacturers Association (TCMA), generating nearly 1 million baht in community income.
- 3. Just Transition: A transition that takes into account labor force and public welfare:
  - Implementing the Go Together Project: SCG, in partnership with the Federation of Thai Industries, is enhancing SME operators' capabilities to transition to a low-carbon business by promoting exchanges of innovative ideas and green technologies. In 2024, 631 participants joined the program, benefiting from training and support in sustainable business practices. SCG aims to expand this impact, targeting 1,200 participants by 2025.
  - **Promoting energy crop cultivation:** The network received funding from the Program Management Unit on Area-Based Development (PMU-A)

of the Office of National Higher Education Science Research and Innovation Policy Council to process energy crops, such as Napier grass, into biomass fuel as an alternative to fossil fuels. As part of the effort, the network also provided knowledge to farmers and created industrial market demand. In 2024, a total of 1,100 rai of Napier grass has been planted. The first harvest yielded 200 tons, reducing greenhouse gas emissions by 1,200 metric tons of CO<sub>2</sub> equivalent.

- 4. Saraburi Sandbox: A model for collaborative green industry development and low-carbon economy in Saraburi:
- · Analyzing Saraburi's clean energy production potential: In collaboration with Princeton University, a U.S. expert in energy transition planning, the Administration Office of Saraburi has found that the province can produce over 100,000 megawatts of clean energy. This information will be used to develop the province's energy roadmap.
- · Supporting farmers in creating models for alternate wetting and drying (AWD) rice farming and carbon credits: The initiative was scaled up from 50 rai in Nong Don and Sao Hai Districts, to 500 rai in 2024, which reduced production costs by 30% as well as decreased water usage and greenhouse gas emissions.
- Supporting and elevating 38 community forest networks in Saraburi: Initiatives have been undertaken to support knowledge exchanges and promote the conservation and restoration of 15,000 rai of community forests to enhance biodiversity and sustainable forest utilization for food sources as well as develop eco-tourism in collaboration with the Saraburi Tourism Association.



Governance for Sustainable Growth

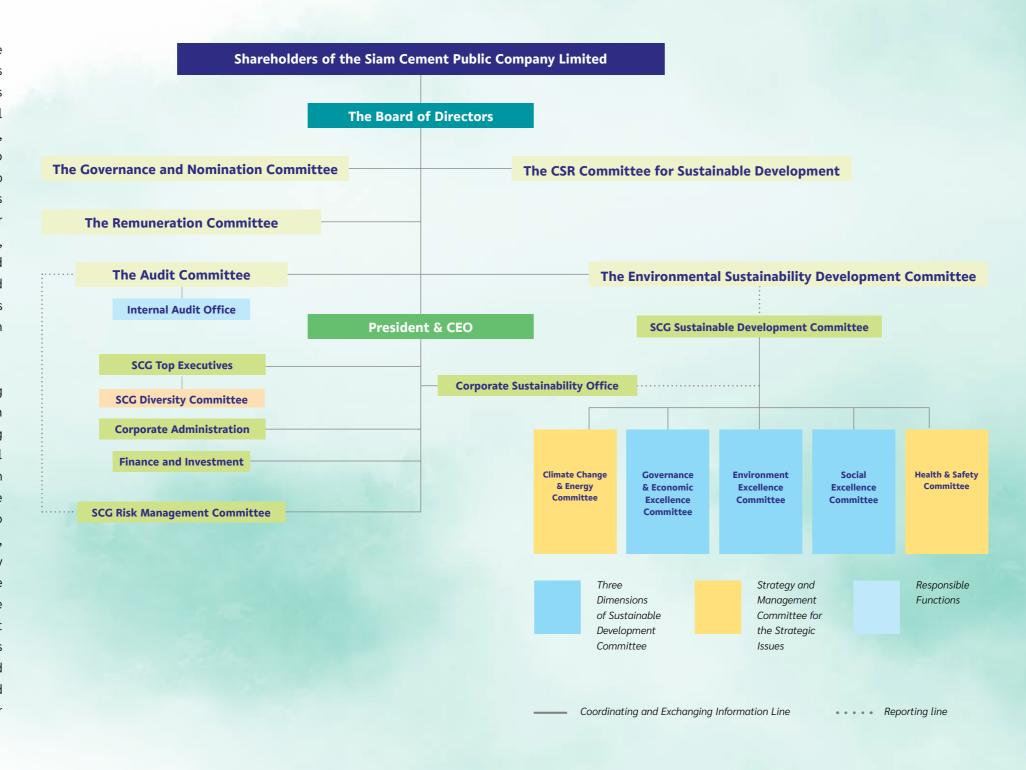
018	Governance for Sustainability
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022	Voices of Young Executives
	and Famala Evacutives



# **Governance for Sustainability**

SCG operates in adherence with its four core values, which are a long-standing business philosophy that serves as the organization's driving force, with its organizational management with responsibility, fairness, and transparency according to the principles of corporate governance to build stakeholder trust. This commitment is fundamental to SCG's ability to deliver consistent returns, create long-term value, promote competitiveness and growth, and drive sustainable growth, with the Board of Directors and top executives serving as governance role models with a clear vision and rigorous standards.

In addition, SCG is committed to achieving net-zero by 2050 through an inclusive green growth approach. This involves balancing business growth with environmental stewardship to achieve nature positive through biodiversity management and water resource restoration. In addition, SCG also strives to create opportunities, strengthen communities, promote well-being, and enhance quality of life, fostering an inclusive society where no one is left behind. This comprehensive strategy is implemented through robust governance, with the Board of Directors establishing clear directions, policies, and strategies to drive the organization toward its goals while creating sustainable value for all stakeholders.



#### Structure of the Board of Directors

#### **Board of Directors**

- Oversee the formulation of policies, strategies, and business direction for the short and long terms aligned with international frameworks for sustainable development across environmental, social, and governance (ESG) dimensions. Integrating material issues (Double Materiality) as well as risk and opportunity management across the value chain by considering both impacts of external on the business (Outside-in) and impacts of business activities on externality (Inside-out) to support proactive decision-making, foster collaboration and engagement with stakeholders.
- · Set metrics and targets, with an annual review of key policies and action plans.
- Manage and allocate key resources to achieve targets, as well as oversee, monitor, and assess the performance of SCG and its top executives against the established plans while maintaining transparency and independence.

## **Environmental Sustainability Development Committee**

The goal of achieving net zero by 2050 presents a significant challenge, particularly amidst current volatility. To drive concrete progress toward this ambitious goal, the Board of Directors established the Environmental Sustainability Development Committee in 2024. This committee plays a critical role in overseeing and advice the management coordinating and fostering mutual understanding among sub-committees to ensure alignment with the company's inclusive green growth policy and strategy, and accelerating the transition to a low-carbon society in a tangible way. The committee also focuses on seeking business opportunities that align with the organization's sustainability goals and creating long-term value and success.

The Environmental Sustainability Development Committee establishes directions, policies, and strategies to drive SCG toward its set targets. The committee also considers and provides recommendations to ensure operations and investments are aligned with the SCG Net Zero Roadmap not only to drive organizational transformation at all levels and systematic implementation of policies across all company activities but also to integrate into business strategies, including key risks and opportunities, related to the transition to a green and sustainable economy. In addition, the committee seeks to accelerate the development of environmentally friendly and sustainable alternative energy across the value chain, green technology and innovation, as well as low-carbon manufacturing processes, products, services, and solutions, while also enhancing personnel

capabilities and promoting a work culture that supports organizational transformation.

The committee regularly monitors and reviews policies, action plans, targets, and performance against the SCG Net Zero Roadmap to ensure the efficiency and effectiveness of GHG emissions reduction. This is supported by an accurate, transparent, and verifiable data system that meets international standards for measurement, reporting, and verification (MRV). The committee also considers and approves information disclosure to stakeholders and stakeholder engagement to ensure transparency in biannual progress review meetings.

In addition, the committee provides recommendations to the Board of Directors, sub-committees, and top executives to foster both internal and external collaboration through various company activities, which ultimately lead to systemic change with extensive impact towards a low-carbon society.

The Environmental Sustainability Development Committee comprises three directors and one top executive, who serves as secretary. All members have strong experiences and expertise in environmental sustainability development and a broad vision. They continuously monitor global changes in environmental sustainability development and are equipped to drive SCG towards achieving net zero through strategic planning, risk management, and appropriate technology adaptation, while also creating business opportunities and sustainable value for the organization.

# **Environmental Sustainability Development Committee**



**Cholanat Yanaranop** Director

Chairman

Our Business







**Thammasak Sethaudom** President & CEO

Member





**Parnsiree Amatayakul** Director

Member





**Chana Poomee** Chief Sustainability Officer

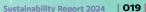
**Secretary** 



**SCG Sustainable Development Committee** 

the policy and supervision of the Environmental Sustainability Development Committee.

- 1. Define and integrate material issues (double materiality), including risks and opportunities, into business strategies and plans to create sustainable value for both the organization and society.
- 2. Establish ESG policies, targets, strategies, and operational guidelines while driving the implementation of the SCG Net Zero Roadmap to achieve the net zero 2050 and reduce GHG emissions by 25% by 2030.
- 3. Develop a transparent, verifiable data system that meets international standards for measurement, reporting, and verification (MRV), and maintain transparent information disclosure practices for stakeholders to serve as a regional and global sustainability role model.
- 4. Enhance employee and supplier capabilities and promote a work culture that supports organizational transformation.
- 5. Monitor and report performance as well as propose improvement recommendations to the Environmental Sustainability Development Committee on a quarterly basis through the three committees on the three dimensions of sustainable development: the Environmental Excellence Committee, the Social Excellence Committee, and the Governance & Economic Excellence Committee, and the two committees on the strategy and management for the strategic issues: the Climate Change & Energy Committee and the Health & Safety Committee.
- 6. Appoint Sustainable Development Committees of each business unit to incorporate SCG's sustainability goals, strategies, and practices and formulate action plans particular to each business to ensure company-wide alignment.

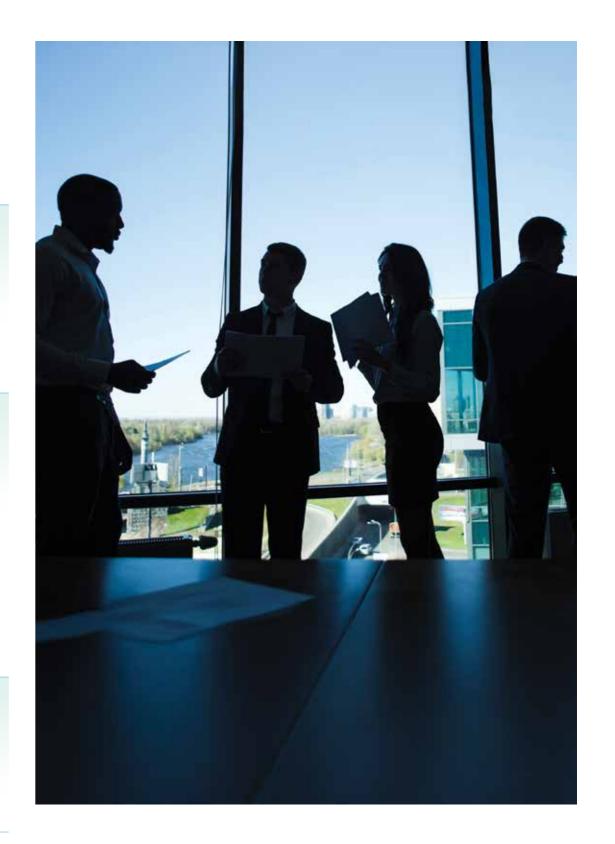


Our Business Governance for Sustainable Growth Strategy & Risk Management Road to Inclusive Green Growth Per

# **Meetings of Sustainability-Related Committees in 2024**

Committee	Key Issues	Number of meetings per year	
The Board of Directors	<ul> <li>Establish strategies, business directions, and policies for the short, medium, and long terms, integrating material issues (Double Materiality) as well as risk and opportunity management across the value chain by considering both impacts of external on the business (Outside-in) and impacts of business activities on external (Inside-out) in line with international ESG frameworks.</li> <li>Set metrics and targets aligned with ESG practices.</li> </ul>	8	
Environmental Sustainability Development Committee	<ul> <li>Establish directions, policies, and strategies to drive SCG towards the established goals; as well as review and provide recommendations to drive the implementation of SCG Net Zero Roadmap.</li> <li>Oversee, monitor, and review policies, action plans, targets, and outcomes of SCG Net Zero Roadmap to ensure decarbonization efficiency and effectiveness.</li> </ul>	2	
Audit Committee	<ul> <li>Establish policies and oversee enterprise risk management.</li> <li>Monitor and review to ensure that enterprise risk management is efficient and effective and significant risks are identified in line with ESG practices. Conduct assessments and develop mitigation plans, utilizing sensitivity analysis and scenario analysis to assess impact severity.</li> </ul>	6	

Committee	Key Issues	Number of meetings per year	
Remuneration Committee	<ul> <li>Evaluate the performance of the President &amp; CEO and top executives to determine appropriate remuneration and propose to the Board of Directors for approval, taking into account adherence to board policies, both financial and non-financial impacts, and the achievement of sustainability targets, which account for 25% in the consideration.</li> <li>Review, study, and monitor changes and trends in compensation regularly to propose remuneration policies that can motivate these executives to lead the company towards success as well as retain competent and ethical employees.</li> </ul>	6	
CSR Committee for Sustainable Development	<ul> <li>Promote ESG-driven CSR activities with a focus on collaboration, self-reliance, and positive business impacts.</li> <li>Emphasize the preservation of environmental balance and approach towards a low carbon society through "the Conserving Water from Mountain to Mighty River Project" to advance community water management, mitigate drought and floods, conserve community forests, and expand terrestrial forests as well as to support low carbon community models in order to alleviate global boiling.</li> <li>Strive to reduce inequalities by prioritizing job creation, access to public health services, and educational opportunities, especially for vulnerable groups.</li> <li>Support SCG's CSR activities and provide recommendations to enhance project implementation.</li> <li>Review the outcome of CSR initiatives for the year 2024 and approve action plans and budgets for projects in 2025.</li> </ul>	4 (quarterly)	
SCG Risk Management Committee	<ul> <li>Oversee enterprise risk management to be in accordance with the organizational structures and their roles and responsibilities.</li> <li>Consider, review, monitor, approve, and report risk profile and its sustainability-related impacts in economic, social and environmental dimensions as well as risk response and mitigation, by considering both impacts of external factors on the business (Outside-in) and impacts of business activities on externalities (Inside-out).</li> </ul>	5	



<sup>\*</sup> The Environmental Sustainability Development Committee was established in July 2024. Meetings were held twice in 2024, in July and October. Four meetings are scheduled for 2025.

Committee	Key Issues	Number of meetings per year	Committee	Key Issues	Number of meetings per year	Committee	Key Issues	Number of meetings per year
SCG Sustainable Development Committee	, , , , , , , , , , , , , , , , , , , ,	4 (quarterly)	Environment Excellence Committee	<ul> <li>Establish policies, targets, approaches, strategies, guidelines, and indicators on a circular economy, sustainable products and services, waste management, water management, and air quality management to advance relevant initiatives towards the established goals and create positive environmental and social impacts.</li> <li>Incorporate the assessment and data analysis guidelines of the Taskforce on Nature-related Financial Disclosures (TNFD) in strategy formulation to manage risks and opportunities related to nature and biodiversity.</li> <li>Establish SCG Nature Positive Roadmap to promote circularity-driven natural resource management, with emphasis on resource efficiency.</li> <li>Elevate environmental actions in each country in which SCG operates in order to become a leader in environmental stewardship.</li> </ul>	4 (quarterly)	Workplace Safety Committee  Transportation Safety Committee	<ul> <li>Establish policies, strategies, planning, targets, and indicators in line with relevant international standards and regulations.</li> <li>Assess, monitor, and provide recommendations to ensure that the business operates in accordance with the action plan and targets, and analyze outcomes gained to provide consultation for further improvements.</li> <li>Promote and drive the effective implementation of SCG Safety Framework, the Transportation Safety Standards, the Safe Work Standards, and Life Saving Rules, as well as Operational Discipline (OD) to foster a safety culture, both in Thailand and abroad.</li> <li>Foster awareness and understanding of occupational health and safety among relevant parties.</li> <li>Conduct an analysis of root causes, trends, and corrective and preventive measures and provide recommendations to prevent recurrence.</li> <li>Build a network to improve safety collaboration among</li> </ul>	(quarterly)
			Social Excellence Committee	<ul> <li>Foster implementation related to international standards, such as UNGP, UDHR, ILO, and OECD, to manage risks and impacts across all SCG's business units, joint ventures, suppliers, contractors, and stakeholders across the value chain.</li> </ul>	4 (quarterly)		associated stakeholders at all levels across all sectors.	
Governance and Economic Excellence Committee	<ul> <li>Develop business long-term plans by integrating risk assessment and management frameworks and scenario analysis, taking into consideration possible outcomes based on scenario-based planning.</li> <li>Monitor enterprise risk management, business ethics, transparent disclosure under the supervision of the Board</li> </ul>	4 (quarterly)		<ul> <li>Establish policies, strategies, targets, and indicators and monitor performance on human rights, diversity and inclusion, inequality reduction, and stakeholder engagement to provide recommendations for practicable actions.</li> <li>Review social dimension implementation to ensure alignment with SCG's Inclusive Green Growth approach.</li> <li>Study and monitor the Taskforce on Inequality and Social-</li> </ul>		SCG		

towards sustainability goals.

• Develop a monitoring system for the financial impacts

• Oversee data integrity to ensure access to accurate

and reliable data, enhance business decision-making capabilities, promote transparency, and measure progress

Maintain business stability and adaptability and oversee

of investments regarding to SCG Net Zero Roadmap 2050.

of Directors.

strategies, investments, post-audits, and investment projects related to a low-carbon economy and a transition to net-zero.

Climate Change & Energy •

Committee

This covers all key sectors and aligns with SBTi, along with transitioning to clean energy in accordance with the SCG Net Zero Roadmap 2050. Collaborate with relevant sectors, both domestically and internationally, to drive and support the development of climate-related policies and promote measures for emissions

reduction, energy transition, and sustainable resource use.

Related Financial Disclosure (TISFD) Framework for risk

and opportunity management and strategy formulation.

Disclose social information in accordance with international

Establish policies, strategies, goals, and pathways for greenhouse gas emissions reduction as a core focus of SCG, aligning with

the Nationally Determined Contributions (NDCs) of each country.

standards and stakeholders' expectations.

 Conduct studies, provide knowledge, and share case studies to support stakeholders in climate action, aligning with changes and evolving expectations to create long-term value.

(bimonthly)

<sup>\*</sup> The Environmental Sustainability Development Committee was appointed in July 2024 and convened a total of two meetings in 2024, in July and October, respectively.

# **Voices of Young Executives and Female Executives**

SCG promotes diversity and equitable treatment for all genders and seeks to recruit and develop individuals from diverse backgrounds to enable them to work together efficiently as a team in order to drive the organization forward in alignment with ESG practices and foster sustainable growth.



SCG places great emphasis on alternative energy by increasing the proportion of biomass and renewable energy usage as well as investing in innovations that reduce fossil fuel dependency and carbon emissions, which will drive long-term business competitiveness in the industry. Additionally, we support and collaborate with our suppliers and contractors in reducing their greenhouse gas emissions across value chain, which is key to achieving the net zero GHG emission by 2050 target and ensuring sustainable business growth.



**Siriphat Charoenrat Manager - Strategic Sourcing Department SCGP** 



SCG focuses on environmental conservation and efficient resource utilization. To this end, it has set a net zero GHG emission target, applied nature-based solutions, integrated circular economy principles, and developed new businesses to strengthen the circular economy system. The Company has also been working in collaboration with stakeholders across all sectors and promote employee engagement in driving the long-term sustainability of the organization.



**Unchalee Mulalee Head of ESG SCG Chemicals (SCGC)** 



SCG seeks to foster mutual business success for suppliers and contractors while also pursuing the net zero GHG emission target. To this end, SCG actively equips small and medium-sized suppliers and contractors to effectively adjust to social and environmental changes by organizing training on greenhouse gas emissions reduction and by providing assistance in analyzing and improving business processes to minimize environmental and social impacts."



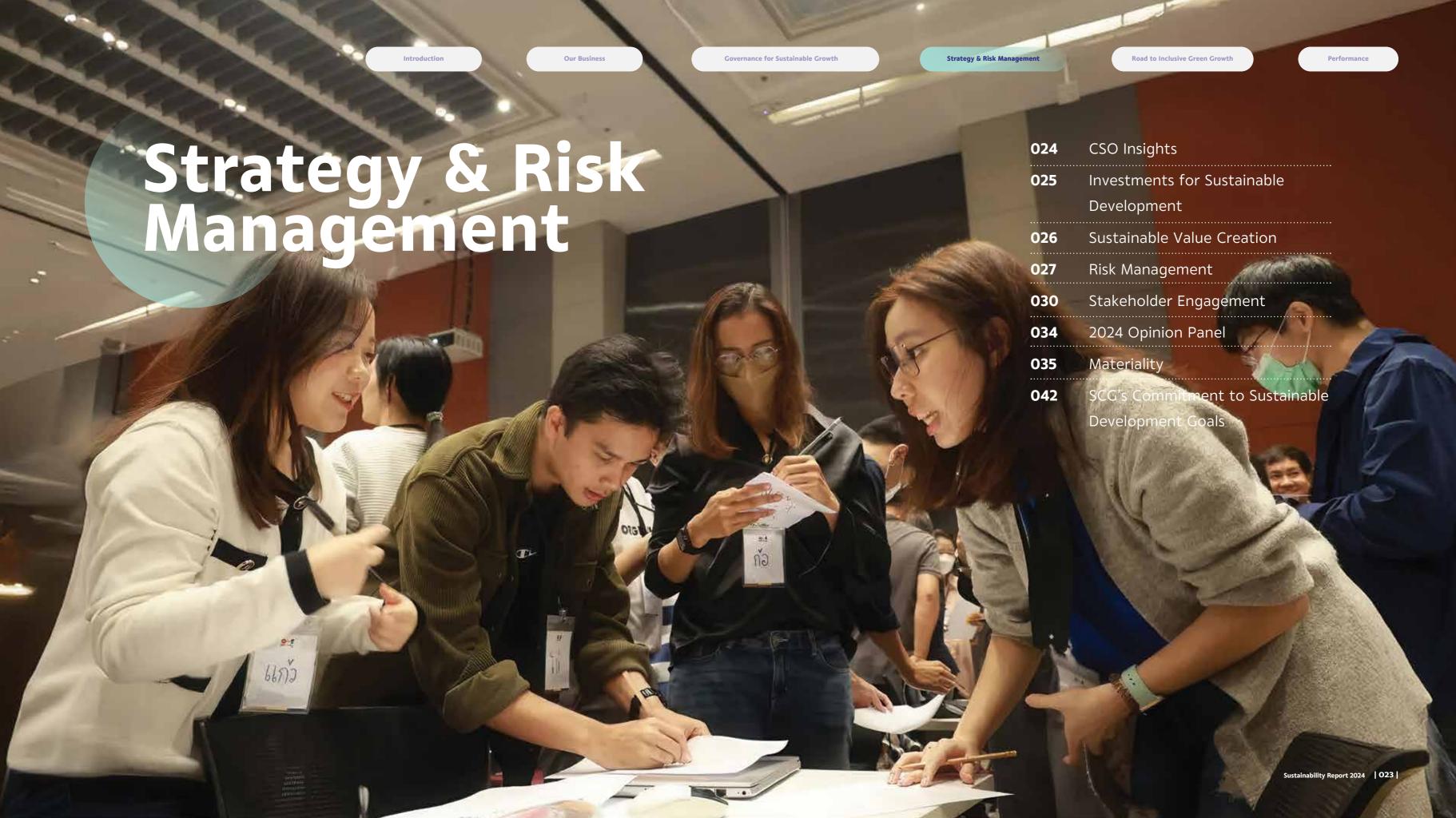
**Ladda Anektaweepon Corporate Procurement Director The Siam Cement Public Company Limited** 



SCG develops products and construction methods through co-creation with customers, whether they are project owners, homeowners, or designers, to create new solutions that address business needs and contribute to the transition to a low carbon society. This ranges from selecting efficient materials and construction methods that reduce on-site waste all the way to designing buildings that help residents save energy and switch to renewable energy, thereby reducing fossil fuel consumption in society.



**Dayin Kiatkwankul Smart System Business Director SCG Smart Living** 



Our Business

# **CSO Insights**

" SCG strives to drive change by developing use cases in collaboration with our network partners to produce scalable impact, all undertaken under the Inclusive Green Growth approach to foster mutual growth for both society and businesses while preserving the planet for future generations. "

#### **Chana Poomee**

Chief Sustainability Officer, SCG



# **Key Crises to Address for Global** Sustainability

Three major crises are compelling urgent action: climate emergency, nature in crisis and inequality. As a result of these ESG risks, businesses are adapting towards a green transition across multiple dimensions, from business strategy and investment to technology development, employee capability enhancement, internal and external collaboration, and organizational culture.

The year 2024 marked the hottest year on record, with average temperatures rising to 1.6°C, exceeding the 1.5°C threshold under the Paris Agreement for the first time. As natural disasters become increasingly severe and widespread, our collective failure to restore nature could lead to the collapse of ecosystems that have buffered us against impacts of climate change, potentially resulting in devastating economic and social losses.

# What are SCG's proactive strategies to address these crises while also ensuring sustainable business growth?

As these challenges require long-term proactive management, SCG strives to drive change by developing use cases in collaboration with our network partners to produce scalable impact, all undertaken under the Inclusive Green Growth approach to foster mutual growth for both society and businesses while preserving the planet for future generations. Our initiatives are also carried out in line with the Regenerative Transformation principle, which focuses on creating positive environmental, social, and economic impacts through three core strategies: 1) Net Zero 2050 - developing low-carbon technologies and products alongside a transition to low-carbon business operations; 2) Nature Positive – focusing on green operations, ecosystem restoration, biodiversity preservation, and adaptation to physical risks from rising global temperatures; and 3) Inclusive Society – building a sustainable society for all and enhancing resilience across four dimensions, namely economic, social, environmental, and cultural, based on the Sufficiency Economy Philosophy.

Furthermore, SCG has joined SBTi and received validation for its decarbonization targets: 25% reduction in GHG Scope 1 and 2 emissions by 2030 compared to 2020 baseline, and at least 25% reduction in Scope 3 emissions from fossil fuel sales to external customers by 2031 compared to 2021 baseline. These targets demonstrate our commitment and how our operational approach can instill confidence among all stakeholders in our capability to achieve the established long-term goals.

# What are the key success factors in driving these strategies?

At SCG, we believe that sustainable success comes hand in hand with robust corporate governance. To this end, the Environmental Sustainability Development Committee is tasked with overseeing the implementation of strategies and policies to achieve the net-zero 2050 goal. In addition, as true transformation starts from within, we follow the "Explosion from within" approach, under which we raise awareness, encourage participation, and develop employee capabilities through various initiatives, such as the Net Zero Accelerator Program (NZP), which enhances energy and decarbonization innovation knowledge and skills, thus serving as a starting point for scaling up changes from within the organization to the industrial sector, society at large, and the broader economy.

The transition towards sustainability requires collaboration at all levels and across all sectors. As such, SCG has implemented the 3C approach: collaborative mindset, collaborative actions, and collaborative values, to create systemic transformation. An example is the Saraburi Sandbox Project, a model for a low-carbon city, in which SCG works with the government, private organizations, and civil society using an area-based approach. The project focuses on four key areas: 1) unlocking policies and regulations to create an environment conducive to green industry development; 2) facilitating access to green funds to enable businesses to invest in sustainable technologies; 3) developing green technology and infrastructure using efficient and costeffective solutions; and 4) supporting SMEs' adaptation to enhance their competitiveness in the green economy.

# What risks and challenges are facing SCG in the green transition, and how are they being addressed?

SCG is faced with constantly evolving regulations at both national and international levels, particularly with regard to the cement industry, which accounts for 8% of global CO2 emissions. To address this, we study world-class operational frameworks through international collaborations and prepare Thailand's cement industry to meet international standards. This includes utilizing alternative materials in cement production, applying circular economy principles, and developing carbon capture, utilization, and storage (CCUS) technology, all of which inform the formulation of our net-zero roadmap as well as the development of low-carbon production processes and preparation for future government policies, such as the Climate Change Act, the emission trading system (ETS), and carbon taxes.

We're also preparing for ESG disclosure requirements by integrating ISSB (International Sustainability Standards Board) standards into our business strategy, aligning them

with our mid-term plan, and enhancing data integrity to ensure our disclosures are accurate, transparent, and compliant with international standards.

Beyond international regulations, another challenge is driving the sustainable growth of the green market to expand consumer choices and create a business ecosystem conducive to the transition to a low-carbon economy. In response, SCG has been collaborating with the government, private organizations, and consumers to promote "Green Priority" policy, including green procurement, eco-label standards, and tax reduction for low-carbon industries. In addition, SCG promotes collaboration between private organizations in the form of industrial clusters to accelerate the transition of Thailand's industries towards unified standards.

# **How does SCG govern its investment** decisions to create long-term value and sustainability?

We prioritize investments that align with our net-zero target, guided by a robust governance structure and efficient two-pronged investment evaluation approach, consisting of 1) the appointment of the Environmental Sustainability Development Committee, which is responsible for aligning environmental directions and policies with net-zero targets and focusing on investments that reduce environmental impact and generate balanced business returns; and 2) the utilization of the Marginal Abatement Cost Curve (MACC) for analyzing and managing technology and innovation investments to identify the most cost-effective decarbonization opportunities. These include increasing renewable energy usage and optimizing energy efficiency through, for instance, exploring industrial hydrogen applications to enhance competitiveness and researching large-scale industrial carbon capture and storage technologies in preparation for a sustainable transition into the future.

Road to Inclusive Green Growth Governance for Sustainable Growth Strategy & Risk Management Our Business

# Investments for Sustainable **Development**

SCG invests to generate sustainable returns and ensure continuous long-term business growth in line with the Inclusive Green Growth approach. Investments are strategically focused on five key areas, as defined by ESG4Plus: 1. Net Zero 2. Go Green 3. Reduce Inequality 4. Embrace Collaboration 5. Trust through Transparency

The SCG Sustainable Development Committee monitors progress on a quarterly basis to support effective ESG investment decisions, ensuring they are based on accurate and comprehensive financial data. This approach also responds to the growing interest of stakeholders, including institutional investors and regulators, who prioritize disclosure of ESG-related investments and financial returns.

To enhance transparency and elevate SCG's sustainability operational standards, SCG aims to drive investment in high-growth businesses that contribute to a low-carbon society, unlocking new business opportunities and strengthening competitiveness. This strategy enables SCG to navigate economic volatility while fostering a strong and sustainable society, with a positive impact on the environment (E), society (S), and governance (G).



# Net Zero 2050:

Investment 3.809

million baht

million baht

**Expenses** 

84

The greenhouse gas reduction projects under the SCG Net Zero Roadmap focus on:

- Reducing fossil fuel use
- Enhancing energy efficiency
- Increasing the share of biomass fuels and renewable energy
- Producing low-carbon products
- Promoting carbon absorption through natural climate solutions (NCS)
- Investing in carbon capture utilization and storage (CCUS) technologies
- · Expanding clean energy businesses



# Go Green:

Investment 1.479

million baht

1.673 million baht

**Expenses** 

In addition to greenhouse gas reduction projects under Net Zero 2050, SCG implements various environmentally friendly initiatives, including:

- Reducing pollution and waste
- Reducing natural resource usage and promoting the circular economy
- Developing eco-friendly innovations and businesses
- Expanding investments in circular economy businesses
- Conserving and restoring biodiversity
- Reducing deforestation to help maintain ecological balance on land and in marine ecosystems



# **Reduce Inequality:**

Investment 391

million baht

95

**Expenses** 

million baht

Projects aimed at promoting quality of life and enhancing the potential of stakeholders focus on:

- Professional skill development
- Education and public health initiatives
- Health and safety programs, with an emphasis on accident prevention



# **Enhance Collaboration:**

Investment

0

million baht

36.43

**Expenses** 

million baht

Supporting organizations at the national, regional, and global levels to foster collaboration in advancing sustainable development efforts and driving the transition toward a low-carbon society.



# **Trust through Transparency:**

Investment 0.93

5.65

million baht

million baht

**Expenses** 

Projects that promote business ethics, corporate governance, transparency, and regulatory compliance, including the development of an ESG disclosure platform to enhance data integrity, transparency, and sustainability performance standards.

Adherence

SCG

and SCG

& Retail

to Fairness

# **Sustainable Value Creation**



#### **Financial Capital**

- Assets 861,502 Million Baht
- Shareholder's Equity 419,780 Million Baht
- Equity Attributable to Owners of the Parent 352,887 Million Baht



#### **Manufactured Capital**

Cost and Expenses 525,498 Million Baht



#### **Intellectual Capital**

R&D and Innovation Spending 4,847 Million Baht



#### **Human Capital**

- Number of Employees 53,730 Persons
- Number of New Employees Hire 2,298 Persons
- Average Hiring Cost per Employee 75,934 Baht/Person
- Average Hours of Training and Development 121 Hours/Person
- Average Amount Spent on Training and Development 14,931 Baht/Person



#### **Social and Relationship Capital**

- Contribution for Social and Community 381 Million Baht
- Employee Volunteering during Paid Working Hours 44 Million Baht
- In-kind Giving: Products or Services Donations, Projects/Partnerships or Similar 9 Million Baht
- Management Overheads Related to CSR Activity 131 Million Baht



#### **Natural Capital**

Raw Materials 88.20 Million Tons

CGS 74% SCGD 3%

SL and D&R 4% SCGC 10% SCGP 9%

220.94 Petajoules CGS 37%

**SCGC 28%** SL and D&R 1% **SCGP 28%** 

• Total Energy Consumption

SCGD 6%

• Total Water Withdrawal 119.32 Million Cubic Meters

CGS 13% **SCGC 19%** SL and D&R 1% SCGP 65%

SCGD 2%



## **Net Zero**

**GHG Emissions** by 2050

Plus Trust through Transparency SCG Four Core Values



## **Enhance** Collaboration

**Drive ESG with** Collaborations at the National. ASEAN, and International Level Concern for Social Res

Tillidion SCG Cement (Packaging Business) and Green Solutions BUSINESS PURPOOR Inclusive **Green Growth** riving Low Carbon Society, **Creating Sustainable Smart Living** Competitiveness, And Fostering Inclusive Distribution Prosperity

Belief in the Value of the individual

Plus Trust through Transparency



# **Reduce Inequality**

**Reduce Social Inequalities** 50,000 persons by 2030



#### **Financial Capital**

• Revenue from Sales 511,172 Million Baht

**SCGC 41%** CGS 16% SL and D&R 12%

SCGP 26%

SCGP 8%

SCGD 5%



#### **Manufactured Capital**

• Production 79.12 Million Tons SCGC 9% CGS 76%

SL and D&R 4%

SCGD 3%



OUTCOME

#### **Intellectual Capital**

- Revenue from Sales of HVA, New Product Development (NPD) and Service Solutions 64.00%
- Revenue from Sales of Green Choice Products and Services 54%
- Number of Patents 858



#### **Human Capital**

- Total Employee Turnover Ratio 4%
- Employee Engagement 4.0 from 5.0



#### **Social and Relationship Capital**

- Number of Check Dam 127,618 Units
- Reduce Inequality 24,543 Persons
- Promoting Community Water Management 2,307 Households



Go Green

**Develop the** 

**Environmental** 

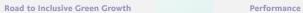
Innovation to

Preserve the World

#### **Natural Capital**

- GHG Emissions Reduction Compared with the Base Year of 2020
- Alternative Fuel 28.59%
- Zero Waste to Landfill
- Renewable Materials and Recycled Materials 10.12%

















**Assessment** and Prioritization



**Establishing** Response **Strategies** 

Strategy & Risk Management



Monitoring and Reporting



Risk

Management

SCG has implemented an integrated risk

management approach based on

the COSO ERM-2017 international

framework, taking into account economic,

social, and environmental megatrends

in relation to the organization's business

objectives and core operations to build

resilience against potential business

challenges while driving growth in

alignment with long-term strategic

objectives, in accordance with the process

described below.

 Consider transition risks and physical risks in both short-term and long-term contexts in alignment with the ISSB standards.



• Establish the SCG Risk Universe.

## **Eight risk categories:**

- 1. Environmental and social risks
- 2. Governance and Compliance risks
- 3. Reputation and intellectual property risks
- 4. Hazard risks
- 5. Input risks
- 6. Process risks
- 7. Financial risks
- 8. Business risks



Establish risk appetite, categorizing assessments into two main types: financial and non-financial.



Utilize risk maps to evaluate likelihood and impact, classifying risks into three levels: high, moderate, and low.



 Assess impact severity using sensitivity analysis and scenario analysis.



Develop mitigation plans to keep organizational risk levels within the risk appetite.



Integrate the measures into business strategies and objectives.



Develop the Risk Assessment Systems (RAS) application for real-time and continuous risk management monitoring.



Monitor and report results to the SCG Risk Management Committee and the Audit Committee on a quarterly basis.







**Key material risks** are major factors affecting SCG's sustainability changes in both the short and long term. SCG adheres to the principle of regenerative transformation and strives to create positive impacts on the environment, society, and economy without leaving anyone behind, strengthen interorganizational collaboration both internally and externally, and cultivate an organizational culture that aligns with long-term sustainable development goals.

Based on the assessment of the 16 risk events, 6 key material risks have been identified:

#### **Emerging Risks**

- Risk from climate change leading to more frequent and severe natural disasters
- Risks from transition to a low-carbon economy due to uncertainty in policies and international regulations and standards
- Risks from geopolitical conflicts, wars, and geo-economic confrontation
- · Data security risks from the evolving cyber attacks

#### Other ESG Risks

- Health and safety risks in the workplace, transportation, and travel
- Human rights risks

# **Key Material Risks and Management**

Risk from climate change leading to more frequent and severe natural disasters

Climate volatility and rising global temperatures increase the risk of natural disasters, necessitating more rigorous planning, management, and response readiness.

· The Business Continuity

Management (BCM) function

monitors and assesses risks

and establish response plans

and business continuity plans.

with external entities such as

the Water and Environment

Institute for Sustainability

(WEIS FTI) and the Water

Resources Subcommittee

in the Eastern Economic Corridor

plans for natural resource

restoration and conservation

 Promote community participation in sustainable natural resource conservation, measured by

international indicators

 Develop long-term ecosystem management and monitoring

(EEC).

· Build collaborative networks

Health and safety risks affect stakeholders' quality of life and the sustainable achievement of zero injury and illness goals.

**Human rights** 

risks

 Conduct human rights due diligence process to monitor and audit performance using key metrics and targets and disclose risk assessment and performance

- Assess and develop human rights practice improvement plans for suppliers and business partners.
- Deliver continuous human rights training and communications to employees at all levels.

Risks from transition
to a low-carbon economy
due to policy uncertainties
and international
regulations
and standards

These include potential increased production costs as result of environmental technology investments, compliance with government measures, and the searching of new business opportunities in sustainable products and innovations.

- Define the SCG Net Zero Roadmap, which aligns with the transition pathway of relevant industries and is recognized by SBTi.
- Actively and continuously realize a circular economy through business partnerships to develop green supply chains and lowcarbon products.
- Adopt alternative technologies and materials to reduce natural resource and energy consumption in production.
- Increase the use of renewable and alternative energy in conjunction with carbon credits.

Risks from
geopolitical conflicts,
wars, and geo-economic
confrontation

Intensifying geopolitical conflicts drive up energy prices, transportation costs, and product prices, leading to global trade slowdown and revenue target shortfalls.

- Monitor and analyze trends to prepare timely and appropriate response plans.
- Restructure business and review investment plans, delaying non-urgent projects and focusing on businesses with high-growth potential that are aligned with global megatrends.
- Continuously improve production processes to increase flexibility and efficiency

Data security risks and the evolving cyber attacks

Road to Inclusive Green Growth

**Risk Levels** 

Cyberattacks can affect business operations extensively and lead to critical data breaches, resulting in loss of customer and stakeholder confidence.

Unsafe work behaviors, hazardous work environments, or difficult-to-control external factors can lead to injury, loss of life, and damage to the business.

- trends to

   Establish unified IT and communication policies and regulations for all employees.
  - Develop comprehensive cybersecurity risk management plans covering critical operations both domestically and internationally.
    - Upgrade security systems across all applications to enhance efficiency and data access security.
    - Certified with ISO/IEC 27001:2022 to enhance the efficiency of information security management.

Unsafe work behaviors, hazardous

Health and safety risks

in workplace,

transportation, and travel

- Enforce the SCG Safety Framework, including life-saving rules, across all operations.
- Develop safety standards corresponding to job-specific risks and business changes.
- Promote a safety culture, with the participation of operators at all levels in safety oversight.
- Utilize digital technology to enhance safety and occupational health management.
- Implement systematic fire risk management and emergency response plans.



Key trends



**Governance for Sustainable Growth** Strategy & Risk Management Road to Inclusive Green Growth Our Business

# Stakeholder **Engagement**

As stakeholders play a crucial role in the success of every aspect of SCG operations, SCG has always placed great emphasis on respecting stakeholder rights, ensuring proper stakeholder engagement, and fostering participation. To this end, SCG has assigned responsibility to relevant functions for stakeholder engagement and established the Stakeholder Engagement Policy and Guidelines as well as Guidance for Stakeholder Engagement to serve as guidance for SCG and its subsidiaries.

As part of this approach, SCG systematically identifies, analyzes, and prioritizes stakeholders using context-based criteria. In addition, SCG has also carried out stakeholder mapping, from which insights are utilized to determine an approach and format for engaging with both internal and external stakeholders.

The stakeholder engagement process is an integral part of double materiality assessments, assessing both the impacts on externality or the environment and the impacts on the organization's value. This process help identify key sustainability issues in terms of impact materiality and is reported to the SCG Sustainable Development Committee to enhance SCG's sustainability actions and ensure alignment with stakeholder needs and expectations.



- through various channels, such as
- Communication of operating results annual reports, management discussion and analysis, sustainability reports, and company websites
  - Regular communication of company information to stakeholders and investors through online channels
  - · Activities for the communication of SCG's business strategy and direction
  - Two annual events dedicated to sharing SCG's strategies and directions with domestic analysts and institutional investors
  - 97 non-deal roadshows and conferences for Thai and international investors, comprising of 184 meetings
  - 85 virtual/in-person domestic roadshows and conferences for Thai investors, including 102 meetings with SCG's CEO and Vice Presidents
  - Regular one-on-one meetings/group meetings and conference calls with investors to provide updates and address gueries
  - Regular updates to shareholders and investors, including business approaches under "SCG Inclusive Green Growth"
  - Participation in the Opportunity Day, organized by the Stock Exchange of Thailand
  - 2 site visits showcasing SCG's commitment to a low-carbon society
  - Investors and analysts visit, such as the Green Polymer Tour at i2P Center SCGC, to highlight SCG's innovations, their applications and business impact

#### **Issues Raised during Engagement** Activities

- Operating results, financial performance, and other related data
- Business strategies and directions, progress, and short- and long-term business plans, industry overview and competitiveness in the industry
- · Allocation of investment budget to support the Company's activities and projects
- ESG-driven plans, such as net-zero goals and policies, concepts and implementation methods, outcomes, and disclosure of relevant information

#### SCG's Response

- · Organize activities to communicate key issues and publish information on SCG's website regularly
- Provide ESG information to investors quarterly, respond to inquiries through ESG Engagement Letters, and communicate ESG matters regularly
- Prepare monthly reports summarizing inquiries and issues from investors for **Executives**
- Add relevant key issues in presentations to ensure investors are fully informed
- Address questions from investors and analysts via various channels, such as email and telephone

## **Value for Relevant Capitals**



**Financial Capital** 



**Human Capital** 



Social and Relationship Capital

**Governance for Sustainable Growth** Strategy & Risk Management Road to Inclusive Green Growth Our Business



communication channel to employees on various matters, which in 2024 included "Cool Me If You Can", "5 Urgent Issues for Combating Global Boiling" and "How to Handle Job Changing."

Employee engagement activities

- Activities promoting health, human rights, diversity and inclusion
- CSR and sustainability activities, such as ESG Photo Contest
- Publication of news and updates through internal channels, such as email, LINE groups, and Employee Connect Application

# **Issues Raised during Engagement Activities**

- Employee caring, retention, development, and career growth
- Safety and health management

#### **SCG's Response**

- · Respect and safeguard human rights, with emphasis on fair and equitable employee treatment
- · Fair compensation management to motivate and attract talents
- Proper welfare management to ensure employee well-being both during their working lives and after retirement
- Employee development, with updated content, formats, and learning systems, as well as individual development plans
- Develop strategies to attract talents to join SCG
- Workforce planning and preparation to effectively support future business operations
- Develop performance evaluation systems to align with organizational
- Approach to reduce and prevent accidents and illness caused by work and transportation

#### **Value for Relevant Capitals**



**Financial Capital** 



**Human Capital** 



Social and Relationship Capital



#### **Accountability**

**Contractors** 

 Procurement in Business Units/ Corporate Procurement Office/ Sustainable Supplier Committee

## **What Matters to Suppliers and Contractors**

- Policies, business approach and SCG's expectations in fostering sustainable collaboration
- Continuity in conducting business smoothly and securely with SCG
- Opportunity for business development and expansion alongside SCG
- Support for new knowledge that benefits the business development of suppliers and contractors

#### **Engagement Approach**

- · Conduct regular visits to gather feedback, exchange opinions, and improve operations with suppliers and contractors
- Share knowledge and new trend that may impact the operation of suppliers and contractors and promoting ESG consciousness, awareness, and practices in their businesses
- At least one SCG Supplier Day annually
- Training and workshops on various topics, such as data collection and the development of strategies for reducing greenhouse gas emissions (Carbon Footprint Product -CFP)
- Promotion of a safety culture among suppliers and contractors
- · Conduct assessments of critical suppliers with high ESG risk, including conducting evaluations for green procurement registration for qualified suppliers and contractors at least once a year
- Develop plans to improve operations of suppliers and contractors in line with SCG's ESG policy
- Provide support to the operation of suppliers and contractors with digital technologies
- Elevate supplier practices in accordance with SCG's Sustainable Procurement Framework and extending the practices to regional operations

## **Issues Raised during Engagement Activities**

- Providing knowledge and supporting resource tailored to the context of small- and medium-sized suppliers and contractors to enhance their business capabilities and promote effective implementation of ESG practice
- Developing contractor capabilities to implement net zero practices in a concrete manner
- · Contractor safety management

#### **SCG's Response**

- Offering knowledge, technology and business opportunities to enhance capabilities and achieve mutual benefits
- Ongoing and collaborative business improvement and development plans, along with regular supplier audit
- Approach to reducing and preventing accidents and illnesses caused by work and transportation

#### **Value for Relevant Capitals**



Financial Capital



**Manufactured Capital** 



Human Capital



Social and Relationship Capital



**Natural Capital** 



**Employees** 

Human Resources

# **What Matters to Employees**

 Employee caring, retention, development, and career growth

## **Engagement Approach**

- Annual meeting with CEO
- · Quarterly meetings with Executives
- Quarterly Leadership Forums



Accountability

• Marketing Units/Sales Channels/Business Transformation/ Merchandise and Sourcing

#### **What Matters to Customers**

## B2B

- Profits and sales from various activities
- Development of distributors and teams across different channels
- Network strengthening
- Increasing the adoption of AI in management

#### B2C

- Quality products, services, and solutions that meet customer needs
- Information on products, services, and innovations
- Consultation and troubleshooting for products, services, and solutions

#### **Engagement Approach**

#### B2B/B2B2C

- Distributor development plans and weekly/monthly business consultation
- Training courses, product knowledge programs and assessment tests
- Platforms to enhance business management efficiency for construction material stores, such as Prompt Plus, Rakmao, and Prompt Dee
- Performance dashboards and data opportunity, such as Project BEST and Salesforce, for strategy formulation, marketing planning, and business operations
- Joint product development and promoting collaboration between business clients to develop sustainable products, services, and solutions
- Expanding market for sourcing products, house brands and imports by building brand awareness and improving supply chain partner efficiency to distribute products to the market distribution and increase profitability in the value chain
- Handling customer feedback and recommendations through face-to-face communication, LINE, Call Center, and chatbots
- Offline and online marketing and promotional activities
- Sales tools and sales tracking tools
- Developing technician management models for Proshop
- Relationship-building activities, such as trips and annual top-ranking distributor recognition events

#### B<sub>2</sub>C

- Annual showcases of products, services, and innovations in Expos, such as Architect Exhibitions and the Home & Garden Fair
- Online platforms for customers' convenient access to products and services
- Handling complaints, suggestions/feedback 24/7 via online channel and website

# **Issues Raised during Engagement Activities**

#### B2B/B2B2C

- Marketing and competitor data for the appropriate structuring of prices and activities
- Product and service quality and other issues for further improvement

#### B2C

• Product and service quality and other issues for further improvement

#### **SCG's Response**

#### B2B/B2B2C

- Restructuring prices based on strategies, market conditions, and marketing activities to increase sales
- Performing stakeholder data analysis to assess competitor data, sales information, and market shares to inform the development of marketing activities
- Putting product claiming systems and data improvement systems in place, such as an e-claim system and a complaint management system
- Selling tools and marketing programs

#### B2C

• Utilizing data from customers to improve products, services, as well as product and service delivery processes

#### **Value for Relevant Capitals**



Financial Capital



Human Capital



Intellectual Capital



Social and Relationship Capital



#### **Accountability**

 Community Engagement Team/ CSR Team/ Brand Management & CSR Office

#### **What Matters to Communities**

- ESG concepts and operational guidelines that prioritize community impacts
- · Community engagement for the creation of sustainable shared value
- Communication and relationship building between SCG and community leaders
- Building community partnerships to achieve sustainable operations

#### **Engagement Approach**

• Visit community and organize community forum to study issues, obtain feedback and insights,

- and collaboratively plan CSR activities that align with local needs once a month
- Organize an open house, inviting the community to visit the factory once a year
- Organize community visits to foster awareness and pride in community activities
- Extract lessons learned from the collaborations between SCG and the network to identify success, challenges, and ways to improve initiatives to pass on a livable society and sustainable environment to future generations
- Be a thought partners, providing consultation on various matters to the communities by utilizing the corporate capabilities
- Foster collaboration between various sectors, combining communities, experts, and relevant parties to create meaningful impacts
- Develop campaign models to raise awareness to promote positive behaviors in circular economy projects
- Develop educational campaigns in collaboration with various sectors to promote positive circular behaviors
- Organize health-related activities with local Public Health Volunteers (PHVs) once a month to raise awareness of communicable and non-communicable diseases
- Open online channels, such as LINE groups and Facebook to receive feedback and suggestions from the community
- Conduct community satisfaction survey once a year

#### **Issues Raised during Engagement Activities**

- · Collaboration between government agencies, the public, and private organizations in supporting CSR projects of communities around SCG's plants, including continuous management and knowledge promotion activities for the communities
- Collaborations that create tangible positive impacts
- Boosting income and enhancing the quality of life
- Providing knowledge and connecting with experts to develop communities according to their needs

#### **SCG's Response**

- · Monthly meetings with the government agencies and the Department of Local Administration
- · Bi-weekly site visits to view community operations
- Meeting with community leaders and residents to foster community participation in development and ensure harmonious co-existence between communities and factories

#### **Value for Relevant Capitals**



Human Capital



Intellectual Capital



Social and Relationship Capital



## **Accountability**

Corporate Sustainability Office

# What Matters to Civil Societies, Academia, Opinion Leaders, and NGOs

- Leadership for change
- Listening to comments and suggestions from civil society
- Fostering collaboration to drive sustainability issues
- Sharing ideas and perspectives for driving SCG's strategies
- Exchanging experiences in ESG implementation

## **Engagement Approach**

- Annual opinion panels for operational improvement
- Collaborating on and supporting projects that promote social sustainability
- Sharing experience in various forums held by business sectors and academic institutions, such as opening factories for SMEs under Go Together project, allowing them to learn and see real practices of transitioning towards a low-carbon society
- Raising awareness and promoting participation through various activities, such as ESG Symposium and business visits, to build understanding and promote sustainable development

#### **Issues Raised during Engagement Activities**

- Leveraging SCG's knowledge and expertise to create positive impact on social sustainability
- Joining hands with other corporate organization and partner network to create significant changes in sustainability
- Building awareness and educating society on issues in which SCG holds expertise

#### **SCG's Response**

- Be a role models and mentors for small- and medium-sized organizations by sharing in forums and site visits
- Working with various network of partners to create efficient mechanisms for driving sustainability in a tangible way

#### **Value for Relevant Capitals**



Human Capital



Intellectual Capital



Social and Relationship Capital



SCG Sustainable Development Committee organized the 13<sup>th</sup> Opinion Panel to welcome suggestions and feedback from experts to enhance its value creation for stakeholders across the value chain and society at large. In 2024, SCG host the discussions on driving inclusive green transitions under the theme 'Driving Inclusive Green Transition' from August 16 to September 18, 2024 in order to gather recommendations on successfully driving the transition toward a low-carbon society. The discussions covered five main topics: technology for decarbonization, the circular economy, sustainable packaging system management, just transition, and the Saraburi Sandbox initiative. The events brought together more than 1,800 participants from various sectors, including government agencies, private organizations, financial institutions, industrial councils and associations, as well as civil society and community representatives. All the recommendations from the seminars were compiled into a comprehensive report and presented to the Prime Minister during the ESG Symposium 2024 on September 30, 2024.

Key recommendations are as follows:

Introduction

Our Business

**Governance for Sustainable Growth** 

Strategy & Risk Management

Road to Inclusive Green Growth

Performanc



1. Technology for Decarbonization



2. Circular Economy



3. Sustainable Packaging Value Chain



4. Just Transition



5. Saraburi Sandbox

- Establishing clear policies and action plans that support long-term sustainable and eco-friendly transportation at both policy and organizational levels that align with national goals while also adapting to international measures, such as CBAM (Carbon Border Adjustment Mechanism).
- Accelerating the development of clear and widely-accepted environmental accreditation systems and standards to enhance the credibility of green productions and services and fostering trust among consumers, stakeholders, and global markets.
- Completing a clean energy transition in transportation and industries through clean technology; developing infrastructure and energy hubs that support clean energy utilization, such as energy hubs for electric vehicles (EV) and accessible energy at appropriate prices; and adopting advanced technologies, such as carbon capture and storage (CCS) systems.

- Promoting eco-friendly products and packaging that are easily recyclable and reduce the use of virgin materials, coupled with at-source waste management, with a minimum standard of separating wet and dry waste based on local context, and the incorporation of waste management knowledge into compulsory education.
- Allocating investment funds to support
  the development of a prototype waste
  management model suitable for population
  size, waste volume, and waste types; and
  supporting other promotional measures,
  such as tax exemptions, for each locality
  to choose and implement as appropriate,
  with emphasis on separating wet and dry
  waste management centers of suitable sizes
  at suitable locations, with proper operating
  licenses as required by law.
- Driving the implementation of a comprehensive Circular Economy Act that establishes unified standards among manufacturers, importers, distributors, and consumers for the management of discarded products and packaging to ensure proper waste separation and recycling.

- Developing an ecosystem that fosters collaboration across the value chain. The implementation of CFO (Carbon Footprint of Organization) will enable each organization to effectively plan and work toward its decarbonization targets, while CFP (Carbon Footprint of Product) serves as a crucial tool for collectively decarbonizing the entire value chain and increasing opportunities for business collaboration.
- As the calculation of CFP (Carbon Footprint of Product) and CFO (Carbon Footprint of Organization) remains complex and requires specialized knowledge for effective implementation, it is crucial to develop and enhance the knowledge and understanding of personnel within organizations.
- or relevant organizations to develop platforms that enable SME operators to more easily access knowledge and product development technologies, thus allowing them to better assess potential risks and impacts in both the short and long term.
- Encouraging large organizations to act as mentors or consultants, provide guidance to SMEs in finding their starting point, as well as assist them with preparation and access to financial support from various financial institutions.
- Focus on GHG emission reduction as well as removal through CCUS technology and low-carbon cement, which requires collaboration between the government, private organizations, and researchers, along with green funding.
- Implementing pilot projects in areas with sufficient readiness, such as solar carport installation in government facilities and floating solar farms in various water bodies, and evaluating, improving, and scaling up such projects to provincial and national levels, while simultaneously pushing for amendments to laws and regulations that hinder clean energy projects and developing supporting measures and incentives, such as tax reductions for solar panel installation and financial support for clean energy projects.
- Applying energy crop technology and research to social enterprises, promoting low-carbon agriculture through wet-anddry rice farming methods, and advancing the study and development of biodiversity and tourism databases for community forest areas in collaboration with experts to generate income and improve the quality of life for community members.



Materiality

# **Double and Dynamic Materiality Assessment Process**



**Analyze megatrend** and organization's context

- Analyze significant megatrends that may impact the entire value chain.
- Review ESG issues relevant to the industry by participating in ESG assessments conducted by leading ESG raters, such as Sustainalytics, CDP, MSCI, FTSE4Good, and S&P Global CSA.
- Gather feedback and suggestions from stakeholders through various channels.
- Exchange strategic ideas and perspectives through collaboration with all sectors to drive and advance sustainability initiatives in order to achieve tangible results, such as through World Economic Forum (WEF), **World Business Council for Sustainable** Development (WBCSD), Global Cement and Concrete Association (GCCA), and the Global Compact Network Thailand (GCNT).



**Identify sustainability** risks and opportunities across the value chain

- Assess both the external impacts on the organization (financial materiality) and the impacts of the organization's activities on society and the environment (impact materiality) across various dimensions in line with international frameworks, such as:
- Climate change risks, in accordance with Task Force on Climate-related Financial Disclosures (TCFD).
- Potential environmental risks from SCG's business operations and changing natural risks, in accordance with Taskforce on Nature-related Financial Disclosures (TNFD).
- Risks from inequality and social issues affecting SCG's business operations, in accordance with Taskforce on Inequality & Financial Disclosures (TISFD).



Assess the significance of the impacts

- Gather opinions and recommendations from the SCG Sustainable Development Committee to understand the impacts of material challenges across all dimensions.
- Gather recommendations on the transition to a low-carbon society to assess impacts on external stakeholders through presession panels for ESG Symposium 2024.
- · Evaluate and screen material issues in the short, medium, and long term.
- Integrate assessment into the Enterprise Risk Management process to systematically establish risk and impact management measures.



Determine and propose materiality

- Determine materiality for the establishment of enterprise risk management and business
- Propose the materiality to the SCG Sustainable Development Committee for approval and integration into business strategy planning, and establish both short- and long-term key performance indicators that integrate ESG achievement targets for the President & CEO and top executives.
- Disclose relevant information to stakeholders to enhance transparency and understanding.

## **Materiality Matrix**

Sustainability Risks and Opportunities Identification

Sustainability Risks and **Opportunities** 

Megatrends

#### **Geopolitical Conflicts**

Trade conflicts, wars, and economic sanctions may increase production costs and create trade restrictions.



#### **Environmental Challenges and Climate** Resilience

Loss of biodiversity and ecosystem degradation, increasingly severe natural disasters, energy transition, and carbon markets.



#### Rapid Technological Change

Artificial intelligence (AI) creates competitive opportunities but may pose challenges with regard to workforce skill development, privacy, and data security.



#### **Increased Social Risks**

Inequality, labor rights, and the transition to a low-carbon economy must be implemented equitably and inclusively.







Policy: Adaptation to laws and standards, such as the Climate Change Act, carbon tax, emissions trading systems, and global plastics treaties.



Technology: Development of decarbonization technologies, such as clinker substitute materials and research on carbon capture and storage.



Market: Development of low-carbon products, advancement of sustainable production and consumption standards, and creation of ecosystems in support of low-carbon products

#### **Physical Risks**

SCG has assessed physical risks, both acute and chronic, using the Shared Socioeconomic Pathways (SSPs) to set scenarios for evaluating potential impacts on the organization's operations, such as extreme heat, flooding, and water stress and drought.\*

**Impact Materiality** 

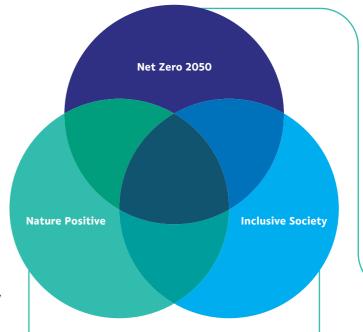
- **Biodiversity Impacts**
- Air Quality
- · Water Management
- Workforce Health & Safety

#### Greenhouse gas Emissions

- · Energy Management
- · Waste Management
- · Community Relations

- Operational eco-efficiency
- Circular economy
- · Biodiversity conservation, water resource restoration, and forest and ecosystem rehabilitation
- Physical risk adaptation

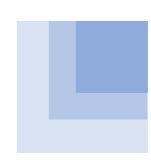
#### **SCG Materiality Categorization**



- Energy transition (Electrical/Thermal)
- Increased market demand for low-carbon products
- Natural climate solutions (NCSs)
- Accelerating the development of Carbon Capture, Utilization, and Storage (CCUS) technology



#### **Materiality Prioritization** and Mapping



**Enterprise Risk Management** 

- Safety and well-being promotion
- Human Rights, diversity, equity and involvement
- Just transition to a low-carbon economy
- Development of sustainable livelihood
- Low-carbon society advancement

<sup>\*</sup> SCG disclosed assessment results for both transition risk and physical risk in Climate report 2024: https://file.scgsustainability.com/wp-content/uploads/2024/09/13172859/SCG-Climate-Report-2024.pdf

## **Materiality 2024**

# Net Zero 2050 **Sub-issues:** Energy transition (Power/ Thermal) Increased market demand for low-carbon products Natural climate solutions (NCSs) Accelerating the development of Carbon Capture, Utilization, and Storage (CCUS) technology

# Risk

# Opportunity

#### Short-term

- Higher energy and raw material costs
- Stricter environmental regulations (e.g. carbon tax)
- Technology and infrastructure limitations
- Supply chain uncertainties
- Access to government and international funding
- Revenue from low-carbon products and carbon credit markets
- Building collaborative networks to accelerate transition

#### Long-term

- Climate change impacts
- Challenges with new technology investment and development
- Shifting consumer behavior towards sustainable
- Reputational risk from failing to achieve Net Zero targets
- Net Zero leadership and enhanced competitiveness
- Investment in renewable energy and CCUS
- Development of decarbonized supply chains
- Business expansion towards a green economy and new business models



Financial Materiality

• The transition from fossil fuels to clean

energy was advanced, with the proportion

of alternative energy used increased to

28.59% and renewable energy usage

Energy efficiency in production processes

was optimized, leading to a 7.91% reduction

in energy consumption in 2024 (compared

Revenue from sales of Green Choice products,

services, and solutions, and which directly

delivered value to customers, accounted for 54.0% and 14.3% of total sales revenue.

Low-carbon cement export markets were

expanded in 2024, with exports to

the United States exceeding 1.3 million tons.

were created via renewable energy trading

on smart grids and investment in energy

storage, with production expanded for

and Concrete Association (GCCA) to obtain

green funding from the Canadian

government to support the cement

and concrete industry's transition to

was utilized as a tool for evaluating

investment efficiency in decarbonization

• The MACC (Marginal Abatement Cost Curve)

Collaborating with the Global Cement

export to international markets.

Net Zero by 2050.

projects.

Business opportunities for SCG Cleanergy

with BAU at the base year of 2007).

respectively.

expanded to 292 MW in 2024.

· Low-carbon cement that reduced greenhouse gas emissions by 10-50% compared to OPC cement was developed.

**Strategic Response** 

**Impact** 

Materiality

- An Environmental Product Declaration (EPD) was obtained across all categories of low-carbon cement and concrete products.
- Cultivation of energy crops (bamboo and Napier grass) was promoted, generating an annual income of 2.5 million baht for farmers in Saraburi, with 2,100 tons of renewable energy produced from these crops.
- The **Saraburi Sandbox** project was elevated into a low-carbon model city, designed to advance Thailand's low-carbon economy and society.
- Partnerships were established with all sectors to create positive environmental and social impacts in the transition toward a low-carbon economy.
- Technologies were developed to reduce greenhouse gas emissions, minimize combustion pollution, and enable long-term carbon capture.



- Net Zero by 2050
- · Achieving near-term targets certified by SBTi to reduce Scope 1 and 2 emissions by 25% by 2030 compared with the base year of 2020 and reduce Scope 3 emissions from fossil fuels sold to external customers by 25% by 2031 compared with the base year of 2021.
- · Decreasing energy consumption by 13% by 2025 compared with BAU at the base year of 2007.
- · Generating 66.7% of total sales revenue from Green Choice products, services, and solutions by 2030.
- · Generating 33.3% of total sales revenue from Green Choice products, services, and solutions that provide direct value to customers by 2030.

# Nature Positive Sub-issues: Operational eco-efficiency Circular economy

#### **Short-term**

· Biodiversity conservation, water resource restoration

and forest and ecosystem rehabilitation

Risk

Physical risk adaptation

- Rapid environmental changes and severe weather events, such as storms, floods, droughts, and forest fires, as well as pollution
- Adaptation to circular economy policies and measures, such as Extended Producer Responsibility (EPR) requirements, increased recycled material content in products, and the Global Treaty on Plastic
- Prompt adaptation and response to disasters
- Development of advanced technologies and innovations to address policies and a shift in consumer demand towards green products
- Building a positive corporate image with regard to sustainability and strengthening confidence among domestic and international customers and suppliers
- Cost savings from eco-efficiency initiatives

#### Long-term

 Risk of biodiversity loss and ecosystem degradation, which may impact supply chains and production processes

 Creating businesses that can grow alongside nature conservation through restoration and sustainable resource use, while leading business transformation in alignment with nature positive standards



- Natural risk assessments were conducted, and restoration plans were developed according to the TNFD LEAP Nature Risk Assessment Approach to ensure nature conservation investments were aligned with nature positive goals.
- Circular economy principles were implemented to reduce natural resource dependency, improve resource efficiency, and valorize waste materials to minimize risks of resource scarcity.
- Recover and recycle the used plastic 185,200 tons in 2024.
- Projects that created circular business opportunities were launched in collaboration with various partners, such as the Wake Up Waste platform for recycling waste trading management and the "Trade-in for a New World" project, through which used plastics were collected for recycling into highquality PCR.



**Strategic Response** 

- Resource consumption was reduced through utilization of recycled and renewable raw materials increased by 8.93 million tons in 2024.
- 99.7% of SCGP packaging was reusable, recyclable, or compostable.
- Water withdrawal was reduced by 2.3% in 2024 compared to 2023.
- Dust emissions were reduced by 7% in 2024 compared to 2023.
- 100% of wood sourced from SCGP's plantations was certified under FSC™-FM/ COC: FSC™-C012207 standards.
- 1,115 artificial coral reef structures "coral homes" were installed in collaboration with network partners to restore marine ecosystem health through the Love the Sea project.
- Educational materials and waste management activities were developed for youth and communities through the Waste Wittaya project, which was piloted in five schools in Rayong, and the Zero-Waste Community Project in 2024, generating 1.4 million baht in community income.



- 8 million tons of recycled and renewable materials by 2025.
- SCGP achieves 100% reusable, recyclable, or compostable packaging design by 2025.
- 500,000 tons of used plastic into production process annually by 2030.
- Zero landfilling of hazardous and nonhazardous waste from production processes in Thailand every year.
- Reducing water withdrawal by 5% by 2030 compared with BAU at the base year of 2022.
- Reducing dust emissions by 4% by 2030 compared with BAU at the base year of 2020.
- Achieving over 60% similarity index between rehabilitated limestone mining areas and natural forest buffer zones.
- FSC<sup>™</sup> biodiversity conservation forest areas account for at least 10% of the total forest plantation areas.
- Conserving, restoring, and increasing green area to 3 million rai by 2050.





TOGETHER

# **Inclusive Society Sub-issues:**

- Safety and well-being promotion
- Human Rights, diversity, equity and inclusion, DEI
- Just transition to a low-carbon economy
- Development of sustainable livelihood
- Low-carbon society advancement

#### **Short-term**

- Risk
- The transition to a low-carbon society requires collaboration from all sectors, particularly suppliers & contractors, SMEs and communities. Failure to adapt to these changes in time may result in social inequality, loss of opportunities and competitiveness, as well as limited access to funding sources.
- Opportunity
- SMEs and communities gain access to new technologies, skills development, and job opportunities in green market for better quality of life, as well as access to funding for decarbonization projects.

#### Long-term

· Capability and competitiveness, and accessibility to technology, and funding sources of value chains and the local economy.

 Building a strong ecosystem where all sectors have equal capability and opportunities to participate in driving an equitable and sustainable transition.



- · Working without fatalities, lost-time injuries, illnesses, and occupational
- Transportation and travel without road accidents.
- Employee capability enhancement through up-skilling and re-skilling programs, and ESG and business knowledge development through SCG Flagship Programs, such as the ESG Leadership Program and Net Zero Accelerator Program (NZP).



**Strategic Response** 

- Establish a safety and working environment management system, and provide knowledge to employees and contractors to strengthen safety culture.
- Foster employee engagement and ESG awareness through daily behavioral practices, participation in company activities, and experience sharing through the Sharing Opportunities for Daily Good Deeds application.
- 4.0 of employee engagement level in 2024 compared to the total workforce.
- 22.4% of senior employees enrolled in the Net Zero Accelerator Program (NZP) in 2024.
- Provide capability enhancement programs to suppliers and SMEs focusing on decarbonization and adaptation to stricter ESG standards.
- 631 SME entrepreneurs participated in the Go Together project in 2024.
- Enhance community capability development driven by the concept of inclusive society, such as Learn to Earn, Ton Kla Community, and Digital Telemedicine Program for Remote Patient Care Project, to create equal opportunities and reduce disparities in education, occupation, and public health.
- Reduce social inequality for 24,543 people
- Create an environment that promotes human rights, diversity, and inclusion, aiming to become an organization of possibilities.



- Zero fatalities among employees and contractors
- Zero lost time injury frequency rate for employees and contractors both Thailand and abroad by 2024.
- Zero work-related illnesses and diseases among employees.
- Zero violation case on human rights
- All companies under SCG pass the Safety Performance Assessment Program (SPAP) at the Standard level and higher.
- Employee engagement rate (Thailand) equals 4.0 compared to the total workforce.
- 100% of senior employees participate in the Net Zero Accelerator Program (NZP) by 2027.
- 1,200 SME entrepreneurs from all regions participate in the Go Together project.
- Reduce social inequality for 50,000 people by 2030.

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# **Materiality Management**



**Material issues** 

Management

#### Net Zero 2050



Climate Resilience

- Set greenhouse gas emissions reduction targets in line with the Paris Agreement to keep the global temperature rise below 1.5 degrees Celsius, and aim for net zero emissions by 2050.
- Develop measures to continuously drive energy efficiency across all business units.
- Prepare and disclose climate-related data according to international guidelines (TCFD).
- · Facilitate oversight of climate actions by the Board of Directors and top management during their quarterly meetings.
- Drive and implement initiatives through SCG Climate Change & Energy Committee, during their quarterly meetings.



Sustainable Products and Services

- Use innovation and digital technology to optimize operational efficiency, product development and cost reduction.
- Adopt circular economy principles to optimize resource utilization and reduce waste and the consumption of energy and water.
- Review capital expenditures to accelerate transformation.
- Apply eco-design thinking from the design process to production, packaging, safe usage, and waste minimization, and reuse.

Material issues

#### Management

# Nature Positive



Circular Economy

- Reduce waste at source through product design, material selection, and production efficiency optimization.
- Oversee SCG's external waste management and chemical management to ensure compliance with regulations.

  Manage waste efficiently through eco-friendly processes in adherence to international cooperation frameworks.
- Foster five success factors for a circular economy: awareness building, cooperation building, requirement formulation, innovation, and the development of management and assessment systems.



Water Management

- The Water Management Committee defines quidelines and strategies for integrated water management.
- Assess water-related risks and impacts on a quarterly basis and report to the Environment Excellence Committee,
   SCG Sustainable Development Committee and SCG Risk Management Committee.
- Conduct water scenarios analysis to forecast water volumes in external sources, in conjunction with management assessment, business continuity management (BCM), and business contingency plans (BCP) for water.
- Monitor the water situation and trends and undertake water resources management efforts in collaboration with the public sector, industries and relevant stakeholders.



Air Quality Management

- The Taskforce on Air Quality Management, comprising representatives from Business Units, jointly establishes strategies, targets, and action plans.
- All business units adopt continuous emission monitoring systems (CEMs) instead of spot checks and arrange for verification by external parties.
- Train air quality supervisors for air quality management according to the regulations of the Department of Industrial Works.
- Organize plant visits for community members to foster good ties and reassure the community of the factory management.



Biodiversity and Ecosystem

- The Quarry Rehabilitation and Biodiversity Working Group provides oversight to ensure compliance with international standards on biodiversity management.
- Foster "Net Positive Impact" in all relevant processes.
- Establish a quarry rehabilitation fund for research into rehabilitation, handover of mining zones after closure, and other social activities.
- Communicate with the community and external entities to effectively communicate SCG's initiatives in ecosystem conservation and biodiversity preservation.

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**Material issues** 

Management

#### **Inclusive Society**



Health and Safety

- The Workplace Safety Committee and the Transportation Safety Committee establish policies, strategies, short-, medium-, and long-term action plans, targets, and indicators. They actively monitor the achievement of targets, oversee plan implementation, and analyze outcomes to continuously enhance effectiveness.
- · Report occupational health and safety performance to the top management and the Board of Directors on a quarterly basis.
- Establish mechanisms for regular self-auditing to encourage ownership and self-discipline.
- · Foster a collaborative management network, develop experts in each business unit, and enrich the knowledge and capabilities of employees and contractors in order to bring about the exchange of knowledge and technology for collaborative risk management.



**Customer Experience** Creation

- · Analyze and monitor customer experiences, ranging from customer's problems, needs, purchasing behaviors, and use of products, services, and solutions, and conduct satisfaction surveys on products, services, and solutions.
- Adopt digital technology to support services provided to business partners, suppliers and all customer groups.
- · Connect customer experience with online channels and service centers to ensure maximum convenience and customer satisfaction.
- Offer innovative products, services and solutions that meet customer needs sustainably.



**Supplier Management** for Sustainable Value

- · Conduct risk assessment and certification of every supplier annually on the basis of enterprise risk management frameworks and operate in accordance with the "SCG Sustainable Procurement Framework," which addresses ESG aspects, alongside spending analysis.
- Segmentation of suppliers into four groups: tier 1 suppliers, critical suppliers, high potential sustainability (ESG) risk suppliers and critical non-tier 1 suppliers.
- · Formulate plans to continually and effectively enhance suppliers' capacity in sustainable business addressing ESG issues, such as through Contractor Safety Management and SCG Transportation Safety: Sustainability Program.
- · Foster business collaboration in accordance with ESG practices by regularly communicating with supplier through activities, such as seminars and workshops.
- Establish a committee to advance knowledge and competency of staff in the procurement, supply and logistics, as well as organize sharing of knowledge and practices with public and private sectors procurement bodies

# **Material issues Human Rights Employee Care** and Development and Social Development

Management

- Announce and review SCG Human Rights Policy and SCG Diversity and Inclusion Policy in line with United Nations Global Compact (UNGC), the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work, Organization for Economic Co-operation and Development (OECD), and other international standards, as well as drive the implementation of such policies through SCG Sustainable Development Committee.
- Establish a unified organization-wide risk management framework and carry out human rights due diligence process in all facets in a proactive manner to prevent human rights violation.
- · Establish metrics and targets to monitor human rights performance.
- Put in place mechanisms for handling complaints and establish remediation measures through stakeholder engagement in case of human right violation.
- Communicate and organize training to develop awareness, knowledge, and understanding for employees at all levels.

- Appoint BU Committees, tasked with providing support and ensuring each employee undergoes suitable knowledge and competency development according to their roles and responsibilities.
- Develop flagship programs and policy-based programs, such as the ESG Leadership Program and professional development programs, and formulate individual development plans for key talents.



- The CSR Committee for Sustainable Development, consisting of members of the Board of Directors and SCG top executives, is responsible for formulating policies and guidance on sustainability-oriented social development
- SCG Foundation carries out a key mission focusing on maximizing human capability and equipping them with knowledge and integrity.
- The Community Relations Unit carries out activities that enhance the potential of neighboring communities of SCG's operational sites to attain better life quality and sustainable self-reliance.

# **SCG's Commitment** to Sustainable **Development Goals**

In an era where the world is facing severe environmental and social challenges, SCG has adopted the concept of Regenerative Transformation as a core driver of its business operations not only to elevate industries' adaptability and competitive capabilities but also to help restore natural resources and build an inclusive society in line with the Inclusive Green Growth approach.

This commitment plays a pivotal role in advancing the United Nations' Sustainable Development Goals (SDGs). As a member of the Global Compact Network Thailand (GCNT), SCG has elevated its development initiatives both domestically and internationally.

Using the Area-based Approach, SCG has established a sandbox for testing and developing solutions tailored to local contexts through hands-on implementation and continuous learning, both within the organization and through collaboration with various sectors, with the ultimate goal of creating sustainable change.



Goal 6: Clean Water and Sanitation - Improve water usage efficiency, reduce external water consumption, and implement sustainable water management.

Goal 7: Affordable and Clean Energy – Increase the proportion of renewable energy use, improve energy efficiency, and develop infrastructure and technology to ensure access to affordable, reliable, sustainable energy for all

Goal 8: Decent Work and Economic Growth - Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all by advancing technology and innovation.

Goal 9: Industry, Innovation, and Infrastructure – Build resilient infrastructure, promote inclusive industrialization, and foster innovation.

**Goal 12: Responsible Consumption and Production – Reduce** waste through reuse and recycling via products and innovations to create sustainable production and consumption models.

Goal 13: Climate Action – Integrate climate change measures into national policies and raise awareness about climate change.

Goal 14: Life Below Water - Conserve and sustainably use the oceans, seas, and marine resources through the management, conservation, and restoration of marine and coastal ecosystems.

Goal 15: Life on Land – Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, and halt biodiversity loss.

Goal 17: Partnerships for the Goals - Enhance multi-stakeholder partnerships across economic, social, and environmental dimensions without leaving anyone behind, and support cooperation between public, private, and civil society sectors through the PPP model.

**Governance for Sustainable Growth** Strategy & Risk Management Road to Inclusive Green Growth

### **Net Zero**

						Outcome	
Our Action	Target	SDG	Strategy	Program	Performance 2567	Business Impact	Externality Impact
Climate Resilience	Net-zero GHG emissions by 2050		<ol> <li>Increase the use of biomass fuels and clean energy sources to replace fossil fuels.</li> <li>Improve or modify processes and equipment for energy efficiency optimization.</li> <li>Research and develop technologies to achieve net-zero GHG emissions by 2050.</li> <li>Develop products, services, and solutions that reduce GHG emissions throughout the value chain</li> <li>Apply economic tools to promote GHG emissions reduction.</li> <li>Plant and restore terrestrial forests, mangrove forests, and seagrass to serve as carbon sinks and enhance biodiversity.</li> <li>Organize activities to foster energy conservation and climate change awareness for employees, suppliers, and stakeholders across the value chain.</li> </ol>	<ul> <li>Development of innovations to increase the use of alternative fuels, such RDFs and biomass, in place of fossil fuels</li> <li>Development of low carbon products and industries:         <ul> <li>SCG Cement and Green Solutions has developed low carbon cement production, reducing coal imports and GHG emissions.</li> <li>Development of advanced technology and Ultra-High Performance Concrete (UHPC) in collaboration with government agencies and private organizations, reducing natural material consumption and GHG emissions from construction materials and processes.</li> </ul> </li> </ul>	25.48 million tCO <sub>2</sub> e GHG emissions		
	25% reduction in Scope 1 and 2 GHG emissions by 2030 compared to 2020 baseline	🐷 🕍 😸 🐱 🐷			25.59%		
	25% reduction in Scope 3 GHG emissions from fossil fuels sold to external customers by 2031 compared to 2021 baseline				20.66%		
	13% reduction in energy consumption by 2025 compared to BAU baseline in 2007			<ul> <li>Smart grid innovation: Implementation of an intelligent electrical grid for efficient and reliable clean energy management</li> <li>Collaboration with government agencies to drive grid modernization and develop innovative energy storage systems (heat batteries), such as Rondo for industrial applications, to replace fossil fuel consumption</li> </ul>	7.91%		
	66.7% of total revenue from sales of Green Choice- labelled products, services, and solutions by 2030		<ol> <li>Develop products, services, and solutions that meet consumer needs, enhance well-being, and demonstrate environmental responsibility (climate resilience &amp; circularity).</li> <li>Develop business processes throughout the value chain in accordance with international standards.</li> <li>Utilize innovation in product, service, and solution development to create new business opportunities.</li> </ol>	Development of 3 sub-categories of the Green Choice label: energy-saving and global warming mitigation, natural resource conservation and extended product life, and hygiene promotion	54%	(§*)	
	33.3% of total revenue from sales of Green Choice-labelled products, services, and solutions that provide direct customer value by 2030	<b>1</b>			13%		
	Green Choice-labeled products, services, and solutions	mí			309 items		























Governance for Sustainable Growth Strategy & Risk Management Road to Inclusive Green Growth

### **Nature Positive**

						Outcome	
Our Action	Target	SDG	Strategy	Program	Performance 2567	Business Impact	Externality Impact
Circular Economy	8 million tons of recycled and renewable materials by 2025		<ol> <li>Reduce waste at the source and eliminate industrial waste landfilling.</li> <li>Maximize the management of industrial waste within SCG, including both hazardous and non-hazardous waste, using the 3Rs principles and circular economy concepts</li> <li>Develop products and services in line with circular economy principles to maintain and maximum material value.</li> <li>Research and develop (R&amp;D) innovations for waste recycling and value addition.</li> <li>Adjust business models according to circular economy principles.</li> </ol>	<ul> <li>SCG Cement and Green Solutions promotes the use of CPAC BIM solutions for building design to enhance design accuracy and quality control throughout the construction process, thereby minimizing resource waste.</li> <li>COTTO has researched and developed a ceramic glazing process using eggshells instead of natural calcium carbonate for sanitary ware and washbasins, leading to the world's first bio-ceramic sanitary ware prototype.</li> <li>SCGC (SCG Chemicals) has developed green plastic polymers, driven circular production methods, and worked with partners within the industry to increase the use of recycled materials and develop innovations that advance sustainability.</li> <li>SCGP promotes sustainable community waste management models through learning and by scaling up from model communities under "SCGP Community LIKE (Zero) Waste" in Ratchaburi, Kanchanaburi, Prachinburi, and Khon Kaen.</li> </ul>	8.93 million tons	(§*) (§*)	
	100% of packaging by SCGP is reusable, recyclable, or compostable by 2025.	iii			99.7%		
	500,000 tons of used plastic into production process annually by 2030	in 👼 🐷 🛞			185,200 tons		
	Zero waste to landfill for hazardous and non-hazardous waste from production in Thailand annually	8			0		
	Zero waste to landfill for non-hazardous waste from production processes abroad by 2030	8			6,968 tons		





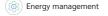


















Road to Inclusive Green Growth Introduction **Governance for Sustainable Growth** Strategy & Risk Management Our Business

					Outcome			
Our Action	Target	SDG	Strategy	Program	Performance 2567	Business Impact	Externality Impact	
Water Management	5% reduction in external water consumption by 2030 compared to BAU baseline in 2022		<ol> <li>Reduce water risks through integrated water management.</li> <li>Reduce water consumption by improving water efficiency in production processes and products.</li> <li>Treat wastewater to meet quality standards, monitor discharge quantity and quality, report incidents, investigate causes, implement solutions, and reduce wastewater discharge.</li> <li>Recycle treated wastewater.</li> <li>Restore water-related ecosystems and provide water access for communities and the agricultural sector.</li> <li>Develop the capabilities of water management personnel to ensure integrated water management and maximum efficiency.</li> </ol>	<ul> <li>"Mae Than Model" Project: A mine has been transformed into a reservoir, installed with a floating solar farm and solar-powered pumping systems to supply water to reservoirs in nearby communities for agriculture, thus increasing their productivity and generating community income.</li> <li>SCGC (SCG Chemicals) has reduced water usage by 123,000 cubic meters in total through various projects. Examples are as follows:</li> <li>Thai Polyethylene Company Limited</li> <li>Part of return condensate is reused in the pellet cutting process, reducing water consumption by 20,088 cubic meters.</li> <li>Fill packs in the cooling tower system have been replaced to reduce water turbidity, decreasing blowdown water by 11,849 cubic meters.</li> <li>Map Ta Phut Olefins Co., Ltd.</li> <li>Steam usage in the header steam flare system has been reduced by adjusting pressure setpoints, saving 34,686 cubic meters of water.</li> <li>The turbine speed of the cooling water pumps was decreased, reducing high-pressure steam usage by 19,496 cubic meters.</li> <li>SCGP has reduced water usage in its production.</li> <li>Heat exchangers were designed and installed to recycle wastewater from pulp production using waste heat to increase wastewater temperature, creating hot water for pulp washing. The initiative reduces water usage by 0.22 million cubic meters per year.</li> <li>Pumps have been installed to recirculate leftover water from the pulp transportation process between conveying pipes to paper mills, reducing water usage by 0.55 million cubic meters per year.</li> <li>The SaveAll and PETAX systems have been introduced to filter and reuse water in the production process, helping to reduce water consumption.</li> </ul>	5.3% increase			
Air Quality Manage- ment	4% reduction in external dust emissions by 2030 compared to BAU baseline in 2020	8	<ol> <li>Set air emission targets in line with international industry benchmarks and ensure compliance with legal requirements.</li> <li>Implement the best available technologies for air pollution management, including both at-source control and emissions, with continuous air quality monitoring.</li> <li>Foster regular engagement with communities and stakeholders and regularly listen to air pollution concerns.</li> </ol>	<ul> <li>SCG Cement and Green Solutions installed continuous emission monitoring systems (CEMs) to detect dust, sulfur dioxide (SO2), and nitrogen oxide (NOx).</li> <li>SCGP (Packaging Business) installed CEMs across 100% of its packaging paper manufacturing plants in Thailand.</li> </ul>	2.15% increase			
Biodiversity and Ecosystem	Striving to be Nature Positive by conserving and restoring nature to increase green spaces and enhance biodiversity, while fostering engagement with communities and stakeholders.		<ol> <li>Collaborate with external experts to manage risks across the value chain, establish preventive measures, restore, and conserve biodiversity sustainably, using globally recognized indicators.</li> <li>Engage with communities and stakeholders to enhance knowledge and understanding of ecosystem and biodiversity conservation.</li> <li>Monitor, assess, and evaluate conserved and restored areas to ensure continuous improvement.</li> <li>Serve as a model for biodiversity conservation to expand best practices to other areas.</li> </ol>	<ul> <li>From the Mountains to the Mighty River Project reforested watersheds, constructed check dams, and restored terrestrial forests, mangrove forests, and seagrass.</li> <li>Supporting networks of community forests and permanent green spaces in Saraburi managed by communities to enhance biodiversity</li> <li>Love the Sea Project utilized SCG 3D printing technology to create substrate bases for coral larvae (coral homes) and restore coral reefs.</li> </ul>	Conserve, Restore, and increase Green Spaces, totaling 318,863 rai, including: Terrestrial forests 317,105 rai Mangrove forests 1,688 rai Seagrass beds 70 rai Installed coral reef habitats 1,115 units Constructed water diversion dams 127,618 units			
	Develop a 100% mine rehabilitation plan.	© <u>*</u>			100%			
	Develop a 100% Biodiversity Management Plan (for limestone mines in Thailand only).	<b>○</b> <u>•</u> ⊗			100% (For limestone mines in Thailand only)			
	More than 60% similarity index between restored mining areas and natural forest buffer zones (For limestone mines in Thailand only)	<b>○ ! ⊗</b>			68% at the limestone quarry in Thung Song			
	At least 10% FSC™-certified biodiversity conservation forest areas of total plantation area	<b>○ ! ®</b>			10.60%	_		





Performance

**Governance for Sustainable Growth** Strategy & Risk Management Road to Inclusive Green Growth

## **Inclusive Society**

Our Action	Target	SDG	Strategy	Program	Performance 2567	Business Impact	Externality Impact		
Health and Safety	Zero work-related fatalities among employees and contractors	i	<ol> <li>SCG is committed to enhancing its operations in alignment with the SCG Safety Framework and Occupational Health and Safety (OHS) standards, including life-saving rules. This commitment applies to all aspects of work, product transportation, and personnel travel across the organization.</li> <li>Continuously promoting a safety culture by raising awareness and encouraging employees at all levels to actively participate in workplace safety. This includes on-site inspections to identify and correct unsafe behaviors.</li> <li>Implementing a safety performance assessment system through the Safety Performance Management System (PMS) to ensure that safety policies are effectively executed. Joint safety targets are set for performance evaluation.</li> <li>Leveraging digital technology to enhance operational efficiency and elevate occupational health and safety management. This ensures alignment with business growth and transformations while reducing risks of accidents, injuries, illnesses, and work-related diseases.</li> <li>Rapid and comprehensive communication of lessons learned from incidents to prevent recurrence. Safety measures are continuously refined to align with emerging risks and changes in each business sector.</li> <li>Systematic fire risk management through site and process assessments in high-risk areas. This includes evaluating preventive measures and emergency response plans while enhancing emergency preparedness through worst-case scenario drills in collaboration with external agencies.</li> </ol>	<ul> <li>All companies, both domestic and international, conduct self-declaration using the Safety Performance Assessment Program (SPAP) and undergo annual certification reviews by representatives at the business unit and SCG levels. Additionally, compliance audits are performed by external parties at least every two years to verify adherence to legal requirements.</li> <li>Software has been introduced to enhance the health management system, support assessment and planning, and monitor measures for reducing risks of health problems and occupational diseases.</li> <li>Transportation safety management technologies have been adopted, such as risky driving behavior detection technology (front collision warnings, tailgating alerts, and lane changes without turn signals) and driver performance monitoring technology (detecting yawning, eyes off the road, and phone usage).</li> <li>A safety, health, and environment (SHE) dashboard has been developed to track performance according to defined safety indicators, fostering organizational safety in a systematic and maximally efficient manner.</li> </ul>	Employee/contractor 2/7 cases				
	Zero lost time injury frequency rate (LTIFR) for employees and contractors in Thailand and overseas	á			Employee/contractor 0.186/0.205 cases/ 1,000,000 hours worked				
	Zero occupational illness and disease rate for employees	á			0.132 cases/1,000,000 hours worked				
	All SCG companies certified to Standard level or higher under the Safety Performance Assessment Program (SPAP)	á			86%				



















Introduction Our Business **Governance for Sustainable Growth** Strategy & Risk Management Road to Inclusive Green Growth Performance

Our Action	Target	SDG	Strategy	Program	Performance 2567	Business Impact	Externality Impact
Customer Experience Creation	100% overall customer satisfaction rate for SCG Contact Center	ă	<ol> <li>Deliver positive experiences to B2B2C business customers and end consumers using innovations.</li> <li>Offer best-better-good options aligned with B2C consumer lifestyles.</li> </ol>	<ul> <li>SCG Smart Living and SCG Distribution &amp; Retail develops high-value-added (HVA) products and new product development (NPD) according to customer requirements to support sustainable business operations. The Company is also expanding its solar energy business to commercial customers, industrial operators, and hospitals, which show potential for continuous growth.</li> <li>SCG Chemicals focuses on HVA products to mitigate the effects of intense competition, achieving sales volume of over 1.4 million tons in 2024 (68% of total sales). Notable products included polyethylene resin made with SMX™ technology for chemical-resistant bottles, polypropylene resin for mono-material retort packaging films that improve recycling efficiency, and recycled PVC tiles made from dialysis solution bags, developed in collaboration with PRINC and Baxter Healthcare.</li> <li>SCGP encourages decarbonization efforts among suppliers and customers throughout the value chain by obtaining Carbon Footprint of Products (CFP) certification for 161 items as well as 16 paper packaging printing and forming processes. This has helped customers comply with government environmental measures in many countries, created opportunities for market expansion, and elevated the Thai packaging industry to international environmental standards.</li> </ul>	100%	(S <sup>k</sup> )	
	94% average overall customer satisfaction rate across all businesses	ส์			93%		
Supplier Management Towards Sustainable Value	100% of suppliers with procurement value over one million baht pass environmental, social, and governance (ESG) risk assessment.	ส์	<ul> <li>Emphasis is placed on elevating operation management practices among contractors in line with ESG principles with fairness, transparency; value creation for stakeholders throughout the sustainable value chain; and risk management to increase business opportunities. To achieve this, the following are implemented:</li> <li>Select and assess contractors with potential for sustainable business operations.</li> <li>Assess risks and categorize contractors to determine strategies and develop contractor improvement plans according to risk levels.</li> <li>Develop and enhance contractor capabilities toward sustainability, encompassing environmental, social, and governance (ESG) aspects.</li> <li>Build awareness and capabilities among procurement staff for efficient procurement and purchasing.</li> </ul>	Assessment of environmental, social, and governance (ESG) risks among suppliers with procurement value exceeding one million baht.			
Human Rights	Zero human rights violations  27% female representation in management	i i i	<ol> <li>Integrate human rights initiatives as well as diversity and inclusion management into business operations throughout the value chain, both domestically and internationally.</li> <li>Foster value as well as develop and expand participation initiatives for all stakeholder groups throughout the value chain and society at large, all guided by respect or human rights.</li> <li>Employees: Respect fundamental rights and enhance diversity and inclusion management in the organization.</li> <li>Contractors: Focus on reducing violation risks and improving quality of life in work environments, encompassing labor, health, safety, and well-being.</li> <li>Suppliers: Enhance management procedures for human rights risks that may impact the value chain.</li> <li>Communities: Foster engagement on the basis of respect for fundamental rights and improve quality of life.</li> <li>Customers: Deliver quality, safe products, services, and solutions as basic rights and promote better quality of life.</li> <li>Other stakeholders: Continuously manage human rights risks to prevent potential impacts from violations or involvement in violations from activities across SCG's value chain. 3. Serve as a role model as well as share and exchange human rights experiences with other organizations.</li> </ol>	<ul> <li>Conducting human right due diligence in collaboration with relevant stakeholders to manage risks and prevent human rights violation.</li> <li>Fostering a culture of diversity and inclusion and promoting a happy working environment through BE YOU Club, Diversity Inspiration Talks, and Happy Space.</li> <li>Non-discrimination against migrant workers in terms of recruitment, capability development, and employee care and treatment, such as compensation and health checkups.</li> <li>Enhancing skills for migrant workers to the same standards as non-migrant counterparts and promoting career growth.</li> <li>Conducting human rights assessment on five suppliers and contractors to enhance their operations and jointly develop improvement plans.</li> <li>Organizing study visits, both internal and external, to exchange knowledge, experience, and best practices.</li> </ul>	27.9%		
	27% female representation in management positions by 2025	űÍ			21.9%		

























**Governance for Sustainable Growth** Strategy & Risk Management Road to Inclusive Green Growth

Our Action	Target	SDG	Strategy	Program	Performance 2567	Business Impact	Externality Impact
Employee Care and Development	4.0 from 5.0 employee engagement score	a manua a fi fi	<ol> <li>Foster organizational value to attract highly-skilled and capable individuals.</li> <li>Provide comprehensive and fair employee care to build employee engagement.</li> <li>Develop personnel capabilities in line with business competition, create a happy work life, and promote effective teamwork.</li> <li>Create a culture of learning by providing opportunities for self-development based on individual interests and learning styles, including both hard skill and soft skill courses, accessible through various learning channels.</li> <li>Promote learning through a quality learning management system (LMS) that responds to user needs.</li> </ol>	<ul> <li>Instituting a hybrid workplace model and designating flexible working hours that suit the nature of each position.</li> <li>Leave benefits have been updated to be more inclusive for all employee groups, including gender affirmation surgery leave, marriage leave for all genders, religious observance leave, caregiving leave, and funeral management leave.</li> <li>Well-being promotion initiatives are organized, focusing on four dimensions: physical, mental, financial, and social.</li> <li>SCG trains personnel and develops their business acumen, leadership, and essential future skills throughout their career through SCG Flagship Programs, with ESG knowledge and case studies integrated. SCG has also developed programs focusing specifically on ESG for personnel at all levels in the hope of developing new leaders in accordance with the Inclusive Green Growth approach, such as the ESG Leadership Program and the Net Zero Accelerator Program (NZP).</li> </ul>	4		
	100% of senior employee participation in the Net Zero Accelerator Program (NZP) by 2027.	a			22.40%		
Community and Social Development	Reduction of inequality in career opportunities, education, and well-being for 50,000 people (cumulatively from 2021-2030)	e marine.	<ol> <li>Leverage both internal and external expertise to enhance capabilities for self-reliance in communities and support society at large.</li> <li>Foster employee and stakeholder engagement across all sectors to create sustainable social value.</li> <li>Develop innovations to address community needs and address social issues.</li> <li>Develop sustainable social development models and expand them to other communities in the network.</li> </ol>	<ul> <li>The Go Together Project was carried out in collaboration with the Federation of Thai Industries to enhance SME capabilities regarding global warming, net-zero emission guidelines, clean energy utilization, industrial technology development, waste-to-value creation, and industrial waste management.</li> <li>The "Power of Community" Project developed community capabilities through knowledge enrichment and job creation, with emphasis on self-reliance.</li> <li>The Learn to Earn Project by SCG Foundation provided scholarships to youth to promote employment and self-reliance.</li> <li>The Telemedicine Project reduced inequality in access to healthcare services.</li> </ul>	57,286 persons		





















Our Business

Net Zero 2050

# Developing **Innovations**

# for a Sustainable **Low-Carbon Society**

At the 29th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP29), one of Thailand's key presentations focused on driving the country's Nationally Determined Contributions (NDCs)



# **Energy Transition from Fossil Fuels to Clean Energy**

SCG has established both short-term and long-term greenhouse gas emission reduction targets in accordance with the Paris Agreement to limit global temperature rise to no more than 2 degrees Celsius, with efforts to keep it below 1.5 degrees Celsius by 2050, compared to pre-industrial levels. In 2021, SCG joined the Science Based Target initiative (SBTi), which certifies organizations' targets according to scientific calculation standards. In 2023, SCG received SBTi certification for its near-term targets to reduce GHG Scope 1 and 2 emissions by 25% by 2030 compared to the base year of 2020 and decrease GHG Scope 3 emissions from fossil fuel sales to external customers by at least 25% by 2031, compared to the base year of 2021.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

While the SBTi certification marks a significant milestone in SCG's journey toward building

a green society, numerous challenges remain as success requires cooperation across all sectors, including government agencies, private organizations, and civil society, both at national and global levels, such as the Federation of Thai Industries, the World Business Council for Sustainable Development (WBCSD), the UN Global Compact Network Thailand (UNGCNT), and the Thailand Business Council for Sustainable Development (TBCSD), with the goal of joining forces to accelerate Thailand's transition to a low-carbon society while leaving no one behind.

**Performance** indicators

25.48 million tons

**GHG** emissions in 2024 Target: Net zero GHG emissions by 2050

**25.59**%

GHG Scope 1 and 2 emissions reduction in 2024 Target: Reduce GHG Scope 1 and 2 emissions by 25% by 2030 compared to the base year 2020

20.66%

**GHG Scope 3 emissions reduction from fossil** fuel sales to external customers Target: Reduce GHG Scope 3 emissions by 25% by 2031 compared to the base year 2021

energy consumption reduction compared to **BAU** baseline in 2007

Recognizing that the energy sector accounts for 70% of national greenhouse gas emissions compared to other sectors, SCG is committed to leading the transition from fossil fuels to renewable energy (RE) and alternative fuels (AF), completely phasing out coal (Zero Coal) and fossil fuel-generated electricity (Zero Power) from its production processes. In addition, SCG strives to raise awareness among industrial associations, government bodies, and private sectors, with the ultimate goal of elevating Thailand's green industry to global recognition.

A sustainable transition to a low-carbon society requires balancing net-zero emissions goals with economic development. In 2024, SCG strengthened this balance through strategic initiatives and awareness campaigns on various platforms at both national and international levels, including the ESG Symposium 2024. Furthermore, SCG has demonstrated its commitment to collaborating with government agencies and engaging with key policy developments, such as the European Union's Carbon Border Adjustment Mechanism (CBAM) and Thailand's Climate Change Act, which aims to achieve net-zero emissions across Thailand by 2065.

### **Expanding Solar Power Usage**

Net Zero 2050

SCG has actively been installing solar power systems across its plants and has developed SCG Cleanergy in tandem to provide comprehensive clean energy solutions to the industrial sector. As part of its commitment to driving a more extensive transition from fossil fuels to clean energy, SCG has also introduced solar power-based services through its Smart Grid system, collaborated with the government to advance grid modernization, and developed innovative heat batteries for energy storage to enhance thermal energy efficiency.

• Smart Gird: A major limitation for many plants looking to adopt solar power is installation space. Some facilities lack adequate space for solar panels or can only install less than their energy needs, while others have excess space and surplus solar power production capacity. To address this issue, SCG Cleanergy has developed a Smart Grid management system, operated via the SCG Cleanergy Platform, which facilitates power trading between operators. The system transmits electricity through





**292** megawatts:

Total installed solar power capacity within SCG

**485** megawatts:

Total renewable electricity traded through SCG Cleanergy's Smart Grid system to government and private sectors in 2024

transmission lines that are connected to factories and the Provincial Electricity Authority's grid through the SCG Cleanergy Platform, which records electricity usage and carbon credit data for the purpose of carbon footprint offsetting. The solution is particularly effective in managing multiple factories in industrial estate areas as it optimizes efficient solar power usage and thus promotes clean energy usage.

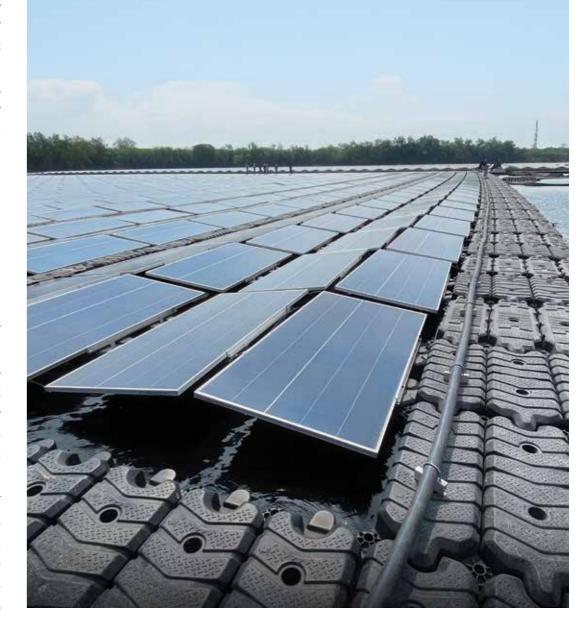
Solar solutions can be installed as a solar rooftop on factory roof space, a solar farm in a vacant area on the plant property, or a floating solar on unused water surfaces.

• Energy Storage: Another limitation facing solar power adoption is storing excess energy produced during daytime for use at other times or converting it into other forms of energy. To address this, SCG Cleanergy has invested in heat battery technology developed by a US-based startup. This technology converts electrical power from wind and solar sources into stored thermal energy, which can later be converted to power turbines for electricity generation or produce high-temperature steam for certain industries. This technology can help reduce fossil fuel use and GHG emissions in the industrial sector. SCG is currently studying its implementation in the cement industry at its Tha Luang plant, which would be the world's first such application. In 2024, SCG began manufacturing heat battery components for export to U.S. industrial customers.

#### **Advancing Grid Modernization Through Collaboration**

As Thailand's draft Power Development Plan (PDP) targets 1,000 megawatts of power generation through Grid Modernization and the Energy Regulatory Commission has announced the launch of the ERC Sandbox project to test technology-powered energy services, SCG has joined the initiative to explore private-sector electricity trading using government transmission lines as a model In 2023, SCG Cleanergy secured approval for four projects totaling 6.308 megawatts as well as established PPP cooperation agreements for equipment installation, power distribution testing, and electricity trading through its platform, with successful implementation in 2024.

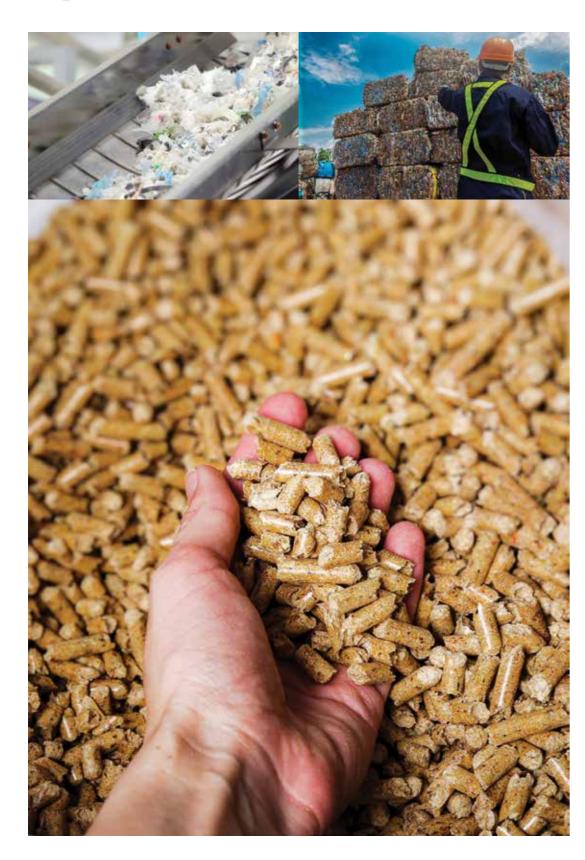
SCG has also planned to participate in a 2,000-megawatt renewable energy trading pilot project through a direct power purchase agreement (direct PPA) using third party access (TPA) services, to supply electrical power to global data center industry leaders in 2025.



Once clean energy is successfully expanded from a smart grid to provincial and regional modernized grid networks, Thailand will have an opportunity to transition to a low-carbon society in a sustainable way. While this development requires coordinated government

policy and legal leadership, SCG is prepared to contribute innovations and engage with all sectors in order to drive Thailand toward such a future.





#### **Increasing Alternative Fuel Usage**

SCG has developed various innovations to increase the use of different alternative fuels in its plants in place of coal. This includes biomass fuels, which leverage Thailand's agricultural abundance and substantial agricultural waste materials, and industrial and community waste, which can be converted into refuse derived fuels (RDFs). SCG also promotes energy crop cultivation and purchases energy crops from farmers and communities for use as alternative fuels, such as Napier grass and bamboo, which helps generate income for communities and fosters participation in the transition to a low-carbon society.

- RDF: RDF is an alternative fuel derived from industrial and community waste materials. SCG collects these materials from areas surrounding its cement plants in Saraburi, Lopburi, Kanchanaburi, Ayutthaya, Lampang, Chiang Mai, Chiang Rai, Nakhon Si Thammarat, and Nakhon Ratchasima, and utilizes them as fuels to generate thermal energy in its cement plants. In 2024, SCG upgraded its machinery capabilities to accommodate various types of RDFs with different qualities, improved its plastic waste incineration for fuel gas production to reduce plastic processing costs, and introduced an external combustion chamber technology to enhance alternative fuel efficiency.
- Biomass SCG promotes energy crop cultivation and sources energy crops from farmers through contract farming systems to increase its biomass fuel reserves for future needs. In addition, SCG has developed





**Governance for Sustainable Growth** 

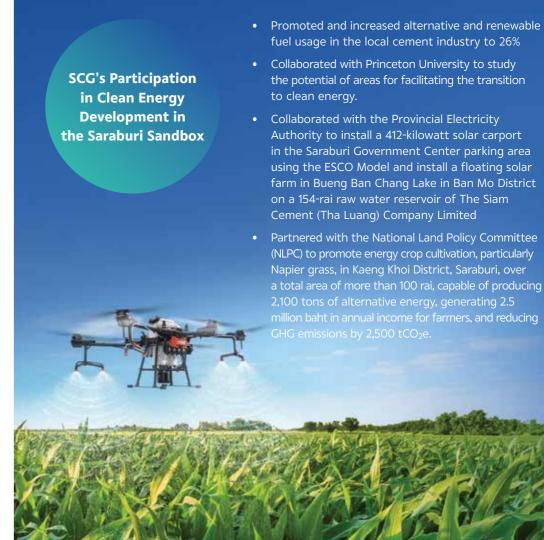
**28.59** %

Proportion of alternative fuels used in 2024 3.21 MtCO<sub>2</sub>e of avoided GHG emissions per year from the use of 30.17 million tons of alternative fuels in place of fossil fuels in 2024

biomass fuel technology to utilize and convert difficult-to-use agricultural materials, such as tree stumps, corn, cassava rhizomes, and Napier grass, which has high moisture content, into higher quality biomass fuels by processing them into energy pellets, suitable for industries requiring consistent fuel quality, and biocoal.

As part of the Saraburi Sandbox project, SCG has initiated a pilot program to promote the cultivation of energy crops, such as bamboo and Napier grass, in Saraburi as part of the Saraburi Sandbox project to provide farmers with stable market access and predictable pricing for these crops. Building on this success, SCG has also extended Napier grass cultivation to Mae Chaem District in Chiang Mai and Mueang Lampang District in Lampang,

offering farmers an alternative to traditional corn farming while also mitigating PM 2.5 pollution from agricultural waste burning. In addition, SCG has collaborated with the Forest Industry Organization (FIO) to establish experimental bamboo plantations in Saraburi and Lampang.



# Leader in **Low-Carbon Cement:** Relentlessly **Advancing Innovation**

The integration of low-carbon products into SCG's portfolio is a key strategy in achieving its net-zero greenhouse gas emissions target by 2050. This aligns with collaborations across sectors to promote

#### **Low-Carbon Cement: Meeting Environmental and Industrial** Needs

SCG Cement and Green Solutions has consistently pioneered innovative lowcarbon cement solutions. The firstgeneration product achieved a 10% reduction in greenhouse gas emissions compared to ordinary Portland cement (OPC). Building on this success, the secondgeneration cement, incorporating highquality supplementary cementitious materials (SCMs), reduced emissions by 15-20% compared to OPC. Currently, the third-generation product is under development, aiming for a 40-50%

reduction compared to OPC. Despite global competition, SCG continues to refine manufacturing technologies and explore alternative raw materials, fuels, and energy sources for efficient decarbonization.

SCG's low-carbon concrete has been successfully adopted by major property developers:

- AP Thailand: Utilized in over 56 horizontal residential projects.
- Property Perfect: Implemented in precast factories nationwide.
- Supalai: Used in over 18 condominium projects.

These collaborations demonstrate a shift towards a more environmentally conscious construction industry prioritizing decarbonization and sustainable

#### **Driving Low-Carbon Products** to International Standards

SCG plays a key role as a leader in building materials industry, committed to developing low-carbon products to support global sustainability goals.. As the first cement manufacturer to receive the Environmental Product Declaration (EPD) label in the United States, SCG has exported over 1 million tons of low-carbon cement. In 2024, SCG planned to expand EPD-certified products in the domestic market to 53, including:

- 8 cement products
- 10 mortar products
- 27 concrete products
- 8 export products

Furthermore, SCG is pursuing EPD certification in North America for two additional products from Vietnam, while expanding into ASEAN and global markets. Reinforcing its position as the first company to receive EPD certification across all product categories, reflecting transparency and a strong commitment to comprehensive environmental impact reporting.



SCG's low-carbon cement production in 2024 helped reduce GHG emissions.

#### **Elevating Low-Carbon Innovation**

SCG's decarbonization strategy extends beyond low-carbon cement. Green loans are utilized to support CO2 reduction initiatives, reinforcing SCG's brand leadership in environmentally friendly products.

Expanding into the Middle East with 3D **Printing Mortar:** SCG is the first to develop 3D printing mortar using low-carbon cement, backed by over a decade of patented research. This innovation reduces greenhouse gas emissions by more than 15%. SCG has shifted its business strategy from providing 3D printing construction services to selling 3D printing mortar with technical support, enhancing market opportunities in the Middle East. The first

batch has been successfully exported to Saudi Arabia, with plans to expand further into South Asia, the Middle East, and Africa (SAMEA) to meet the growing demand in construction and industrial sectors. SCG also aims to extend its 3D printing product applications to both construction and furniture, addressing diverse global market needs.

**Driving a Circular Economy:** SCG actively incorporates industrial waste materials, such as fly ash from power plants, into cement mixtures. This strategy reduces natural resource consumption and green house gas emissions while maintaining product quality, promoting a sustainable economic model.





• Ultra-High Performance Concrete (UHPC): SCG collaborates with government and private organizations to advance UHPC technology for infrastructure applications, including bridge girders, bridge joints, warehouse and factory beams, and specialized pavements for heavy loads. UHPC offers superior strength and durability, making it ideal for load-bearing structures while enabling more efficient designs with reduced material usage. It also enhances construction speed and lowers life-cycle costs by minimizing maintenance needs, as its low permeability prevents steel corrosion. Additionally, UHPC contributes to sustainability by reducing carbon dioxide emissions by 20-60%.

SCG has successfully implemented UHPC in several projects, including bridges at SCG Headquarters in Bang Sue, the Yellow Bridge in Thung Song, Nakhon Si Thammarat, the RY.4060 road bridge in Khao Chamao and Kaeng Hang Maeo, Rayong-Chanthaburi, and the CCTC Workshop CPAC building in Bang Son. SCG continues to expand UHPC applications through ongoing collaborations with public and private sector partners.

#### Transitioning to a Low-Carbon Industry

In 2024, SCG, as a Thai Cement Manufacturers Association (TCMA) member, in collaboration with the Saraburi Provincial Industrial Council and provincial authorities, advanced the Saraburi Sandbox project, a low-carbon city model, by joining the World Economic Forum's (WEF) Transitioning Industrial Clusters Initiative, marking Thailand's first such industrial cluster, the third in ASEAN, and the twenty-first globally to do so. The initiative aims to transform Thai industry toward a low-carbon economy and society through a public-private-people partnership, which represents a significant challenge.

Furthermore, SCG has partnered with the Global Cement and Concrete Association (GCCA) to secure green funding from the Canadian government. Administered through the United Nations Industrial Development Organization (UNIDO), the green funding supports the Thai cement and concrete industry's transition toward its 2050 net-zero GHG emission target.



**Governance for Sustainable Growth** 

## **Advanced Technology Research for Net Zero**

Carbon Capture, Utilization, and Storage (CCUS) technology is central to SCG's 48% GHG emission reduction. Utilizing the Marginal Abatement Cost Curve (MACC), SCG evaluates project investments and assesses the readiness of green infrastructure, including carbon storage areas, transportation systems, and government support, including both legal frameworks and funding.

- **Hydrogen Production:** SCG researches cost-competitive hydrogen production and its integration with captured carbon dioxide to create high-value-added products.
- Oxyfuel Technology: SCG is researching oxyfuel technology to reduce GHG emissions in cement production by replacing fossil fuel combustion with pure oxygen. This process increases the combustion temperature, reduces exhaust gases, and simplifies carbon capture. It prepares factories for future integration with high-efficiency carbon capture solutions. Additionally, oxyfuel technology helps reduce other pollutants from air-based combustion, improving the efficiency of alternative fuels such as biomass and reducing reliance on fossil fuels.
- Biochar Carbon Removal: SCG has developed Biochar technology as part of its Green Circular Business initiative. This process transforms agricultural waste biomass into Biochar, which is used to

improve soil quality and in concrete applications for long-term carbon storage. In collaboration with Chiang Mai University, SCG has applied Biochar concrete in the construction of roads and pavements, covering an area of 4,900 square meters at Chiang Mai University. This project also serves as a model for addressing PM2.5 pollution in northern Thailand. Furthermore, SCG received funding from the Japan Carbon Frontier Organization (JCOAL) in 2024 to explore the conversion of agricultural waste into Biochar, which will be used as a coal substitute and a carbon storage medium in both soil and concrete. This initiative is a crucial step in promoting sustainability and advancing carbon-neutral solutions.







The 15<sup>th</sup> Conference of the Parties to the Convention on Biological Diversity (CBD COP15), held on December 7-19, 2022, in Montreal, Canada, adopted the Kunming-Montreal Global Biodiversity Framework, which established the concept of nature positive as a new global goal alongside the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) and the Sustainable Development Goals (SDGs).

Nature positive aims to halt and reverse nature loss by 2030 on a 2020 baseline, and achieve full recovery by 2050, measured through biodiversity, ecosystem integrity, and natural processes at all levels.

This initiative addresses current environmental challenges where biodiversity and ecosystem health continue to decline as the global demand for resources increases rapidly.

Just as net zero targets have spurred governments and private businesses worldwide to develop low-carbon economies and alternative energy sources, nature positive serves as a new goal where all sectors play a role in nature conservation and restoration as well as in the transformation of production and consumption patterns to improve eco-friendliness.

As its businesses, by nature, rely on and have a direct impact on natural resources, SCG is

committed to developing approaches to reduce environmental impacts, from management and risk assessment to long-term nature restoration planning aligned with nature positive goals. In 2024, SCG appointed the Nature Positive Committee to work with the SCG Sustainable Development Committee to develop resource management strategies, which involved studying resource dependencies and impacts on nature across the value chain as well as identifying ways to make positive impacts on nature and cultivate a nature positive lifestyle among employees from family to organizational levels.



Our Business

**SCG Cement** and Green Solutions: **Biodiversity Restoration** in Mining Sites

Guided by green mining principles, SCG Cement and Green Solutions prioritizes environmental protection and harmonious co-existence with local communities and thus minimizes potential environmental impacts by adopting semi-open cut mining, leaving buffer zones around mine perimeters to preserve natural mountain landscapes. In addition, the company has been working with external experts to study biodiversity in its mining areas and has developed restoration plans from the beginning through to the present.

A notable success in mining management is the Mae Than Mine, a lignite and ball clay mine in Lampang that operated from 1983 to 2019. The 490-rai, 200-meter-deep mine pit has since been transformed into a reservoir with a maximum capacity of 50 million cubic meters. In 2020, a floating solar farm and a solar-power pumping system were installed to pump water to nearby community reservoirs for agricultural use, thus increasing productivity and generating income for local communities. Known as the Mae Than Model, the project has expanded its water distribution area under a project named the Siriraj Model.



Strategy & Risk Management



SCG Cement and Green Solutions has been using Minesight processing software to optimize resource planning for maximum efficiency and is currently driving its transition towards Smart Green Mining through cutting-edge technology such as employing drones for surveying, production planning, and seed dispersal to restore biodiversity. All internal combustion limestone trucks at the Lampang quarry have been fully replaced with 12 EV trucks, while 4 EV trucks have been deployed at Thung Song in Nakhon Si Thammarat and 2 at Khao Wong in Saraburi.

Additionally, SCG is the first in Thailand to successfully implement 5G technology in the industrial sector by collaborating with AIS and Prince of Songkla University to develop a remote-controlled EV Unmanned Truck system. This initiative integrates Al-powered unmanned EV trucks into fleet management systems within mines, enhancing operational efficiency, reducing accident risks, and minimizing environmental impacts. Two trucks are already operational at Khao Wong limestone quarry in Saraburi, with plans to expand the deployment to other mines as part of ongoing smart green mining initiatives. To date, these limestone EV trucks have contributed 3,083 tons in avoided carbon dioxide emissions in total.





The biodiversity research, impact assessment, and nature restoration across all mining sites in every region are conducted in collaboration with experts from various universities, including the Faculty of Forestry, Kasetsart University; the Faculty of Science, Prince of Songkla University; and the Forest Restoration Research Unit (FORRU), Faculty of Science, Chiang Mai University.

The biodiversity research at each mine consists of three phases:

- 1. Conducting a biodiversity baseline study to survey and document all plant and animal species in the area
- 2. Conducting an In-depth plant species study to select and plant pioneer species suitable for ecosystem restoration that attract native

- animals and create a suitable environment for other plant species to thrive
- 3. Collecting data of naturally increasing biodiversity in the area resulting from bird and insect-mediated dispersal

With new challenges presented by nature positive goals, SCG Cement and Green Solutions is seeking to strengthen its commitment to improving biodiversity restoration plans for its mining sites to better address current environmental situations and exercise prudent in its management to ensure positive impacts on both the mining sites and surrounding communities in accordance with future targets.

#### Love the Sea Project: Expanding Coral Home Installation

Coral reefs serve as habitats, food sources, and shelters, forming a vital part of the marine ecosystem. However, they have been facing deterioration and damage from both human activities and climate change.

In 2022, SCG launched the Love the Sea Project in partnership with the Department of Marine and Coastal Resources under the Ministry of Natural Resources and Environment, the Faculty of Veterinary Science at Chulalongkorn University, and the Earth Agenda Foundation. Under the project, SCG 3D printing technology is utilized to create substrate materials to which coral larvae can attach, known as coral homes, for coral reef restoration. The design has been continuously refined to closely resemble natural coral, thus providing suitable habitats for reef fish.

SCG has expanded the Love the Sea Project by fostering partnerships with other organizations and rallying their support for further coral home deployment to various locations. These organizations include the Rotary Club of Mining, Phuket Province, which has installed coral homes at Mai Thon Island; Thai Union Group PLC, which has installed coral homes at Racha Island; and Supalai PLC, which has installed coral homes at Sak Island.

To date, a total of 1,115 coral homes have been installed under the Love the Sea Project, resulting in 39,600 coral colonies. Surveys have also identified 17 sessile species and over 50 fish species from 18 families.



#### SCG Chemicals (SCGC):

#### **Environmental Risk Assessment** and Biodiversity Baseline Study

In 2023, SCG Chemicals (SCGC) completely revised its biodiversity action plans, incorporating guidelines from the Kunming-Montreal Global Biodiversity Framework and its nature positive goal of achieving harmonious human-nature coexistence by 2050. This framework guides project operations through three key SCGC Biodiversity Commitments: No Net Loss, Net Positive Impact, and No Deforestation.

Following SCGC's Biodiversity Protection Roadmap, in 2024 SCGC conducted environmental impact and risk assessments around its operating sites as well as launched a biodiversity baseline study in mangrove forest plantations in Rayong to understand their influence on biodiversity.

For risk assessment and environmental planning, SCGC has adopted the TNFD LEAP Nature-related Risk Assessment Approach and has developed a database for biodiversity area assessment by GIS to evaluate risks within a 50-kilometer radius of all company operations in accordance with the principles of the International Union for Conservation of Nature (IUCN).

Based on the assessment results, nature positive action plans have been developed for areas within the 50-kilometer radius of all operating sites. An example is a biodiversity



baseline study in collaboration with experts from the Faculty of Fisheries at Kasetsart University (Bangkhen) and the Department of Marine and Coastal Resources, where environmental changes in mangrove plantations are monitored in order to enhance aguatic habitat restoration and evaluate the success of mangrove reforestation in Noen Kho Sub-district, Klaeng District, Rayong. Conducted with a 2024-2026 timeframe, the study also examines the interrelationship between climate change and biodiversity to identify contributing factors that enhance the health of ecosystems in areas under conservation and restoration as well as improve balance for living organisms and surrounding communities.

SCGC is planning to expand the study to other areas along the eastern seaboard to build a strong foundation and ensure its ability to achieve nature positive goals in the long

Introduction Our Business Governance for Sustainable Growth Strategy & Risk Management Performance

# SCGP: Living up to International Standards for Agroforestry Management

Driven by its commitment to becoming a model organization in biodiversity and ecosystem conservation, SCGP has been working actively to achieve an ecosystem balance by implementing sustainable biodiversity management, adopting international standard indicators, taking a participatory approach to community forest management and utilization, and raising conservation awareness among all stakeholders.

SCGP underwent annual audits by external agencies, namely the Forestry Research Center and FSC (Forest Stewardship Council), and achieved three FSC certifications: FSC™-CW/COC, FSC™-FM/COC, and FSC™-FM (SLIMF), which ensure that all of its products comply with EU Deforestation Regulations.

Furthermore, SCGP utilizes CERT+, a geographic information system program certified by Thailand's Greenhouse Gas Management Organization (Public Organization). Designed for calculating tree carbon sequestration, the system employs satellites and AI to measure the amount of carbon capture in each area and monitor



10.6%

Percentage of forests with biodiversity and ecosystem diversity compared with agroforestry coverage, exceeding the 10% target according to FSC™ sustainable forest management standards.

forest conditions for productivity management. Electronic systems have also been introduced for tracking agroforest status and development.

Throughout its wood product development process, SCGP has maintained a No Gross Deforestation commitment as well as sustainable and legal forest management at every production stage, from raw material procurement to customer delivery. SCGP has also continuously been monitoring biodiversity status and measuring plant diversity indices in three conservation forests: Ban Huai Saphan Samakkhi Community Forest and Khao Cha-ang Conservation Forest in Kanchanaburi and Kamphaeng Phet Conservation Forest in Kamphaeng Phet.



Our Business

As the world's growing population and increasing consumption rates stand in stark contrast to our limited natural resources, all sectors will inevitably be faced with shortages of virgin materials, which could ultimately impact biodiversity.

As such, every business unit under SCG is committed to advancing a circular economy, as seen in various initiatives, from optimizing production processes, reducing the use of virgin materials, and reclaiming waste materials all the way to developing innovations to enhance product recyclability, expanding cooperation with government agencies, private sector partners, and communities, as well as promoting broader social awareness and understanding of circular economy principles and proper waste management.



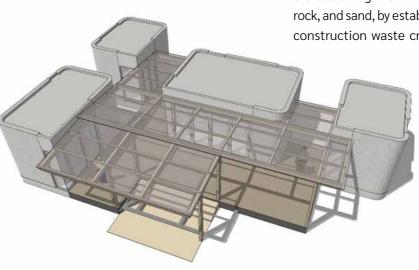
# SCG: Reducing Resource Use at the Source

Leveraging new technologies, SCG strives to develop green construction solutions, minimize resource use at the source, and develop innovations to replace existing materials with recycled alternatives or upcycle waste into new value-added products, in line with circular economy principles.

Over recent years, SCG Cement and Green Solutions has promoted the use of CPAC BIM solutions for building design to enhance design accuracy and quality control across the construction project. Particularly effective in error detection, this technology helps reduce construction mistakes and redundant tasks, thus minimizing unnecessary resource waste-including time, labor, and materials-by 5-15%, depending on the project type.

In 2024, SCG Smart Living focused on reducing the use of virgin raw materials, such as cement, rock, and sand, by establishing three additional construction waste crushing plants, making them available across all SCG Smart Living facilities nationwide. This initiative has enabled SCG Smart Living to utilize its own crushed materials in combination with external recycled materials and replace virgin materials by up to 8%. Excess recycled materials can also be developed into alternative subgrade materials for land adjustment or road construction and for use in place of virgin fill soil or sand in construction projects around and in the vicinity of its plants nationwide.

For COTTO products, a ceramic glazing process using eggshells for sanitaryware and washbasins has been developed, resulting in the world's first bio-ceramic sanitaryware prototype. This innovation replaces the use of natural calcium carbonate, which generates GHG emissions during the firing process. Now being patented, with plans to integrate into production lines by 2025, this technology is expected to reduce natural resource (limestone) consumption by 460 tons annually and decrease the total GHG emissions from production by 930 tons of carbon dioxide equivalent (tCO<sub>2</sub>e) per year.



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Nature

Positive

SCG Chemicals (SCGC) recognizes the importance of responsible business practices and is committed to sustainability in all dimensions. Through the development of SCGC GREEN POLYMER™, an innovative eco-friendly plastic resin, we aim to minimize environmental impact while maximizing resource efficiency. Our approach promotes circular economy principles, driving sustainable production methods. We collaborate with industry partners to increase the use of recycled materials and develop innovative solutions that meet sustainability challenges. By extending positive impacts to communities and society, we strive to balance business growth with genuine environmental stewardship.

Notable projects in 2024 include:

#### • Recycled PVC Tiles from Dialysis Bags:

This project marked Thailand's first-ever initiative to recycle used dialysis bags into high-quality PVC tiles. Under this circular economy collaboration between Principal Capital PLC (PRINC), Baxter Healthcare, and Dynoflex, a total of 5,320 used dialysis bags have been recycled, equivalent to over 800 kg of PVC waste. The resulting high-quality recycled PVC tiles have been installed in patient wards at Princ Hospital Suvarnabhumi, with plans to expand the initiative to three more affiliated hospitals and achieve over 9,000 square meters of installation. The project not only reduces GHG emissions but also maximizes resource utilization in line with circular economy principles.



## Waste Wittaya

As Thailand's first-ever private initiative to develop materials and activities for waste management education in schools, this program seeks to cultivate a mindset for conscious resource use and management in line with circular economy principles among yout In 2024, the project was piloted in five schools in Rayong, with plans to expand to other schools in the future.

- Wake up Waste: This SCGC startup has developed a recyclable waste trading and management platform and offers a mobile waste compression service, where waste is collected from various locations, particularly hotels, hospitals, offices, and condominiums, and compressed for efficient transportation to optimal recycling facilities. Currently, Wake Up Waste purchases waste from 400 buildings and has recycled 2,000 tons of material. The project has also been expanded through collaboration with Bangchak Corporation PLC in the "Reduce Waste at the Source with Bangchak" Project, a recyclable waste collection initiative piloted across 50 gas stations.
- NETS UP: Launched in partnership with various network partners, including the Ministry of Natural Resources and Environment, the Youth Fund, and the Alliance to End Plastic Waste (AEPW), this project collects and sorts used fishing

- nets along Rayong's coast for recycling into plastic resin and eco-friendly clothing. In 2024, the project collected 1,404 kg of nets, equivalent to the material required to produce 3,300 t-shirts and to 20,812.5 kg  $\rm CO_2$  equivalent of avoided GHG emissions.
- Trade-in for a New World "Closed-Loop Circular Appliances": For the first time in Thailand, SCGC has partnered with HomePro to invite customers to trade in old household items for new products with discounts. Used plastics from old appliances are recycled into high-quality PCR (post-consumer recycled) resin, a green innovation under the SCGC GREEN POLYMER™ brand, which is then produced into new electrical appliances using a closed-loop systemeco-friendly circular products that offer new value to customers.

**Governance for Sustainable Growth** 



#### **SCGP:** Recyclable Packaging **Development**

SCGP prioritizes resource efficiency and environmental protection in accordance with sustainable development principles. As such, SCGP adopts the Make-Use-Return approach throughout its operations, from design and production to utilization and reprocessing back into raw materials, which has enabled the company to develop packaging that generates no waste over the years. Currently, 99.7% of SCGP's packaging can be reused, recycled, or decomposed, with a target of reaching 100% by 2030.

SCGP's recycled material packaging embodies its commitment to the development of sustainable innovative materials, as evident in its efforts to enhance the properties and efficiency of recyclable and degradable paper



99.7%

Percentage of reusable, recyclable or decomposable packaging in the packaging portfolio, with a target of reaching 100% by 2030.



Our Business

fibers, adopt mono-material plastic films in place to multi-material options to improve recyclability, and use PCR resin to reduce plastic burning as fuel and decrease GHG emissions.

In addition, SCGP actively promotes the recycling of used consumer packaging by setting up drop-off points in collaboration with partners across all sectors in various projects, thus efficiently closing the recycling loop. Such projects are: the reBox Project in partnership with Thailand Post, the Old Paper for New Paper Exchange Program, the Bring Paper Home Project in cooperation with government agencies and private companies, and the Packback Project in collaboration with over 90 public and private organizations. In 2024, these efforts resulted in the recycling of 101 tons of waste paper.

SCGP also promotes sustainable waste management community models through educational activities and has been working to replicate the success of the Zero-Waste Community Projects across Ratchaburi, Kanchanaburi, Prachinburi, and Khon Kaen. As of 2024, a total of 106 communities joined the project, with 358 tons of waste reduced, generating a combined income of 1.4 million baht for participating communities.



## Inclusive Society

# Growing Together **Towards** a Sustainable World

SCG recognizes that the rapid changes in today's society including international policies, government regulations, and the transition from traditional to clean and digital technologies, may pose risk if adaptation is not timely. The intensifying crises could further widen social inequality. Therefore, it is crucial for people and communities to adapt and develop in alignment with the evolving context. This presents a national-level challenge that requires cooperation from all sectors to support a just transition and reduce greenhouse gas emissions while maintaining sustainable stewardship of natural resources.

To achieve a successful transition, it is essential to create an environment where new ideas can be tested and developed into practical solutions that drive change at every step across the entire value chain. This includes adopting technology and innovation at large scale, reshaping business models towards a low-carbon society, promoting environmental stewardship and enhancing overall quality of life. SCG is committed to empowering its people and strengthening the capabilities of its stakeholders -- including employees, suppliers and contractors, communities, and small and medium enterprises (SMEs)—with a strong foundation in human rights management. The goal is to prepare them for changes, equip them with professional skills needed for an evolving marketplace, particularly in the fast-growing green sector, and ultimately reduce social inequality and ensure that everyone can progress through a transition together sustainably.

> 50,000 individuals

SCG aims to reduce social inequality for 50,000 individuals by 2030.

# **Employee Capability Enhancement**



SCG is committed to ESG principles in its business operations in pursuit of both sustainable organizational growth and its 2050 net zero GHG emission target. To achieve these goals, the key lies in personnel development, accomplished by developing new skills, enhancing existing capabilities, and creating an "Organization of Possibilities," where employees are empowered to demonstrate their potential, and work together to drive the organization towards its established goals through training in business, leadership, and essential future skills throughout their careers. This is accomplished through SCG Flagship Programs, which incorporate ESG knowledge and practical examples to ensure employees are equipped with the understanding and awareness of sustainable development. In addition, SCG has developed specialized ESG courses for employee at all levels, with the goal of cultivating organizational leaders in line with SCG's Inclusive Green Growth approach.

#### **SCG Flagship Programs and All-Level Employee Development**

SCG Flagship Programs are learning pathways designed to cover employee development throughout their career. New employees begin their path with the "Start Your New Career" and "Ready Together" courses, where they learn about organizational culture and direction, working with diverse teams, and gain knowledge about ESG and inclusive green growth. Supervisory level employees can take the ABC (Abridge Business Concept) and BCD (Business Concept Development) courses, which incorporate practical ESG in Actions to develop business practices following ESG guidelines. Management level employees are offered MAP (Management Acceleration Program), MDP (Management Development Program) and MEP (Management

> Enrichment Program), which focus on applying ESG in Business, experience sharing, and leadership development.



Executive level courses include AMP (Advanced Management Program), which focus on participation in training offered by international organizations to build networks and stay abreast of evolving global trends.

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#### **ESG Courses for Target Employees**

Courses in this group consist of internal courses as well as programs offered by external agencies, such as:

- ESG Leadership Program: Provides ESG in Actions knowledge for key talents.
- WBCSD Leadership Program: Organized by the World Business Council for Sustainable Development, attended annually by management level representatives.
- Climate Action Leaders Forum (CAL FORUM): Organized by the Thailand Greenhouse Gas Management Organization (Public Organization) to serve as a platform for leading organization executives to exchange ideas and experiences in GHG management, with C-level executives participating annually.



Organization of Possibilities Targets

Employee engagement compared to the total number of domestic employees equals

4.0 from 5.0

100%

Senior management who have undergone the Net Zero Accelerator Program (NZP) by 2027

Furthermore, SCG promotes personnel engagement and ESG awareness through the cultivation of daily behavior and company activities, participation with the "Sharing Opportunities, Every Day" application used to encourage employee sharing and participation.



"SCG is an 'Organization of Possibilities,' from recruitment, capability development, employee care and retention, and its Believe in the Value of the Individual, which is one of the four core values, all the way to human rights, and diversity and inclusion, all of which are aimed at creating opportunities for employees to grow with the organization. In pursuit of inclusive green growth, SCG has integrated ESG, AI, and digitization knowledge to ensure that employee capabilities meet evolving contexts, thus driving sustainable growth for the organization, people, and society simultaneously."



Corporate Human Resources Director, SCG





#### **Start the Dot Program**

SCG gives opportunities for employees to fully showcase their abilities and create positive outcomes for the organization and business through the Start the Dot Program, where they can develop innovative projects that may be incubated into internal startups.

The program begins with idea presentation (Moonshot Idea), where employees participate in a boot camp to gain knowledge about project development, such as business model design and marketing plans. The second phase is Proof of Concept, with expert mentors providing guidance. Selected projects receive funding to be further developed into successful businesses (Shoot for the Moon) within a timeframe of 3-5 years.

Projects that reached the Shoot for the Moon phase in 2024 include the Solar Franchise Project, which enables construction contractors in provincial areas to expand their services into the solar rooftop installation market, with SCG providing technological support and advice to ensure high-quality service at competitive prices.

" When entrepreneurs learn from both SCG's mistakes and successes,

Through knowledge exchange, consultation, and guidance,

we're fostering a collaborative mindset, collaborative action,

and collaborative value, which will build determination, accelerate

change, and increase opportunities to achieve a low-carbon society

it benefits their own development and enhances competitiveness.

# **Supplier Capability Enhancement**

SCG's environmental responsibility extends well beyond its direct operations to encompass Scope 3 greenhouse gas emissions generated throughout its supply chain from the procurement of raw materials and equipment, transportation, and production processes within supplier operations.

As such, SCG has developed the Supplier Decarbonization program as part of its supplier capability enhancement policy in order to equip SCG's suppliers to decarbonize their operations. This initiative is in line with the concept of inclusive society, under which SCG strives to support all parties to achieve mutual growth without leaving anyone behind.

SCG started collecting data on Scope 3 emissions in 2020 and has continuously prepared its suppliers since then, beginning with organizing the Supplier Day in 2022 and the first Supplier Workshop in 2023, where 12 partners were invited to learn about GHG emissions calculations.

In 2024, SCG focused on collecting data from 113 suppliers in the categories of Purchased Goods and Services and Fuel- and Energy-Related Activities (not included in Scope 1 and Scope 2), which were used extensively in production and thus had a significant impact

on Scope 3 emissions. Suppliers are divided into two categories: 20 strategic suppliers, referring to those with climate awareness that have begun collecting their own GHG emissions data; and 93 high-impact suppliers, referring to those who have not yet started collecting GHG emissions data. SCG has begun collecting GHG emissions data from strategic suppliers and provided in-depth workshop on GHG emissions calculations and data management methods to 19 high-impact suppliers, with plans to continue these efforts in 2025, in order to build understanding about data collection methods and GHG calculations, raise awareness about climate change, and develop appropriate GHG management plans.

A key point in building understanding and encouraging supplier participation is underscoring the necessity and direct benefits of GHG emissions data collection on their businesses, particularly given the global emphasis on green business operations, trade regulations, as well as the potential implementation of carbon taxes in the near future, which will affect both suppliers and SCG.



## **SME Capability Enhancement**

Thailand's industrial sector consists not only of large business organizations but also of numerous small and medium enterprises (SMEs). A transition to a low-carbon society would be difficult if the SME sector is not adequately prepared. Therefore, SCG has made it its mission to forge partnerships to enhance SMEs' capabilities to keep pace with global changes.

together. "

**Chana Poomee** 

Chief Sustainability Officer, SCG

In 2024, SCG launched the "Go Together" project in collaboration with the Federation of Thai Industries. The project opened SCG's facilities to SME entrepreneurs who were members of various provincial industrial federations and gave them an opportunity to



**1,200** entrepreneurs

The number of SME entrepreneurs from all regions who participate in the project



learn and exchange knowledge about global warming, approaches to achieving net-zero emissions, clean energy utilization, industrial technology development, waste valorization, and industrial waste management. Leveraging SCG's knowledge and experience, this initiative was aimed at enhancing SME capabilities in line with environmentally and socially responsible industrial development practices. In 2024, eight such events were organized in SCG factories across every region.

These events featured booths by expert companies within SCG's network to provide consultation to entrepreneurs and help SMEs efficiently achieve their carbon and net zero goals. These companies included Cleanergy, a provider of clean energy management solutions; AI Technology, Zycoda, REPCO NEX, an expert on AI systems for operational efficiency optimization; ESP, an expert on energy cost reduction and biomass fuel utilization; and SCG BLC, a comprehensive

consultant. Financial institutions, such as SME D Bank, EXIM Bank, Bank of Ayudhya, and Krungthai Bank were also present to facilitate entrepreneurs' access to funding for eco-friendly management projects.

The "Go Together" project is scheduled to run from July 2024 to July 2025. After each event, entrepreneurs join groups on an online platform to access consultation with SCG experts and exchange ideas with other entrepreneurs, with the goal of fostering a sustainable network of SME entrepreneurs. In addition, through continuous monitoring and evaluation, SCG has found that many entrepreneurs have been able to implement the knowledge gained, as seen in their success in installing solar panels in their factories to reduce energy costs and improving factory waste management systems to transform waste materials into valuable fuel resources.

Strategy & Risk Management **Governance for Sustainable Growth** Road to Inclusive Green Growth

degree provided by the SCG Foundation.

# Community **Capability Enhancement**

Local communities are the foundation of Thai society, and the country progress depends on their strength and resilience. Therefore, SCG places importance on enhancing community capability through various initiatives driven by the concept of inclusive society. The goal is to ensure equal opportunities for all and reduce social inequality by improving access to education, career development, medical care, and public health services, while fostering a sense of shared responsibility for societal well-being.

#### **Learn to Earn Scholarship**

The Learn to Earn Project by the SCG Foundation provides scholarships to young students to enable them to secure employment and achieve self-sufficiency. The program focuses on high-demand professions such as nurses, nursing assistants, dental assistants, or caregivers of the elderly-particularly crucial as Thailand transitions into an aging societyas well as specialized fields like prosthetists and orthotists.

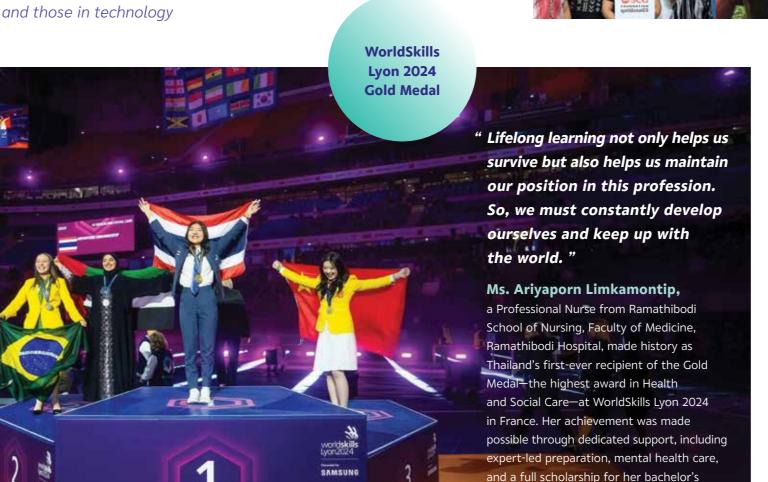
Beyond scholarships for professional courses or hard skills, the project also promotes life skills or soft skills among scholarship recipients. These include communication, teamwork, creativity, and financial literacy. The program also nurtures young talent by supporting their



The SCG Foundation provides professional development scholarships for 924 students in nursing assistant, dental assistant, and community caregiving and those in technology

participation in international competitions in collaboration with the Department of Skill Development to select talent to compete in WorldSkills Lyon 2024 in France, recognized as the world Olympics of vocational skills.

Moving forward, the SCG Foundation remains committed to continue empowering underprivileged youth by providing them with the guidance and resources needed toward careers under the Learn to Earn concept.





#### **Ton Kla Community Project**

Launched by the SCG Foundation in 2014, the Ton Kla Community project seeks to develop young leaders into a vital force in strengthening their local communities sustainably. The initiative provides funding for young people to implement development projects that benefit their home communities, such as projects on career promotion and development, local wisdom and cultural heritage conservation, natural resources and the environment, and educational promotion.



Seven batches of Ton Kla community leaders have emerged, comprising 72 persons from 31 provinces across Thailand.

#### Sustainable Community Through Sufficiency Economy Philosophy **Project**

#### **Kanuengnit Chanamo**

through Sufficiency Economy Philosophy" Project, Kanuengnit Chanamo, a 4<sup>th</sup>-batch Ton Kla community leader from Buriram, elderly people are invited to learn about

As part of her "Sustainable Community

established the O9D Sufficient Center, where organic vegetable farming and how to create careers based on sufficiency economy principles. The project was expanded to other communities and won a HER Award from UNFPA Thailand in 2024.





#### **Digital Telemedicine Program** for Remote Patient Care Project

Healthcare service inequality is a global issue including Thailand, particularly in remote areas such as highland communities and border regions, as traveling to hospitals is difficult and expensive for patients, especially the elderly and bedridden, causing many patients to refuse treatment, leading to worsen health conditions.



**23** hospitals

The number of district hospitals in the network across Thailand in the northern, northeastern, central, and southern regions

SCG has launched "the Digital Telemedicine Program" to address healthcare access inequality through DoCare, an innovative solution developed and tested since the COVID-19 pandemic. DoCare integrates both telemedicine (remote medical consultation) and telemonitoring (remote health tracking) to enhance healthcare services. The system includes hospitalinstalled software that serves as a central data hub and DoCare equipment kits provided to sub-district health-promoting hospitals and community health stations. When health measurements are taken, these bluetooth-connected devices automatically record health measurements and transmit real-time data to a Health Monitoring Dashboard, enabling doctors to instantly view the patients' vital signs immediately and access information anytime via computers or mobile phones through the web-based My Health World system. Local people can conveniently access health service at community health station where health officers or Village Health Volunteers (VHVs) provide initial health screening. Patients can also consult doctors via video calls for further medical advice.







" Previously, the hospital faced overcrowding problems, especially from chronic patients with hypertension and diabetes, who formed the largest group. With telemedicine equipment from SCG, we can now screen patients with mild symptoms or well-controlled conditions and have them get treatment at health promoting hospitals or health stations in their communities and receive health consultations and medication adjustments online without having to travel to the hospital. This has reduced the number of patients at Tha Wung Hospital by more than half, relieving stress on doctors and allowing them more time to treat severe patients who require in-hospital treatment. "

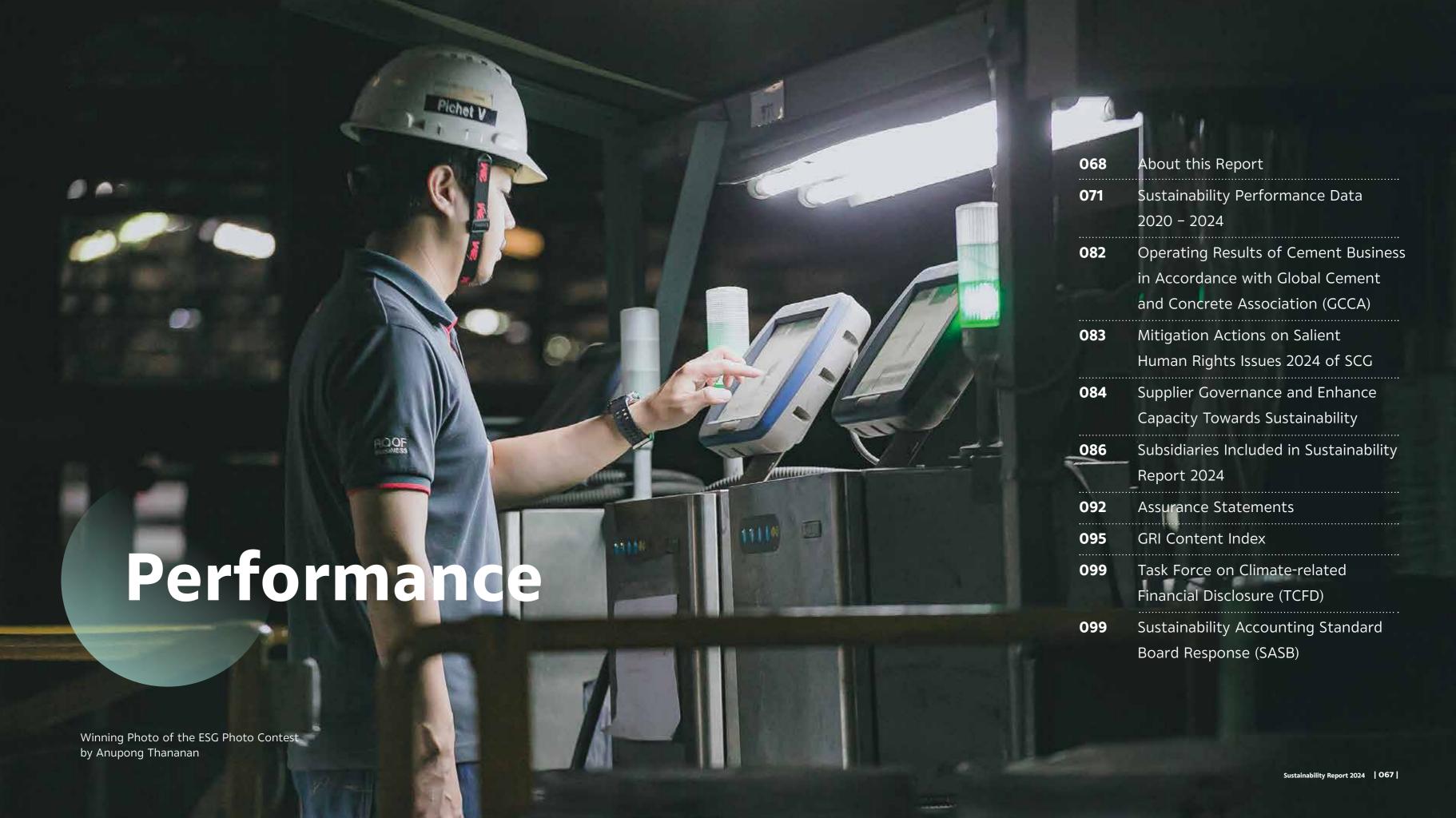
Santi Lapbenjakul, M.D.

Director of Tha Wung Hospital, Tha Wung District, Lopburi

For remote and hard-to-reach areas, such as highland communities, VHVs bring DoCare kits sets to conduct health checks for the locals. Additionally, telemedicine services are extended to inmates, providing remote medical consultations for prisoners, by Queen Sirikit Hospital in Na Thawi District, Songkhla.

The Digital Telemedicine Program is a collaborative initiative between SCG, medical networks, and district and community hospitals, aimed at transforming access to public healthcare. The project help reduce hospital overcrowding, allowing doctors and medical staff more time to treat patients and improve patient recovery outcomes. Currently, the network has expanded to 10 more hospitals in addition to the original 13 hospitals, with financial support from the Board of Investment (BOI).

SCG and its hospital network have planned to scale up the project nationwide to minimize healthcare service inequality among Thai people.



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## **About this Report**

SCG has published annual sustainability report since 2001, disclosing of sustainability performances of five core business units namely SCG Cement and Green Solutions (CGS), SCG Smart Living and SCG Distribution and Retail (SL and D&R), SCG Decor (SCGD), SCG Chemicals (SCGC) and SCGP. Sustainability performance in this Report is SCG's information which the top management deems relevant and of value to stakeholders.

#### **Reporting Scope**

Economic, environmental, and social information consolidated performances of all subsidiaries as defined by controlling stake aligned with its financial reporting in the annual report. A full list of these companies is on page 86-91, for the period of 1 January 2024 - 31 December 2024.

The report is compiled and prepared in accordance with Global Reporting Initiatives (GRI Standards 2021), and incorporating performance reporting prescribed by relevant international standards including:

- Task Force on Climate-related Financial Disclosures (TCFD) in page 99
- Sustainable Development Goals (SDGs) in page 42-48
- Global Cement and Concrete Association (GCCA) in page 82
- Sustainability Accounting Standards Board (SASB) in page 99-101

#### **Sustainability Management System**

SCG applied the management systems according to various international standards in operations such as quality management system standards, environmental management system standards, occupational health and safety management system standards, etc. To ensure that SCG has a sustainable management system covering the entire organization, SCG has established sustainable development guidelines such as the Sustainable Development Guidelines, Environmental Management Guidelines, Occupational Health and Safety Management Guidelines. Subsidiaries under business units of SCG have been certified international management standards, i.e. ISO 9001 - Quality Management System, ISO 14001 - Environmental Management System, OHSAS/TIS 18001/ISO 45001 - Occupational Health and Safety Management System, and ISO 50001 - Energy Management System. In 2024, 100% subsidiaries have been certified for ISO 9001, 80% for ISO 14001 and 90% for OHSAS/TIS 18001/ ISO 45001.



SCG Sustainable Development Framework



SCG Environmental Management Framework



SCG Safety Framework

#### **Reporting Assurance**

Financial data in this report are from similar sources as in SCG Annual Report and verified by certified public accountants.

Environmental, social and governance performance data are verified as accurate and compatible substantively with GRI Standards version 2021 by third party as detailed in page 92-94.

#### **Environment**

Environment data presented here are from activities deemed to have significant impact, reported by companies with production processes, excluding entities with no significant impact on environment from such as sales offices, R&D laboratories, services and holding companies.

Data sources, i.e., accounting evidence, meter reading, production process data, evidence-based estimation are presented in absolute value. For specific consumption or emission, disclosure since 2016 has been improved for clarity, by comparing the year performance with that of Business As Usual (BAU) of base year. SCG uses 2007 as base year for energy consumption, 2022 for water withdrawal, and 2020 for air emissions. For climate target, it is set in term of absolute value.

Reporting of cement business within Cement-Building Materials Business follows the Global Cement and Concrete Association (GCCA) guidelines. Specific air emissions and heat consumption performances are calculated compared with clinker production. Specific GHGs emission and water consumption performances are calculated compared with cementitious production.

#### **Energy**

Total energy consumption consists of thermal energy and electricity used in the space of companies/factories. The thermal energy portion shows volume and share of renewable and non-renewable energy.

Thermal energy consumption = fuel weight or steam volume (purchased volume or estimated stockpile variance) x heat value of fuel type (lab test results or supplier's data).

#### **Greenhouse Gas Emissions (GHGs)**

GHGs data in this report represent emissions from operations calculated according to guidelines in WRI/WBCSD GHG Emissions Protocol:

#### 1. Reporting Scope

1.1 Direct Scope 1 emissions from manufacturing processes and activities that are owned, and controlled by SCG. Examples include combustion of coal or natural gas in boilers, furnaces, vehicles: emissions associated with chemical reaction in production processes such as calcination in cement production. Direct scope 1 is excluded the combustion of biomass.

Performance

- 1.2 Indirect Scope 2 are emissions from purchased energy such as electricity, steam and hot air.
- 1.3 Indirect Scope 3 are emissions from upstream to downstream of SCG-related activities.

#### 2. GHG Inventory

- 2.1 Direct Scope 1 emissions are calculated from
- Combustion
  - Reporting of fuel use (weight or volume) such as amount of oil or natural gas x emission factor referenced to Thailand Greenhouse Gas Management Organization (Public Organization); TGO, Intergovernmental Panel on Climate Change 2006, (IPCC) or GCCA.
  - Fuel consumption (based on heating value) for instance amount of coal x heating value x TGO emission factor; otherwise, IPCCC 2006 or GCCA.
  - Carbon mass balance from fuel consumption
- Chemical reaction in production process, i.e., limestone is calculated using mass balance.
- Cement business reporting is reference with GCCA guideline.
- 2.2 Indirect Scope 2 emissions are calculated on the basis of purchased electricity, steam or hot air consumption x GHG emission factors based on TGO, manufacturers or suppliers.
- 2.3 Indirect Scope 3 emissions are calculated and reported in line with Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

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3. Types of GHG emissions reported include, CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs and SF<sub>6</sub> which are converted and reported as CO<sub>2</sub> equivalent by Global Warming Potential (GWP) referenced with IPCC-defined GWP factors.

#### **Air Emission**

Air emissions are the quantity of air pollution such as NOx, SOx and particulate matters from combustion and are part of the production process. Types of air pollutants depend upon each production process in which chemical substance is produced. Results and measurement method conform with the law requirements such as US EPA, or equivalent standard.

Air emission quantity reported is calculated based on concentration measured actual upon spot check conducted by laboratories certified by and registered with Department of Industrial Works, multiplied by hot air flow rate and production hours.

In addition, SCGC, SCGP, CGS and SCGD measure their air emissions from stack using Continuous Emission Monitoring Systems, CEM. Cement Business references measurement to GCCA guideline. (Details in page 82)

#### Water

Water management consists of the amount of water withdrawal, recycled water and effluents.

"Water withdrawal" means quantity of water drawn from various types of external sources namely surface water, groundwater, and other agencies. In terms of category, fresh water means water with less than 1,000 mg/L. of total dissolved solid while "other waters" contain over 1,000 mg/L. of total dissolved solid. Water withdrawn from water-stress area is estimated based on Aqueduct Water Risk Atlas.

"Recycled water" means the quantity of treated water returned to the process, excluding non-treated reused water such as cooling water.

"Water discharge" means quantify of effluences discharged into water sources such as surface water, groundwater, and other agencies, from the first reporting year of 2020, with reporting of discharge into stress area and effluent types in terms of Biochemical Oxygen Demand-BOD, Chemical Oxygen Demand-COD, and Total Suspended Solids-TSS.

#### **Industrial Waste**

Industrial waste reporting is divided into hazardous and non-hazardous waste according to laws and regulations in each country where SCG operates, in terms of waste generation, waste management and waste in storage to demonstrate production efficiency and waste management efficiency according to the following:

- "Diverted from disposal" consists of reuse, recycling and treatment
- "Waste directed to disposal" consists of incineration for energy output, non-energy generating incineration, landfill and other disposal operations.

The amount of waste generation from production process is calculated using appropriate method on weighing, calculating or evidence-based estimation; whereas weighing of waste directed to disposal using scale yielded more precise result.

#### Social

#### **Health and Safety**

#### **Numbers of Employees and Contractors**

- 1. Employee is a full-time worker consisting of operational level, supervisory and technical staff level, managerial level, interns (probationary) and special-contract employees.
  - Operational level is a front-line worker who uses skills and techniques in their daily operations.
  - Supervisory and technical staff level is a front-line manager responsible for daily management or with subordinates.
  - Managerial level is a manager responsible for addressing business strategies or policies, delegating and controlling supervisory and technical staff who implement policy and daily work.
  - Special contract employee is temporarily employed for a specific period.

- Contractor is a person who consented to work or provide service or benefit to the company apart from the company's employee per the definition above, which could be divided into 3 types of contractors are as follow:
  - Workplace Contractor is a contractor working for the company, whose work and/ or workplace is controlled by the company (excluding Transportation Contractor).
  - 2) Direct Transportation Contractor is a transportation contractor with operation under SCG's brand.
  - 3) Other Transportation Contractor is a transportation contractor without operation under SCG's brand.

Workplace Contractor data covered in the report are calculated for number of hours worked.

Third Party is other people, neither employee nor contractor, who are not working for the company and are not covered in this report.

#### **Hours Worked Calculation**

- 1. Data from a clock-in system, HR database, accounting, or relevant administrative functions.
- 2. In case the companies/ plants do not have a clock-in system or database system, or other record document the formula below is applied to estimate hours worked.

#### Number of hours worked =

(number of workers x number of working days x number of normal hours worked per day) + total number of overtime hours worked (if any)

#### **Health and Safety Data Recording**

SCG records the data based on work-related in health and safety as followed:

Performance

- 1. Fatality Work-Related Injury and Occupational Illness & Disease Rate from workplace is the number that results in fatality case (person) per 1,000,000 hours worked.
- 2. Total Recordable Work-Related Injury and Occupational Illness & Disease Rate from workplace is the number that results in fatality, lost time, restricted work or medical treatment case (person) per 1,000,000 hours worked.
- 3. Number of Fatality Work-Related Injury is the number that results in fatality regardless of sudden death or suffering consequences and subsequent death.
- 4. Fatality Work-Related Injury Rate from workplace is the number that results in fatality case (person) per 1,000,000 hours worked.
- 5. Total Number of Recordable Work-Related Injury from workplace is the number that results in fatality, lost time, restricted work or medical treatment.
- 6. Total Recordable Work-Related Injury Rate from workplace is the number that results in fatality, lost time, restricted work or medical treatment case (person) per 1,000,000 hours worked.
- 7. Number of High-Consequence Work-Related Injury from workplace is the number that results in high-consequence, excluding fatality.
- 8. High-Consequence Work-Related Injury Rate from workplace is the number that results in high consequence excluding fatality case (person) per 1,000,000 hours worked.
- Lost Time Injury Frequency Rate from workplace is the number of work-related lost time injury case (person) per 1,000,000 hours worked.
- Severity Work-Related Injury Rate from workplace is the number of lost workday (day) from work-related lost time injury per 1,000,000 hours worked.
- 11. Number of Fatality Occupational Illness & Disease from workplace is the number that results in fatality regardless of sudden death, or suffering consequences and subsequent death.
- 12. Total Number of Recordable Occupational Illness & Disease Rate from workplace is the number that results in fatality, lost time, restricted work or medical treatment.

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- 13. Total Recordable Occupational Illness & Disease Rate from workplace is the number that results in fatality, lost time, restricted work or medical treatment case (person) per 1,000,000 hours worked.
- 14. Near Miss Frequency Rate is the number of near miss cases per 1,000,000 hours worked.

Lost Time is work-related injury, occupational illness & disease that causes the injured absence from work on the next working day or the following shift, as well as the case that such injury, occupational illness & disease leads to leave of absence as the person is incapable of returning to work after the incident.

High-consequence work-related injury is injury that results in fatality, handicap, disability, organ loss, or in an injury from which the worker cannot, does not, or is not expected to recover to pre-injury healthy status within six months.

#### **Employees**

#### **Average Wage Ratios**

Employees refers to persons who work full time for the company as specified in the employment contract and can be categorized into executives, management employees, and non-management employees. The term encompasses employees of SCG Cement and Green Solutions (CGS), SCG Smart Living and SCG Distribution and Retail (SL and D&R), SCG Decor (SCGD), SCG Chemicals (SCGC) and SCGP.

Wage refers to salary paid on a monthly basis to employees as prescribed by the company.

Other remuneration refers to any remuneration in addition to salary, given as incentives or special performance-related pay, as well as other monetary rewards such as bonus.

Reporting of average wage ratio calculated solely on salary, and average remuneration ratio calculated on salary and other remuneration throughout the year, and comparative average between female and male employees in different levels including gender pay gap analysis, is in accordance with GRI 405-2.

#### Governance

#### **Double Materiality Assessment**

The annual basis of double materiality assessment is in line with the principles of double and dynamic materiality, which consider both external factors affecting the organization and the impacts of the organization's operation on the external environment. It is compatible with international guidelines as detailed in page 38.

#### **Supplier Management**

- 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 capacity building program and supplier supports in corrective action plan implementation and supplier assessed with substantial actual/potential negative impact supported in capacity building program and corrective action plan implementation.



This report and its predecessors can be downloaded from www.scg.com For more information please contact:

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## **Sustainability Performance Data**

#### **Economic Performance**

SCG has managed to maintain a strong financial foundation in terms of sales and cash flow, despite facing global economic fluctuations.

Performance Data	2020	2021	2022	2023	2024	<b>GRI Standards</b>	SASB
Revenue from sales (Billion Baht)	399.9	530.1	569.6	499.6	511.2	GRI 201-1	
Profit for the year (Billion Baht)	34.1	47.2	21.4	25.9	6.3	GRI 201-1	
EBITDA (Billion Baht)	74.6	91.9	61.9	54.1	53.9	GRI 201-1	
Employee compensation comprising salary, wage, welfare, and regular contributions (Million Baht)	46,796	47,921	50,732	50,190	51,331	GRI 201-1	
Dividend to shareholders (Million Baht)	16,800	22,200	9,600	7,200	6,000	GRI 201-1	
Interest and financial expenses to lender (Million Baht)	7,082	6,758	7,523	10,297	11,500	GRI 201-1	
Taxes to government and local government authorities such as income tax, local maintenance tax, property tax and other specific taxes (Million Baht)	7,190	8,430	6,685	6,167	5,860	GRI 201-1	
Tax privilege and others from investment promotion, and research and development (Million Baht)	1,149	1,829	1,054	1,248	1,340	GRI 201-4	
Non-compliance case through SCG Whistleblowing System (Cases)	38	30	51	55	47	GRI 205-3	
Customer Satisfaction - SCG Contact Center (%)	100	100	100	100	100		
Average Customer Satisfaction - All business unit (%)	94	94	94	94	93		
Contributions to organizations (Million Baht) <sup>(1)</sup>	13.79	11.31	30.9	27.8	36.4		
Contributions to political activities (Million Baht) <sup>(2)</sup>	0	0	0	0	0		
Suppliers that assessed Environmental, Social and Governance (ESG) Risks (% of procurement spending)	100	100	100	100	100		
Procurement Spending by Geography (% of procurement spending) • Domestic • Regional	57 43	40 60	50 50	55 45	56 44		
Revenue from Sales of High Value Added Products and Services (Billion Baht) (%)	126.1 31.5	182.7 34.5	195.5 34.3	167.7 33.6	154.4 38.0		

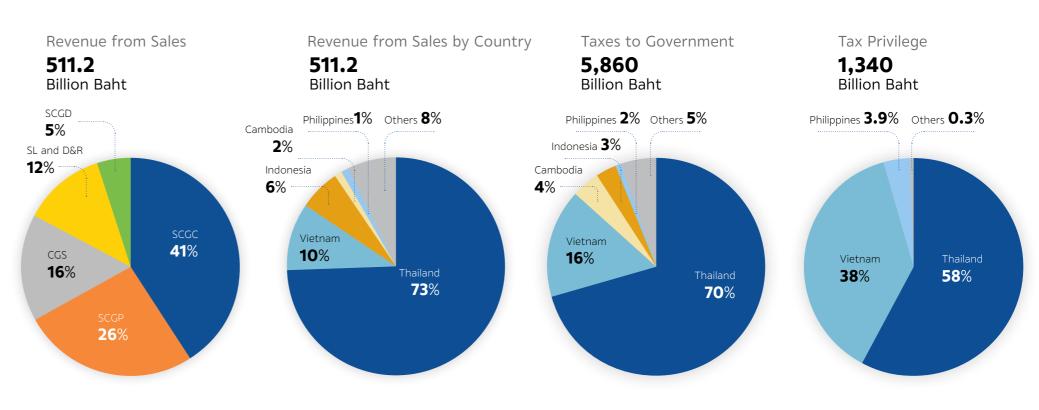
Performance Data	2020	2021	2022	2023	2024	<b>GRI Standards</b>	SASB
Revenue from Sales of SCG Green Choice Products and Services (Billion Baht) (%)	130.4 32.6	216.0 40.7	289.7 50.9	270.7 54.1	275.6 54.0		EM-CM-410a.2
Revenue from Sales of Products and Services designed for use-phase resource efficiency (Billion Baht) <sup>(3)</sup> (%)	0.022 0.02	4.870 2.00	27.46 11.6	71.5 14.3	35.1 16.7		RT-CH-410a.1
Revenue from Sales of Sustainable Construction Products and Services (Billion Baht) (%)	59.6 14.9	69.4 13.1	71.8 12.6	59.3 11.9	55.9 10.9		EM-CM-410a.1

#### NA = Not Available

- The top seventh organizations contributed by SCG are Alliance to End Plastic Waste (AEPW), Thai Cement Manufacturers Association (TCMA), World Business Council for Sustainable Development (WBCSD), Global Cement and Concrete Association (GCCA), The Federation of Thai Industries, Global Compact Network Thailand, and The Thai Chamber of Commerce and Board of Trade of Thailand. The objective is to support sustainable development actions. In particular, initiatives that need to be accelerated in building a network of cooperation, such as climate change adaption and transition to low carbon economy, circular economy, and health & safety in order to achieve tangible results. SCG does not provide support to influence any organization or represent a stakeholder in that organization's operations.
- <sup>(2)</sup> SCG 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 measures, voting activities, or referendums). In addition, SCG establishes definition and prohibition of facilitation payments in Anti-corruption policy which means any action that may influence or motivate an unfair decision making and treatment.

SCG Cement and Green Solutions: CGS SCG Smart Living and SCG Distribution and Retail: SL and D&R

SCG Decor: SCGD SCG Chemicals: SCGC SCGP



<sup>(3)</sup> Only SCG Chemicals (SCGC)

Strategy & Risk Management Our Business **Governance for Sustainable Growth** Road to Inclusive Green Growth

#### **Environmental Performance**

Production and Raw Material

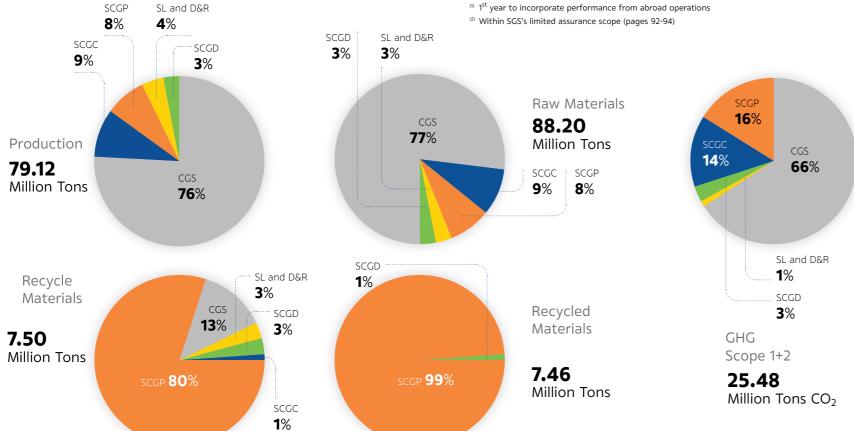
By embedding Circular Economy Principle into business, SCG can increase the amount of recycled materials.

Performance Data	2020	2021	2022	2023	2024	GRI Standards	SASB
Production (Tons) <sup>(2)</sup>		83,395,110 <sup>(1)</sup>	85,891,647	77,518,763	79,120,677		EM-CM-000.A
Raw Materials (Tons) <sup>(2)</sup>	52,767,345	71,342,275		82,039,769	88,201,788	GRI 301-1	
Renewable Materials (Tons) <sup>(2)</sup> (%)	5,651,933 10.71	3,759,406 5.27	6,048,122 6.93	5,445,245 6.64	7,497,227 8.50	GRI 301-2 GRI 301-2	RT-CP-410a.1
Recycled Materials (Million Tons) <sup>(2)</sup> (%)	NA NA	NA NA	4,777,591 6	6,892,041 8.40	7,458,443 8.46	GRI 301-1 GRI 301-1	
Renewable Materials and Recycled Materials (Million Tons) <sup>(2)</sup> (%)	NA NA	NA NA	10,825,712 12.44	8,564,830 10.44	8,929,642 10.12		

SCG Cement and Green Solutions: CGS SCG Smart Living and SCG Distribution and Retail: SL and D&R

SCG Chemicals : SCGC SCGP

(1) 1st year to incorporate performance from abroad operations



#### **Greenhouse Gas Emissions**

Greenhouse gas emissions decreased 8.76 million tons CO<sub>2</sub> compared to 2020, in line with science base targets towards the net-zero in 2050.

Performance Data	2020(1)	<b>2021</b> <sup>(3)</sup>	2022	2023	2024	GRI Standards	SASB
GHGs Scope 1 and 2 (Tons CO <sub>2</sub> ) <sup>(2)</sup>	34,243,210	33,525,541	30,116,798	27,083,867	25,479,607		
GHG Scope 1 (Tons CO <sub>2</sub> ) <sup>(2)</sup>	30,994,851	30,343,481	27,236,390	24,329,050	22,869,440	GRI 305-1	EM-CM-110a.1
GHG Scope 2 (Tons CO <sub>2</sub> ) <sup>(2)</sup>	3,248,358	3,182,060	2,880,408	2,754,817	2,610,166	GRI 305-2	
Location-Based (Tons CO <sub>2</sub> ) <sup>(2)</sup>	3,388,383	3,323,357	3,106,463	2,935,118	2,860,118		
Market-Based (Tons CO <sub>2</sub> ) <sup>(2)</sup>	3,248,358	3,182,060	2,880,408	2,754,817	2,610,166		
Biogenic CO <sub>2</sub> (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	4,853,737	5,459,979	3,968,392	5,522,750	GRI 305-1	
GHG emission reduction compare with base year 2020 (Tons CO <sub>2</sub> ) (%)		717,668 2.09	4,126,412 12.05	7,159,343 20.91	8,763,603 25.59	GRI 305-5	
GHG Scope 3 (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	15,603,650	10,014,394	10,606,251	10,695,208	GRI 305-3	
1. Purchased goods and services (Tons ${\rm CO_2}$ ) $^{(2)}$	NA	5,036,763	4,672,130	5,303,395	5,822,774		
2. Capital goods (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	0	0	0	53,830		
3. Fuel and energy related activities (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	1,878,089	1,461,512	1,460,420	1,266,371		
4. Upstream transportation & distribution (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	1,090,483	1,542,759	1,480,778	1,109,770		
5. Waste generated in operations (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	1,373	2,642	22,427	76,327		
6. Business travel (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	1,479	13,225	3,910	6,761		
7. Employee commuting (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	24,144	6,888	9,981	36,009		
8. Upstream leased assets (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	0	0	0	0		
9. Downstream transportation & distribution (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	1,145,963	422,057	566,064	388,330		
10. Processing of sold products (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	4,225,574	34,002	246,235	434,023		
11. Use of sold products (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	1,747,781	1,205,819	887,651	918,074		
11.1 Use of sold fossil fuels <sup>(2)</sup>	NA	1,156,169	1,205,819	887,493	917,262		
12. End-of-life treatment of sold products (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	41,467	51,556	67,203	58,623		
13. Downstream leased assets (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	0	0	0	106		
14. Franchises (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	487	7,735	6,578	3,977		
15. Investments (Tons CO <sub>2</sub> ) <sup>(2)</sup>	NA	410,047	594,068	551,609	520,234		

#### NA = Not Available

<sup>(1)</sup> Base year of scope 1+2

<sup>(2)</sup> Within SGS's limited assurance scope (Page 92-94)

<sup>(3)</sup> Base year of scope 3

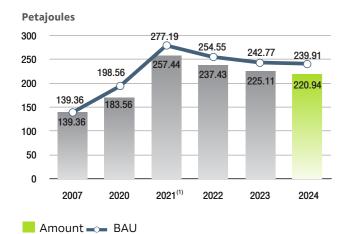
#### **Energry Consumption**

Renewable fuel consumption is constantly increasing in order to reduce non-renewable fuel consumption

Performance Data	2020	2021	2022	2023	2024	GRI Standards	SASB
Total Energy Consumption (Petajoules) <sup>(2)</sup>	183.56	257.44	237.43	225.11	220.94	GRI 302-1	EM-CM-130a.1
Non-Renewable Fuel Consumption (Petajoules) <sup>(2)</sup>	147.72	209.10	185.21	166.49	157.55	GRI 302-1	EM-CM-130a.1
Renewable Fuel Consumption (Petajoules) <sup>(2)</sup>	17.96	24.85	31.31	38.25	43.23		
Steam & Heat Consumption (Petajoules) <sup>(2)</sup>	4.44	4.65	2.52	2.61	2.59		
Electrical Consumption (Petajoules) <sup>(2)</sup>	13.88	19.18	18.66	18.01	17.81	GRI 302-1	EM-CM-130a.1
Electricity Sold (Petajoules) <sup>(2)</sup>	0.45	0.35	0.26	0.25	0.25		
Energy Consumption Reduction compare with business as usual (BAU) at base year of 2007							
(Petajoules) (%)	15.00 7.6	19.75 7.1	17.12 6.7	17.66 7.3	18.97 7.9	GRI 302-4	

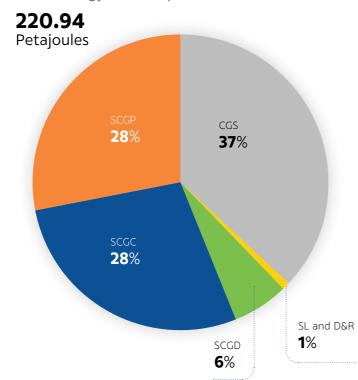
<sup>(1) 1</sup>st year to incorporate performance from abroad operations

#### **Total Energy Consumption**



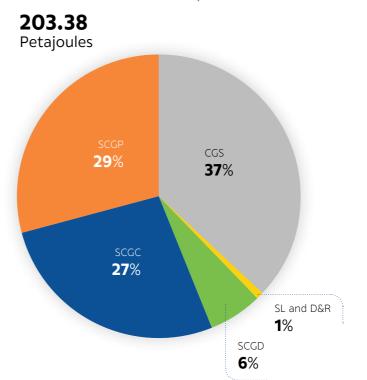
<sup>(1) 1</sup>st year to incorporate performance from abroad operations

#### Total Energy Consumption

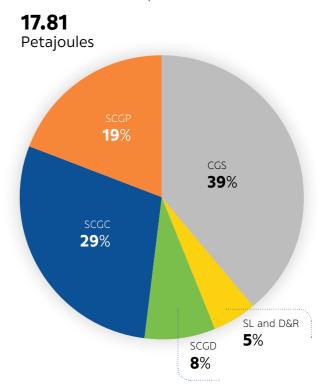


#### **Energy Consumption**

#### Steam and Heat Consumption



#### **Electrical Consumption**



Co-processing Performance of Cement-Building Materials Business

Significant proportion of alternative fuels utilization in cement business resulting in GHG reduction

Performance Data	2020	2021	2022	2023	2024	GRI Standards	CACD
remonitative para			2022				JAJD
Alternative fuel used to replace the fossil fuel							
(as % of total heat consumption)	18.30	19.90	26.90	35.50	43.52		
<ul> <li>Alternative fossil fuel</li> </ul>	6.60	7.70	9.11	11.66	15.05		
• Biomass	11.70	12.20	17.79	23.84	28.47		
Alternative raw materials contained in cement (%)	8.40	8.40	10.10	7.33	7.64		
Alternative raw materials contained in concrete (%)	1.29	1.09	0.94	1.05	1.25		
Clinker-to-Cement ratio (%)	72.90	74.20	71.82	71.24			
Alternative raw materials contained in other building materials (%)	15.40	11.20	8.79	7.34	6.20		

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

<sup>(2)</sup> Within SGS's limited assurance scope (pages 92-94)

#### Water Withdrawal and Effluent Quality

#### In 2024 SCG can reduce total water withdrawal by 2.3%.

Performance Data	2020	2021(1)	2022	2023	2024	2024 Areas with water stress <sup>(2)</sup>	GRI Standards	SASB
Water Withdrawal	•		······································			•		
Water Withdrawal by source								
Surface water (Million Cubic Meters) <sup>(3)</sup> • Freshwater TDS ≤ 1,000 mg/l • Other water TDS > 1,000 mg/l	28.45 28.45 0	50.85 50.85 0	50.25 50.23 0.02	47.57 47.56 0.01	49.83 49.83 0	28.24 28.24 0	GRI 303-3	EM-CM-140a.1
Groundwater (Million Cubic Meters) <sup>(3)</sup> • Freshwater TDS ≤ 1,000 mg/l • Other water TDS > 1,000 mg/l	38.01 31.38 6.63	42.31 42.31 0	38.63 38.63 0	36.75 36.41 0.34	38.99 38.76 0.23	32.58 0 0	GRI 303-3	EM-CM-140a.1
Third-party water (total) (Million Cubic Meter) <sup>(3)</sup> • Freshwater TDS ≤ 1,000 mg/l • Other water TDS > 1,000 mg/l	27.83 27.83 0	36.87 36.87 0	31.19 31.19 0	37.92 37.92 0	30.51 30.51 0	25.88 0 0	GRI 303-3	EM-CM-140a.1
Total Water Withdrawal (Million Cubic Meters) <sup>(3)</sup>	94.29	130.03	120.07	122.17	119.32	86.70	GRI 303-3	
Water Withdrawal Reduction compared with business as usual at the base year of 2022 (Million Cubic Meters) (%)	-	- -	- -	-10.07 -8.98	-6.04 -5.33	-	GRI 302-4	
Recycled Water (Million Cubic Meters) <sup>(2)</sup> (%)	12.33 11.6	17.03 11.9	18.50 13.4	18.49 13.14	17.99 13.10	-		EM-CM-140a.1

Performance Data	2020	2021(1)	2022	2023	2024	2024 Areas with water stress <sup>(2)</sup>	GRI Standards	SASB
Water Discharge								
Water Discharge by destination <sup>(3)</sup>								
Surface water (Million Cubic Meters)	35.57	48.25	66.27	64.08	64.87	49.06	GRI 303-3	
<ul> <li>Groundwater (Million Cubic Meters)</li> </ul>	1.16	0.001	0	0	0.03	0	GRI 303-3	
<ul> <li>Seawater (Million Cubic Meters)</li> </ul>	NA	NA	0.15	0.12	0.12	0.05		
<ul> <li>Third-party water (total) (Million Cubic Meters)</li> </ul>	4.76	4.15	3.21	2.10	0.84	0.66		
Third-party water sent for use to other organizations (Million Cubic Meters)	4.62	3.81	2.91	1.67	0.49	0.49	GRI 303-3	
Water Discharge by freshwater and other water <sup>(3)</sup>								
• Freshwater TDS ≤ 1,000 mg/l (Million Cubic Meters)	5.45	7.84	18.59	23.23	20.47	4.40	GRI 303-3	
• Other water TDS > 1,000 mg/l (Million Cubic Meters)	36.04	44.56	51.04	43.06	45.42	45.36		
Total Water Discharge (Million Cubic Meters) <sup>(2)</sup>	41.49	52.40	69.63	66.30	65.88	49.76	GRI 303-3	

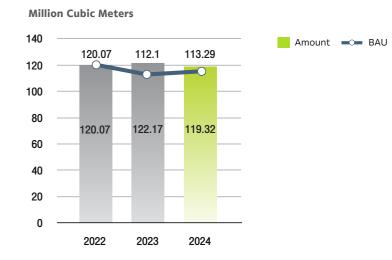
#### NA = Not Available

Performance Data	2020	2021 <sup>(1)</sup>	2022	2023	2024	GRI Standards	SASB
BOD (Tons) <sup>(3)</sup>	176	211	765	570	455	GRI 306-1	
COD (Tons) <sup>(3)</sup>	3,875	4,411	6,445	6,031	5,939	GRI 306-1	
TSS (Tons) <sup>(3)</sup>	549	490	1,105	830	742	GRI 306-1	

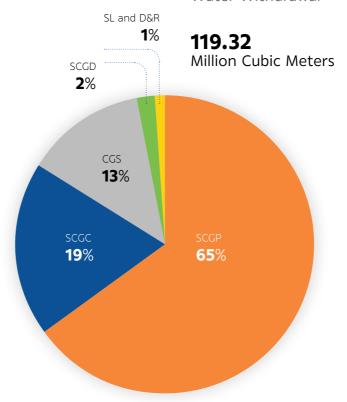
NA = Not Available

NR = Not Relevance

#### **Water Withdrawal**

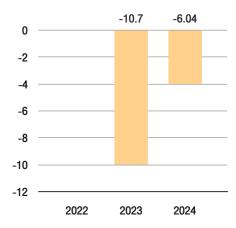






#### **Water Withdrawal Reduction** compared with BAU at the base year of 2022





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

<sup>(2)</sup> Water stress assessment using latest Aqueduct 4.0 vesion

<sup>(3)</sup> Within SGS's limited assurance scope (pages 92-94)

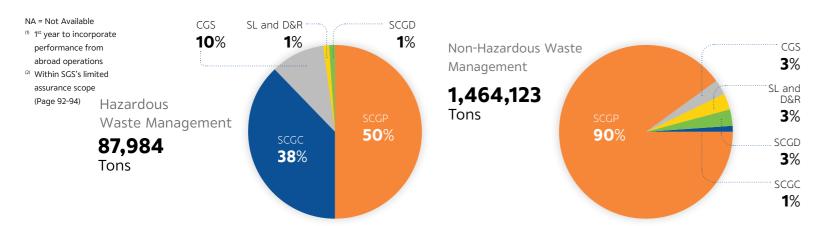
<sup>(1) 1</sup>st year to incorporate performance from abroad operations

<sup>(2)</sup> Within SGS's limited assurance scope (Page 92-94)

**Waste Management** 

Small amount of hazardouse and non-hazardouse waste from operations abroad are still ended up in landfill due to different waste management approach and legal requirement from Thailand

Performance Data	2020	2021(1)	2022	202	23	20	24	<b>GRI Standards</b>	SASB
Hazardous Waste Generation (Tons)(2)	1,235,450	1,256,120	1,745,807	1,642	,500	1,552	2,106	GRI 306-3 (2020)	EM-CM-150a.1
Hazardous Waste Management (Tons)(2)	17,790	13,970	64,908	107,	335	87,984		GRI 306-3 (2020)	EM-CM-150a.1
Diverted from Disposal (Tons) <sup>(2)</sup>	1,217,660	1,242,150	1,680,899	1,535	,165	1,464	4,123	GRI 306-3 (2020)	EM-CM-150a.1
				Onsite	Offsite	Onsite	Offsite		
Total Weight of Waste diverted from disposal (Tons) <sup>(2)</sup>	1,224,250	706,771	1,191,216	613,716	528,141	609,233	559,821	GRI 306-4 (2020)	EM-CM-150a.1
Total Weight of Hazardous Waste diverted from disposal <sup>(2)</sup>	17,590	4,439	39,034	40,782	51,025	4,055	55,390		
Reuse     Recycled     Other recovery		34 3,663 742	305 37,873 856	0 40,782 0	408 47,779 2,838	687 3,368 0	20,531 32,014 2,845		
Total Weight of Hazardous Waste diverted from disposal (Tons) <sup>(2)</sup>	1,206,660	702,333	1,152,182	572,934	477,117	605,178	504,431		
<ul><li>Reuse</li><li>Recycled</li><li>Other recovery</li></ul>		6,397 695,813 122	19,040 1,133,095 47	338 572,055 541	12,948 463,444 725	14,547 590,177 454	41,090 462,860 481		
Total Weight of Waste directed to disposal (Tons) <sup>(2)</sup>	11,200	549,349	554,591	269,171	231,472	198,701	184,351	GRI 306-5 (2020)	EM-CM-150a.1
Total Weight of Hazardous Waste directed to disposal (Tons) <sup>(2)</sup>	200	9,532	25,874	3,162	12,367	4,331	24,207		
<ul> <li>Incinerated with energy recovery</li> <li>Incinerated without energy recovery</li> <li>Other disposal</li> <li>Landfilled</li> </ul>		9,498 31 3 0	16,272 560 257 8,785	2,968 192 0 2	4,779 235 143 7,210	4,161 168 0 2	13,193 3,570 478 6,966		EM-CM-140a.1
Total Weight of Non-Hazardous Waste directed to disposal (Tons) <sup>(2)</sup> • Incinerated with energy recovery • Incinerated without energy recovery	11,000	539,817 539,351 333	528,717 444,394 35,756	266,009 264,270 0	219,105 111,297 32,383	194,370 191,094 2,858	160,144 95,604 30,477		
<ul><li>Other disposal</li><li>Landfilled</li></ul>		0 133	1,137 47,430	171 1,569	487 74,938	279 139	575 33,487		



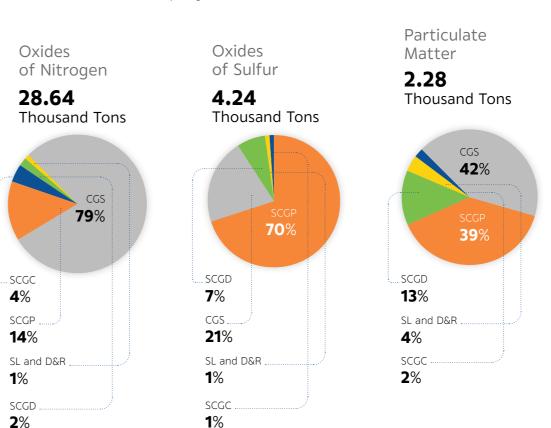
Air Emissions

The boundary of air quality data assurance has been expanded to cover operations abroad to gain confidence and ease of strategic, targets and action plan setting.

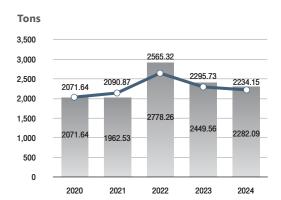
Performance Data	2020	2021	2022(1)	2023	2024	GRI Standards	SASB
Oxides of Nitrogen (Thousand Tons) <sup>(2)</sup>	30.80			33.51		0505 /	EM-CM-120a.1
Oxides of Sulfur (Thousand Tons)(2)	3.71	3.13	5.71	5.80	4.24	GRI 305-7	EM-CM-120a.1
Particulate Matter (Thousand Tons) <sup>(2)</sup>	1.39	1.53	2.78			GRI 305-7	
Mercury (Kilograms) <sup>(2)</sup>	32.95				19.36		

 $<sup>^{\</sup>mbox{\tiny (1)}}$  1st year to incorporate performance from abroad operations

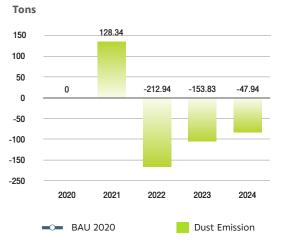
<sup>(2)</sup> Within SGS's limited assurance scope (Page 92-94)



#### **Dust Emission**



## Dust Emission Reduction compared with BAU at the base year of 2020



Biodiversity/Environmental Expenditures and Benefits/Violations of Legal Obligations and Regulations Environmental investment in 2024 are mainly contributed from the installation of cleaner energy such as solar system on rooftop, on ground and floating.

Performance Data (Only Thailand Operations)	2020	2021	2022	2023	2024	GRI Standards	SASB
Quarries with Biodiversity Management Plan in place (Number of Sites) (%)	4 100	4 100	4 100	4 100	4 100		EM-CM-160a.2
Operating Expenses – Environmental (Million Baht)	2,676	2,657		2,913	1,741		
Capital Investment – Environmental (Million Baht) (1)	1,220	1,643	2,116	1,015	5,288		
Total Expenses – Environmental (Capital Investment + Operating Expenses) (Million Baht)	3,896	4,300	5,292	3,928	7,029	GRI 305-7	EM-CM-120a.1
Savings, cost avoidance and tax incentives linked to environment investment (Million Baht) <sup>(2)</sup>	9,611	34,084	76,429	72,177	65,395		

<sup>(1)</sup> Incorporate performance from abroad operation

<sup>(2)</sup> Savings, cost avoidance and tax incentives linked to environment investments include revenue from sales of SCG Green Choice, which directly provide value to customers

Performance Data	2020	2021	2022	2023	2024	GRI Standards	SASB
Total costs from water-related incidents (Million Baht)	0	0	0	0	0		
Number of violations of legal environmental obligations/ regulations (over USD 10,000) (Number of Cases)	0	0	0	0	0	GRI 307-1	

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Social Performance

Introduction

Our Business

Governance for Sustainable Growth

Strategy & Risk Management

Road to Inclusive Green Growth

Performance

**Health and Safety** 

Lost time injury frequency rate of employee and contractors are decreased but still not achieved zero fatality and lost time injury targets.

Performance Data	2020	2021 <sup>(1)</sup>	2022	2023	2024	GRI Standards	SASB
From Workplace							
Hours Worked <sup>(2)</sup> (Million Hours Worked)  • Employee  • Contractor	79.72 124.97	118.31 140.43	117.17 134.29	112.29 134.42	128.99 141.15		
Total Recordable Work-Related Injury and Occupational Illness & Disease Rate (Cases/1,000,000 Hours Worked)  • Employee <sup>(2)</sup> • Contractor	0.840 0.608	0.947 0.869	0.785 0.923	0.891 0.766	0.892 0.723		EM-CM-320a.1 RT-CH-320a.1
Fatality Work-Related Injury and Occupational Illness & Disease Rate (Cases/1,000,000 Hours Worked)  • Employee <sup>(2)</sup> • Contractor	0.000 0.032	0.017 0.057	0.000 0.015	0.009 0.045	0.016 0.043		RT-CH-320a.1
Total Number of Recordable Work-Related Injury <sup>(2)</sup> (Cases) • Employee • Contractor	67 76	112 122	92 124	100 103	98 101	GRI 403-9	
Total Recordable Work-Related Injury Rate <sup>(2)</sup> (Cases/1,000,000 Hours Worked) • Employee • Contractor	0.840 0.608	0.947 0.869	0.785 0.923	0.891 0.766	0.760 0.716	GRI 403-9	
Number of Fatality Work-Related Injury <sup>(2)</sup> (Cases)  • Employee (Male : Female)  • Contractor (Male : Female)	0:0 3:1	1:1 8:0	0:0 2:0	1:0 6:0	2:0 5:0	GRI 403-9	
Fatality Work-Related Injury Rate <sup>(2)</sup> (Cases/1,000,000 Hours Worked)  • Employee  • Contractor	0.000 0.032	0.017 0.057	0.000	0.009 0.045	0.016 0.035	GRI 403-9	
Number of High-Consequence Work-Related Injury <sup>(2)</sup> (Cases)  • Employee  • Contractor	0 4	2 7	1 7	2 3	4 7	GRI 403-9	
High-Consequence Work-Related Injury Rate <sup>(2)</sup> (Cases/1,000,000 Hours Worked) • Employee • Contractor	0.000 0.032	0.017 0.050	0.009 0.052	0.018 0.022	0.031 0.050	GRI 403-9	
Lost Time Injury Frequency Rate <sup>(2)</sup> (Cases/1,000,000 Hours Worked) • Employee • Contractor	0.113 0.216	0.389 0.249	0.137 0.276	0.276 0.231	0.186 0.205		
Severity Work-Related Injury Rate (Days/1,000,000 Hours Worked) • Employee • Contractor	2.960 5.609	6.246 8.780	2.330 10.849	6.047 5.386	5.915 5.908		
Total Number of Recordable Occupational Illness & Disease (Cases) • Employee <sup>(2)</sup> • Contractor	0	0 0	0	0 0	17 1	GRI 403-10	

Performance Data	2020	2021(1)	2022	2023	2024	GRI Standards	SASB
Occupational Illness Frequency Rate	•						
(Cases/1,000,000 Hours Worked)	0.000	0.000	0.000	0.000	0.422		
Employee <sup>(2)</sup> Contractor	0.000	0.000	0.000	0.000	0.132		
	0.000	0.000	0.000	0.000	0.007		
Number of Fatality Occupational Illness & Disease (Cases)  • Employee <sup>(2)</sup>	0	0	0	0	0	GRI 403-10	
Contractor	0	0	0	0	1	GI II 403 10	
Number of Reported Cases of Silicosis (Cases)							
• Employee <sup>(2)</sup>	0	0	0	0	0		EM-CM-320a.2
• Contractor	0	0	0	0	0		
Near Miss Frequency Rate (Employee & Contractor)	17.524	20.213	58.044	32.285	28.262		EM-CM-320a.1
(Cases/1,000,000 Hours Worked)	17.524	20.213	36.044	32.203	20.202		
Process Safety Incident Count (PSIC)(3) (Cases)	0	0	0	0	2		RT-CH-540a.1
Process Safety Total Incident Rate (PSTIR) <sup>(3)</sup> (Cases/1,000,000 Hours Worked)	0	0	0	0	0.049		RT-CH-540a.1
Process Safety Incident Severity Rate (PSISR)(3)	0	0	0	0	2.359	•	RT-CH-540a.1
(Cases/1,000,000 Hours Worked)	U	U	U	U	2.339		
From Travelling and Transportation							
Number of Fatality Work-Related Injury <sup>(2)</sup> (Cases)							
• Employee (Male : Female)	0:0	0:0	1:0	0:0	0:0	GRI 403-9	
Direct Transportation Contractor (Male : Female)	1:0	0:0	2:0	0:0	2:0	GNI 403-9	
Other Transportation Contractor (Male : Female)	2:0	0:0	0:0	1:0	0:0	<u> </u>	
Number of Fatality Work-Related Occupational Illness & Disease (cases)							
• Employee (Male : Female) <sup>(2)</sup>	0:0	0:0	0:0	0:0	1:0	GRI 403-10	
Direct Transportation Contractor (Male : Female)	0:0	0:0	0:0	0:0	0:0	<u> </u>	
Number of Transportation Incident (cases)	33	24	16	12	3		RT-CH-540a.2
Logistics Drivers Trained from SCG Skills Development School (Persons)	8,989	8,969	17,243	15,355	20,500		
From Workplace, Travelling and Transportation						•	
Number of Fatality Work-Related Injury <sup>(2)</sup> (cases)		•				-	
Employee (Male : Female)	0:0	1:1	1:0	1:0	2:0	GRI 403-9	
Direct Transportation Contractor (Male : Female)	4:1	8:0	4:0	6:0	7:0		
Number of Fatality Work-Related Occupational Illness & Disease (cases)							
Employee (Male : Female)	0:0	0:0	0:0	0:0	1:0	GRI 403-10	
Contractor (Male : Female)	0:0	0:0	0:0	0:0	1:0		
Others							
Product that have under gone a Hazard Assessment <sup>(3)</sup> (%)	100	100	100	100	100	•	RT-CH-410b.1
Revenue from Products that contain Globally Harmonized							RT-CH-410b.1
System of Classification and Labeling of Chemicals (GHS) <sup>(3)</sup> (%)	100	100	100	100	100		

 $<sup>\</sup>ensuremath{^{(1)}}\ensuremath{\,\mathrm{1st}}$  year to incorporate performance from abroad operations

Employee: A full time employee according to an employment contract such as operational level, supervisory and technical staff level, and managerial level including Intern (probationary) and special contracted employee.

Workplace Contractor: A contractor that works for the organization, and whose work and/or workplace is controlled by the organization (exclude transportation contractor).

 $\label{thm:contractor} \mbox{Direct Transportation Contractor: Transportation contractor with operation under SCG's brand.}$ 

Other Transportation Contractor: Other transportation contractor without operation under SCG's brand.

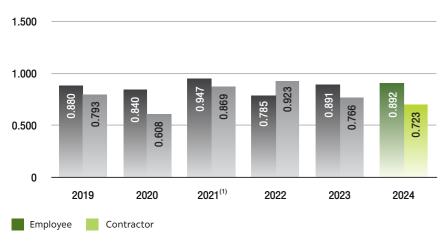
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<sup>(2)</sup> Within SGS's limited assurance scope (Page 92-94)

<sup>(3)</sup> Only SCGC (Chemicals Business)

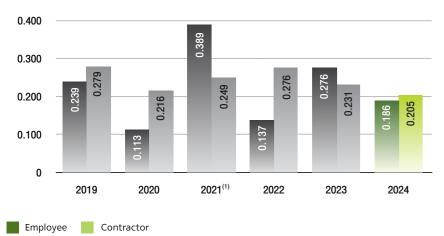
## Total Recordable Work-Related Injury and Occupational Illness & Disease Rate

Cases/1,000,000 Hour Worked



#### **Lost Time Injury Frequency Rate**

Cases/1,000,000 Hour Worked



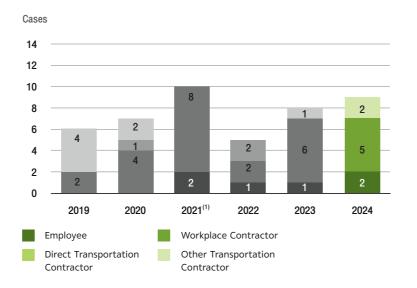
<sup>(1) 1</sup>st year to incorporate performance from abroad operations

**Workplace Contractor:** A contractor that works for the organization, and whose work and/or workplace is controlled by the organization (exclude transportation contractor).

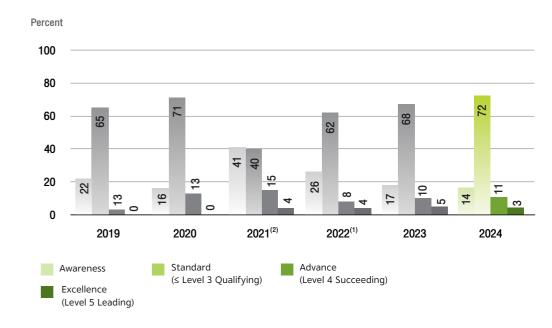
**Direct Transportation Contractor**: Transportation contractor with operation under SCG's brand.

Other Transportation Contractor: Other transportation contractor without operation under SCG's brand.

#### **Number of Fatality Work-Related Injury**



#### **SPAP Certified Companies**



<sup>&</sup>lt;sup>(2)</sup> 1st year of safety performance level corresponding to SCG Safety Framework 2021

#### **Social Performance**

**Labor and Social Development** 

SCG promotes diversity, equity and inclusion and achieve the target of 27% female in all management positions in 2025.

Performance Data	2020	2021	2022	2023	2024	GRI Standards	SASB
Number of all employees (Persons)	49,754	58,283	57,814	55,578	53,730	GRI 2-7	
Female share of total workforce (%)	23.0	22.4	24.4	24.0	24.8	GRI 405-1b	
Female in all management positions (%)	24.9	24.8	30.5	30.6	27.9	GRI 2-7	
Female in junior management position (%)	26.4	26.6	32.6	33.4	29.9		
Female in top management position (%)	13.1	12.9	14.8	14.7	14.8		
Female in management position in revenue-generating functions <sup>(1)</sup> (%)	19.5	18.3	23.3	27.1	27.6		
Female in Science, Technology, Engineering and Mathematics positions (STEM-related positions) (%)	24.2	26.3	13.2	27.2	28.6		
Proportion of local employee abroad in all management positions <sup>(2)</sup> (%)	0.9	0.4	1.1	6.3	9.8	GRI 202-2	
Number of employees with disability <sup>(3)</sup> (Persons)	NA	NA	NA	34	39		
Number of promoting occupations for people with disability (Persons)	NA	NA	NA	255	244		
Equal pay information by Gender <sup>(6)</sup>						GRI 405-2	
Ratio of average salary (base salary only) of female to male (Executive Level) <sup>(6)</sup>	0.973	1.086	1.017	0.988	0.540		
• Ratio of average total remuneration (base salary + other cash incentives) of female to male (Executive Level) <sup>(6)</sup>	0.973	1.133	1.098	1.169	0.569		
Ratio of average salary (base salary only) of female to male (Management Level) <sup>(6)</sup>	0.924	0.995	0.938	1.015	0.937		
• Ratio of average total remuneration (base salary + other cash incentives) of female to male (Management Level) <sup>(6)</sup>	0.924	1.004	0.929	1.000	0.984		
Ratio of average salary (base salary only) of female to male (Non-management Level) <sup>(6)</sup>	1.130	1.138	1.108	1.130	1.048		
• Ratio of average total remuneration (base salary + other cash incentives) of female to male (Non-management Level) <sup>(6)</sup>	1.129	0.987	0.965	0.974	0.915		
Employees represented by an independent trade union or covered by collective bargaining agreements <sup>(4)</sup> (%)	88.0	85.6	78.7	84.0	84.9		

Performance Data	2020	2021	2022	2023	2024	<b>GRI Standards</b>	SASE
Absence of employees							
Sick leave (%)	10.6	9.1	10.0	12.0	11.3		
<ul> <li>Work-related leave (%)</li> </ul>	0.1	0.0	0.0	0.0	0.0		
Others (%)	89.3	90.9	90.0	88.0	88.7		
<ul> <li>Number of employees taken parental leave<sup>(5)</sup> (Persons)</li> </ul>	306	250	267	216	175	GRI 401-3	
<ul> <li>Number of employees returned to work after parental leave (Persons)</li> </ul>	303	246	251	200	165		
Number of new employees hire (Persons)	482	854	2,688	3,122	2,298	GRI 401-1a	
Percentage of total employees (%)	1.0	1.5	4.6	5.6	4.3		
• by Gender (Female : Male) (%)	37.0 : 63.0	39.0 : 61.0	44.0 : 56.0	25.0 : 75.0	37.0 : 63.0		
• by Employee level (Management level : Other	1.5 : 98.5	1.3 : 98.7	0.7 : 99.3	0.3 : 99.7	0.3 : 99.7		
level) (%)							
• by Age group (under 30 yr : 30 - 50 yr : over 50 yr) (%)	70.3 : 29.5 : 0.2	74.4 : 25.5 : 0.1	74.4 : 25.5 : 0.1	56.7 : 40.8 : 2.5	70.9 : 28.2 : 0.9		
Number of positions filled by internal candidates						•	
(Rotation/ Promotion) (Persons)	2,012	2,232	11,418	11,156	14,256		
<ul> <li>Percentage of total employees (%)</li> </ul>	4.0	3.8	19.7	34.4	45.9		
• by Gender (Female : Male) (%)	26.0 : 74.0	26.0 : 74.0	30.0:70.0	30.0 : 70.0	30.0 : 70.0		
• by Employee level (Management level : Other	7.9 : 92.1	10.9 : 89.1	21.8 : 78.2	10.0 : 90.0	8.0:92.0		
level) (%)							
• by Age group (under 30 yr : 30 - 50 yr : over 50 yr) (%)	17.4 : 77.5 : 5.1	14.6 : 79.1 : 6.3	12.4 : 75.4 : 12.2	12.0 : 73.0 : 15.0	10.7 : 73.2 : 16.1		
Average hiring cost per employee (Baht/Person)	98,140	85,542	95,720	87,975	75,934		

#### NA = Not Available

- (1) Revenue-generating functions e.g. marketing, sales, production
- (2) Calculate from number of local Management Level abroad over total number of management level
- <sup>(3)</sup> Visual and physical impairment and movement disability or other, e.g. hearing impairment, mental disability, communication disability
- (4) Employees joining trade union or working with companies covered by Welfare Committee
- (5) Under Thai laws, only female employees can take parental leave
- (6) Within SGS's limited assurance scope (Page 92-94) and the definition of executive level was revised in 2024.
- $^{*}$  In 2024, the survey is according to Gallup Methodology with 1 to 5 rating scale.

Performance Data	2020	2021	2022	2023	2024	GRI Standards	SASB
Voluntary employee turnover (Persons)	1,180	849	2,304	2,622	4,011	GRI 401-1b	
<ul> <li>Percentage of total employees (%)</li> </ul>	2.4	1.5	4.0	4.7	7.5		
• by Gender (Female : Male) (%)	27.0 : 73.0	29.0 : 71 .0	35.0 : 65.0	36.0 : 64.0	26.0 : 74.0		
<ul> <li>by Employee level (Management level : Other level) (%)</li> </ul>	2.6 : 97.4	3.3 : 96.7	1.0 : 99.0	1.7 : 98.3	0.8:99.2		
• by Age group (under 30 yr : 30 - 50 yr : over 50 yr) (%)	24.8 : 64.3 : 10.9	27.0 : 68.9 : 4.1	38.4 : 57.3 : 4.3	36.2 : 58.7 : 5.1	31.1 : 62.3 : 6.6		
Total employee turnover (Persons)	1,804	1,323	3,575	4,074	4,540	GRI 401-1b	
<ul> <li>Percentage of total employees (%)</li> </ul>	3.6	2.3	6.2	7.3	8.4		
• by Gender (Female : Male) (%)	23.0 : 77.0	27.0 : 73.0	40.0:60.0	36.0 : 64.0	25.0 : 75.0		
<ul> <li>by Employee level (Management level : Other level) (%)</li> </ul>	5.4 : 94.6	5.5 : 94.5	6.0 : 94.0	1.6 : 98.4	1.8 : 98.2		
<ul> <li>by Age group (under 30 yr : 30 - 50 yr : over 50 yr) (%)</li> </ul>	17.3 : 53.5 : 29.2	18.4 : 57.3 : 24.3	34.8 : 52.1 : 13.1	28.0 : 49.1 : 22.9	23.2 : 55.8 : 21.0		
Employee engagement level (%)	71	70	69	69	4.00*		
• by Gender (Female : Male) (%)	66:73	64:72	59:72	61:72	3.98 : 4.01*		
• by Employee level (Management level : Other level) (%)	76:71	74:69	68:69	65:69	4.03 : 4.00*		
<ul> <li>by Service year (under 5 yr / 5-20 yr / over 20 yr ) (%)</li> </ul>	67:68:79	64:67:77	68:66:75	69:68:72	4.07:3.99:3.99*		
• by Nationality (Thai : Others) (%)	70 : 76	69 : 74	66 : 77	64 : 81	3.92 : 4.17*		
Employee satisfaction level (%)	NA	NA	NA	65	4.23*	-	
• by Gender (Female : Male) (%)	NA	NA	NA	59:68	4.18 : 4.25*		
• by Employee level (Management level : Other level) (%)	NA	NA	NA	58:66	4.25 : 4.23*		
• by Service year (under 5 yr / 5-20 yr / over 20 yr ) (%)	NA	NA	NA	69:65:64	4.15 : 4.20 : 4.35*		
• by Nationality (Thai : Others) (%)	NA	NA	NA	59:79	4.24 : 4.22*		
Average hours of training and development (Hours/Person)	124	82	155	129	121	GRI 404-1	
Mandatory (Hours/Person)	104	42	112	110	109		
Non mandatory (Hours/Person)	20	40	43	19	12		
Average amount spent on training and development	45.704	0.500	12.540	42.005	44.024		
(Baht/Person)	15,794	9,569	13,540	13,905	14,931		
Number of sites where human rights risks have been identified	24	F0.	22	40	46	-	
with mitigation plans (Company)	34	50	33	49	46		
Reduce Inequality (Persons)	NA	3,000	8,746	20,997	24,543		
Contribution for social and community development (Million Baht)	669	700	560	397	381	GRI 201-1	
Contribution by SCG (Million Baht)	326	388	401	268	256		
Contribution by SCG Foundation (Million Baht)	343	312	159	129	125		
Employee volunteering during paid working hours (Million Baht)	40	28	54	56	44		
In-kind giving: product or services donations,	124	147	15	9	9		
projects/partnerships or similar (Million Baht)	124	147	IS	9	9		
Management overheads related to CSR activity (Million Baht)	167	157	161	141	131	•	

#### NA = Not Available

<sup>(1)</sup> Revenue-generating functions e.g. marketing, sales, production

<sup>(2)</sup> Calculate from number of local Management Level abroad over total number of management level

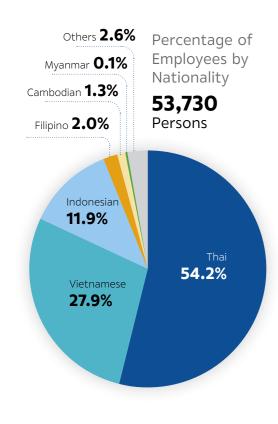
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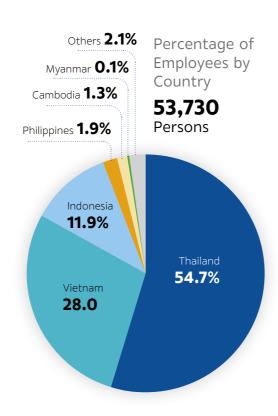
<sup>(4)</sup> Employees joining trade union or working with companies covered by Welfare Committee

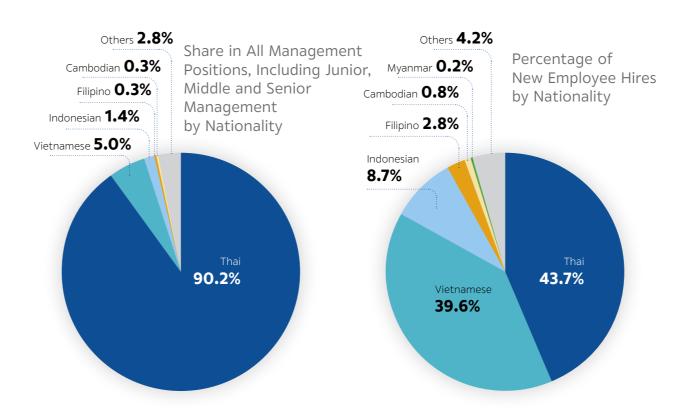
<sup>&</sup>lt;sup>(5)</sup> Under Thai laws, only female employees can take parental leave

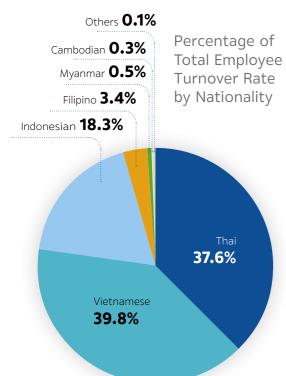
<sup>(6)</sup> Within SGS's limited assurance scope (Page 92-94) and the definition of executive level was revised in 2024.

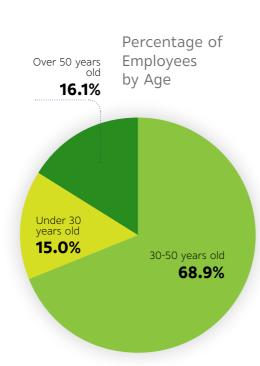
 $<sup>^{\</sup>ast}$  In 2024, the survey is according to Gallup Methodology with 1 to 5 rating scale.











# Operating Results of Cement Business in Accordance with Accordance Global Cement and Concrete Association (GCCA)

	Unit	2020	2021	2022(1)	2023	2024
Number of facilities adopting GCCA Cement	number of factory	6	16 <sup>(1)</sup>	16	16	16
CO <sub>2</sub> Protocol	%	100	100(1)	100	100	100
Absolute CO <sub>2</sub> emissions-Gross	million tons of CO <sub>2</sub>	15.49	21.15 <sup>(1)</sup>	19.35	17.13	16.20
Absolute CO <sub>2</sub> emissions-Net	million tons of CO <sub>2</sub>	15.15	20.61(1)	18.79	16.43	15.29
Specific CO <sub>2</sub> emissions-Gross	kgCO <sub>2</sub> /ton Cementitious	630	639 <sup>(1)</sup>	612	592	570
Specific CO <sub>2</sub> emissions-Net	kgCO <sub>2</sub> /ton Cementitious	616	623 <sup>(1)</sup>	594	568	539
Heat Consumption	MJ/ton clinker	3,448	3,466(1)	3,567	3,655	3,777
Alternative fossil fuel	% by heat	6.6	7.7 <sup>(1)</sup>	9.1	11.7	15.1
Biomass	% by heat	11.7	12.21 <sup>(1)</sup>	17.8	23.8	28.5
Alternative raw material in clinker produced	%	1.5	12.21	2.0	1.2	0.9
Alternative raw material in cement produced	%	8.4	8.4	10.1	7.3	7.6
Total alternative raw material	%	3.4	3.5	4.4	3.1	3.1
Clinker factor (cementitous)	%	72.9	74.2(1)	71.8	71.2	69.3
Clinker produced with monitoring of Dust, NO <sub>x</sub> , SO <sub>2</sub> , VOC/THC, Heavy Metal, PCDD/F (KPI1)	%	99.41	99.41	57.32	50.94	65.37
Clinker produced using CEMs measurement of Dust, NO <sub>x</sub> and SO <sub>2</sub> emissions (KPI2)	%	95.82	80.97	59.74	56.61	49.82
Dust emissions (KPI3)	tons	794	807	1,197	1,064	1,030
Specific dust emissions (KPI3)	g/ton clinker	42	44	50	52	50
NO <sub>x</sub> emissions (KPI3)	tons	26,406	29,680	33,641	27,054	25,453
Specific NOx emissions (KPI3)	g/ton clinker	1,409	1,632	1,416	1,335	1,236
SO <sub>2</sub> emissions (KPI3)	tons	992	1,035	1,351	1,059	934
Specific SO <sub>2</sub> emissions (KPI3)	g/ton clinker	53	57	57	52	45
Clinker produced with monitoring of Dust, NO <sub>x</sub> , SO <sub>2</sub> (KPI4)	%	100	100	100	100	100
VOC/THC emissions (KPI3) <sup>(4)</sup>	tons	385	430	291	336	515
Specific VOC/THC (KPI3) <sup>(4)</sup>	g/ton clinker	21	24	18	22	25
Mercury emissions (KPI3) <sup>(4)</sup>	kg	32.95	29.51	10.24	11.34	19.36
Specific Mercury emissions (KPI3)	mg/ton clinker	1.72	1.63	0.62	0.74	1.28
Clinker produced with monitoring of VOC/THC and Mercury (KPI4) <sup>(4)</sup>	%	99.41	99.41	99.30	99.30	99.21
Dioxin emission (PCDD/F) (KPI3) <sup>(4)</sup>	mg	89	99	128	158	110
Specific Dioxin (PCDD/F) (KPI3)(4)	ng/ton clinker	5.54	5.47	7.76	10.28	7.32
Clinker produced with monitoring of Dioxin (PCDD/F) (KPI4) <sup>(4)</sup>	%	99.41	76.10	82.16	99.30	88.59

	Unit	2020	2021	2022(1)	2023	2024
HM1 emission <sup>(2),(4)</sup>	kg	NA	23.41	40.79	25.86	17.84
Specific HM1 emission <sup>(2),(4)</sup>	mg/ton clinker	NA	1.29	2.48	1.69	1.18
HM2 emission <sup>(3),(4)</sup>	kg	NA	527.94	892.25	1,654.05	295.99
Specific HM2 emission <sup>(3),(4)</sup>	mg/ton clinker	NA	29.2	54.22	107.96	19.63
Quarries where rehabilitation plan	number of site	4	4	11	11	11
is implemented	%	100	100	100	100	100
Quarries with community engagement plan in place	%	100	100	100	100	100
Quarries with high biodiversity value	number of site	4	4	4	4	4
where biodiversity management plan is implemented	%	100	100	36	36	36
Total water withdrawal	million cubic meter	10.28	9.89	13.04	12.22	11.99
Specific water withdrawal	liter/ton cementitious	418	413	412	423	422
Health and Safety						
Number of Fatality Work-Related Injury (From Workplace and Transportation) - Employee	cases	0	0	1	0	1
- Contractor	cases	5	3	3	4	4
- Third party	cases	1	2	0	0	4
Fatality Work-Related Injury Rate of Employee	cases/10,000 employees	0	0	1.142	0.000	1.342
Lost Time Injury Frequency Rate of Employee	cases/1,000,000 hours worked	0.16	0.076	0.114	0.396	0.000
Lost time injury frenquency rate of workplace contractor	cases/1,000,000 hours worked	0.06	0.124	0.187	0.213	0.168
Severity Work-Related Injury Rate of Employee	days/1,000,000 hours worked	0.98	3.058	2.055	15.833	0.000

Within SGS Thailand limited assurance scope (Page 92-94)

NA = Not Available

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

<sup>(2)</sup> HM1 included Cadmium (Cd) and Thallium (Tl)

<sup>(</sup>S) HM2 included Antimony (Sb), Arsenic (As), Lead (Pb), Chromium (Cr), Cobalt (Co), Copper (Cu), Manganese (Mn), Nickel (Ni), and Vanadium (V)

<sup>(4)</sup> Required to monitor and measure by Thailand regulation

# Mitigation Actions on Salient Human Right Issues in 2024 of SCG

Carry out the Human Rights due diligence process covering every activity of SCG's business across the value chain, including suppliers and contractors, new investments, and mergers and partnership, through stakeholder engagement. Mitigation measures are established and continuously monitored to ensure their effectiveness, with remediation actions in place in case of violations. In 2024, salient human rights issues and mitigation actions are as follows.

Scope	Salient Human Rights Issues	People Affected and Number of Companies	Mitigation and Remediation Actions	Result Monitoring
SCG's Own Operations	Health and Safety Lost time and fatality, injury, and occupational illness & disease	in subsidiaries (297 companies)	<ul> <li>Level up the implementation of SCG Safety Framework and occupational health and safety standards in practice, both in Thailand and abroad.</li> <li>Monitor performance both lagging and leading indicator, such as near-miss incidents, unsafe actions or conditions. Conduct root cause analysis to determine corrective and preventive measures, scale up best practices, and ensure swift communication of lesson learned to strengthen prevention in Thailand and abroad.</li> <li>Measure health and safety performance by mandating it as part of Safety Performance Management System evaluation from supervisory levels up to all executive levels.</li> <li>Apply digital technology to strengthen effectiveness and level up occupational health and safety management, in line with business growth and transformation such as Health Management system, OHS dashboard, and a digital platform for high-risk work permits.</li> <li>Manage fire risk systematically and level up fire drill with external parties for maximum readiness.</li> <li>Promote and instill safety culture continuously focusing on awareness raising and enhance participation of all level including on site inspection aiming to seek and correct unsafe behavior in order to reduce work-related injury, and occupational illness and disease.</li> </ul>	<ul> <li>100% of SCG's plants/ subsidiaries within the scope of assessment passed the SPAP assessment.</li> <li>3 subsidiary companies reported fatality work-related injury or occupational illness &amp; disease.</li> <li>18 subsidiary companies reported lost time work-related injury or occupational illness &amp; disease.</li> </ul>
Operations of Contractors and Suppliers	Health and Safety     Lost time injury     and fatality     in workplace     and direct     transportation	carriers (992 companies)	<ul> <li>Expand traveling and transportation safety measures to abroad with promulgation of Good Transportation Safety for Abroad rules in Vietnam, Indonesia, Laos, and Cambodia.</li> <li>Implement a system for tracking and monitoring drivers' behavior in both transportation vehicles and company's vehicles through GPS Alarm, Alert, and traffic ticket tracking, to analyze and modify driving behaviors towards safer driving.</li> <li>Regulate the working and resting hours of drivers through Delivery Plan or Work Schedule, and limit overtime hours to minimize risks caused by fatigue (Fatigue Management).</li> <li>Scale up the good practices of Operational Discipline (OD) across all business units.</li> <li>Establish an accident investigation committee, with representatives from each business unit, to conduct Root Cause Analysis, implement corrective and preventive measures, and expand these measures across companies to elevate safety standards organization-wide.</li> </ul>	<ul> <li>86% of operation contractors certified under Contractor Safety Management.</li> <li>100% of major carriers have assessed.</li> <li>8 contractors/carriers reported fatality work-related injury.</li> <li>23 contractors/carriers reported lost time work-related injury.</li> </ul>

## SCG continues to monitor the effectiveness of mitigation actions of other human rights issues which fall outside of the salient human rights issues.

Scope	Other Human Rights Issues	People Affected and Number of Companies	Mitigation and Remediation Actions	Result Monitoring
SCG's Own Operations	• Employment • Conditions		ensure suitability across different job positions.	4% of employee engagement rate based on the total number of employees.
SCG's	Migrant Workers' • Rights	in subsidiaries (297 companies)	<ul> <li>Facilitate knowledge and best practices sharing in migrant workers management among business units.</li> <li>Conduct communication and knowledge sharing by issuing notifications, regulations, and guidelines in migrant workers' native languages and providing interpreters for clearer understanding.</li> <li>Ensure no discrimination in employment, development, care, and retention of migrant workers, such as providing fair compensation and health check-ups.</li> <li>Establish skill development for migrant workers under the same standards and promote their career progression.</li> <li>Conduct assessments in compliance with 'the Sedex Members Ethical Trade Audit (SEDEX)' in four aspects: labor standards, health and safety, business ethics, and environment.</li> </ul>	6 subsidiary companies passed the audit.
Operations of Contractors/ Suppliers	Employment     Conditions      Migrant Workers' • Rights	(9,506 companies)	<ul> <li>Conduct assessments of pilot contractors and suppliers on human rights to enhance execution and establish collaborative improvement plans.</li> <li>Conduct annual ESG Risk assessments for suppliers/contractors that include an assessment of human rights aspects.</li> <li>Provide supervision to oversee new and major suppliers/contractors to ensure their continuous commitment to complying with the Supplier Code of Conduct.</li> <li>Provide communication channels for receiving feedback and conduct assessments and follow-ups on improvement actions for suppliers/contractors through the Supplier Portal platform.</li> </ul>	<ul> <li>97% of suppliers/contractors with procurement spend demonstrated their commitment to complying with the SCG Supplier Code of Conduct.</li> <li>100% of suppliers/contractors with procurement spend exceeding one million baht underwent an Environmental, Social, and Governance (ESG Risk) assessment.</li> <li>5 pilot contractors and pilot suppliers underwent human rights assessments.</li> </ul>

## **Supplier Governance and Enhance Towards Sustainability**

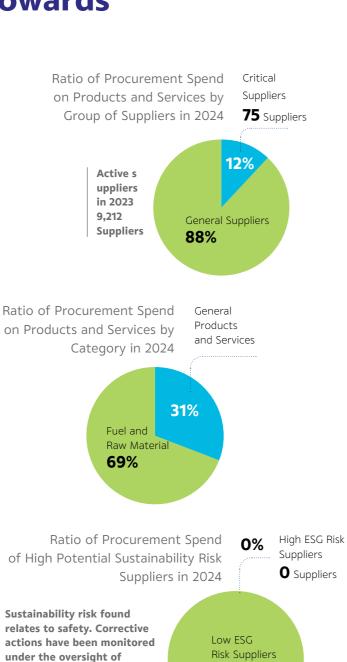
#### **Critical Suppliers**

refer to manufacturers and distributors of products and services that are significant to SCG's business operations, such as high purchasing volume, critical component, or non-substitutable products.

#### High Potential Sustainability (ESG) Risk Suppliers

refer to manufacturers and distributors that are likely to cause negative impacts from their improper

operations in the social (e.g. human rights, employee and labor care), environment (e.g. waste management) and governance (e.g. legal compliance) aspects.



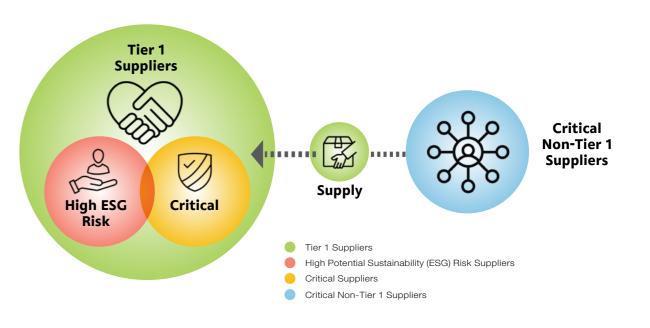
100%

**Sustainable Supplier** 

Safety Committee.

**Committee and Transportation** 





#### **Supplier Development Plan to Mitigate Sustainability Risks**

Strategy & Risk Management

Sustainability Risk	Number	Example of Development Plan
Environmental Risk	19	Decarbonization Program: Conducting workshops for key suppliers involved in the production process, focusing on those with a significant impact on greenhouse gas emissions.
Human Rights Risk	5	Enhancing human rights due diligence processes for suppliers, with a focus on high-risk sectors such as labor-intensive industries.
Occupational Health and Safety Risk	80	Conducting training on safety standards and presenting safety awards to promote and enhance the efficiency and safety of suppliers' operations.

	Strategy	Implementation	Measurement	2020	2021	2022	2023	2024	Target
	<ul> <li>Select and assess suppliers with the capability for sustainable business.</li> </ul>	Evaluate vendors in terms of quality, cost and delivery (QCD Supplier Evaluation).	<ul> <li>Evaluate suppliers under Approved Vendor List (AVL) with vendor evaluation (QCD Supplier Evaluation)</li> </ul>	100%	100%	100%	100%	100%	100% suppliers under Approved Vendor List (AVL) receive vendor evaluation (QCD Supplier Evaluation).
Economic	<ul> <li>Conduct risk assessment and supplier segmentation to formulate strategy</li> </ul>	<ul> <li>Conduct a supplier assessment program and segmentation of critical suppliers with a systematic approach.</li> </ul>	and segmentation of spend spen		100% procurement spend	100% procurement spend	100% procurement spend	100% procurement spend	
	and supplier development plan corresponding with the risk.	Conduct sustainability risk assessment and supplier segmentation since 2013.	<ul> <li>Assess sustainability risks (ESG Risk).</li> </ul>	100% procurement spend	100% procurement spend	100% procurement spend	100% procurement spend	100% procurement spend	100% supplier of procurement spend processed through the annual Environmental, Social, and Governance (ESG) assessment.
	Develop     and enhance	Promote and audit suppliers for registration	Green procurement and products	8,579 million baht	9,548 million baht	9,176 million baht	9,726 million baht	8,183 million baht	-
Environment	supplier's capability towards sustainability.	Procurement List. Procurement List. 84 Purchase products and services according to the Green Procurement List. 100%.  Promote and support • Suppliers achieve 458		84 products	92 products	95 products	94 products	95 products	
				1.	481 suppliers	752 suppliers	481 suppliers	515 suppliers	-
	Develop and enhance supplier's capability towards sustainability.	<ul> <li>Raise awareness and behavioral change to create safety culture.</li> <li>Use safety management system to uplift contractors safety standard.</li> <li>Having contractors</li> </ul>		95%	85%	90%	89%	86%	100% Operation contractors certified under Contractor Safety Management every year from 2012 onwards.
Social		informed and signed for Life Saving Rules in every access for work.	<ul> <li>Major carriers processed through Fleet Carriers Standards assessment.</li> </ul>	100%	100%	100%	100%	100%	100% major carriers processed through Fleet Carriers Standards assessment.
			Lost Time Injury     Frequency Rate     (LTIFR) for     contractors.	0.216 cases/ 1,000,000 Hours Worked	0.249 <sup>(2)</sup> cases/ 1,000,000 Hours Worked	0.276 cases/ 1,000,000 Hours Worked	0.231 cases/ 1,000,000 Hours Worked	0.205 cases/ 1,000,000 Hours Worked	Reduce Lost Time Injury Frequency Rate of contractors and target for zero by 2024.

	Strategy	Implementation	Measurement	2020	2021	2022	2023	2024	Target
Governance	Select and assess suppliers with the capability for sustainable business.	<ul> <li>Launched SCG         Supplier Code         of Conduct in 2013         and updated the latest         version in 2022.</li> <li>Started supervising         new and main suppliers         to commit to comply         SCG Supplier Code         of Conduct continuously         since 2014.</li> </ul>	Suppliers     committed to     comply with     SCG Supplier     Code of     Conduct.	91% procurement spend	93% procurement spend	94% procurement spend	94% procurement spend	97% procurement spend	95% of the procurement spend comes from suppliers who commit to comply with SCG Supplier Code of Conduct by 2023.

<sup>(1)</sup> Green Industry: certification developed by the Ministry of Industry (Thailand) to encourage the industrial sector to operate a green business for sustainable development.

<sup>(2) 1</sup>st year to incorporate performance from abroad operations

## Subsidiaries included in Sustainability Report 2024\* (Thailand)

		5		v Mater	rials					E	nviro	nmer	nt						<u> </u>
	Business/Company	Production	Total wmaterial	Raw Mat Recycled	Raw Mat Renewable	Ene	rgy		А	ir				Wate	r			Safety	Occupational Illness
		ď	Rawn	Rav	Rav	Thermal	Electrical	Dust	SO <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	, , , , , , , , , , , , , , , , , , ,	ŏ
1	The Siam Cement Public Company Limited																		
	SCG Cement and Green Solutions (CGS)																		
1	SCG Cement Co., Ltd.																	✓	✓
2	The Concrete Products and Aggregate Co., Ltd.	✓	✓	✓	✓	NR	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓
3	The Siam Cement (Kaeng Khoi) Co.,Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓
4	The Siam Cement (Ta Luang) Co., Ltd. (Ta Luang /Khao Wong)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓
5	The Siam Cement (Thung Song) Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓
6	The Siam Cement (Lampang) Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓
7	The Siam Refractory Industry Co., Ltd.	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	NR	✓	✓	✓
8	Eco Plant Services Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓
9	SCI Eco Services Co., Ltd.	✓	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓	NR	NR	NR	NR	<b>✓</b>	✓	✓
10	Q Mix Supply Co., Ltd.	✓	✓	✓	NR	✓	✓	NR	NR	NR	NR	✓	NR	NR	NR	NR	NR	✓	✓
11	Silathai Sanguan (2540) Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓
12	Silasanon Co., Ltd.	✓	✓	✓	NR	NR	✓	✓	NR	NR	NR	NR	✓	NR	NR	NR	NR	✓	✓
13	CPAC Construction Solution Co., Ltd.																	✓	✓
14	Green Conservation Solution Co., Ltd.																	<b>√</b>	<b>✓</b>
	SCG Smart Living and SCG Distribution and Retail (SL and D&R)																		
1	Cementhai Gypsum Co., Ltd.																		
2	MRC Roofing Co., Ltd.																		
3	The Siam Fibre-Cement Co., Ltd.																	✓	✓
4	Siam Fibre Cement Group Co., Ltd. (Saraburi/Ta Luang/Thung Song/ Nongkae/Lumpang)	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	SCG Landscape Co., Ltd. (Khonkaen/Thung Song/Ladkrabang/Lamphun/Sriracha/Nongkae/Fence)	✓	NR	NR	NR	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓
6	Siam Fiberglass Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
7	SCG Roofing Co., Ltd. (Saraburi/Saraburi Nuestile/Nakorn Prathom/Chonburi/Nakorn Rajchasrima/Lamphun/Khonkaen/Nakorn Sri Thammaraj/Nongkae)	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	SCG Cement-Building Materials Company Limited																	✓	✓
9	SCG Distribution Co., Ltd.																	✓	✓
10	SCG International Corporation Co., Ltd.																	✓	✓
11	SCG Building and Living Care Consulting Co., Ltd.																	✓	✓
12	Nexter Living Co., Ltd.																	✓	✓
13	Nexter Digital and Solution Co., Ltd.																	✓	✓

		5		w Mater						E	Enviro	nmer	nt						le u
	Business/Company	Production	Total Rawmaterial	Raw Mat Recycled	Raw Mat Renewable	Ene	rgy		A	ir				Water	r		ste	Safety	Occupational Illness
		ů	Rav	2 2	Re R	Thermal	Electrical	Dust	so <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste		ŏ
14	SCG Living and Housing Solution Co., Ltd.																	✓	✓
15	SCG Experience Co., Ltd.																	✓	✓
16	SCG Retail Holding Co., Ltd.																		
17	Saraburirat Co., Ltd.	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓
18	SCG Home Retail Co., Ltd.																	✓	✓
19	SUSUNN Smart Solution Co., Ltd.																	✓	✓
20	SCGT Automobile Co., Ltd.																	✓	✓
21	Quality Construction Products Public Company Limited (Bang Pa-In/ Nong Kae)	<b>✓</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	NR	<b>✓</b>	✓	✓
22	Q-Con Eastern Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	NR	NR	NR	NR	NR	✓	✓	✓
23	Innovate Al Co., Ltd.																		
24	Panel World Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	NR	NR	✓	✓
25	SCG-Sekisui Sales Co., Ltd.																	✓	✓
26	Zifisense Asia Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
27	SCG-Boonthavorn Holding Co., Ltd.																		
28	Thai Sunny Co., Ltd.																		
29	QCHANG TECHNOLOGY Company Limited																		
	SCG Decor (SCGD)																		
1	SCG Decor Public Company Limited																	✓	✓
2	The Siam Sanitary Fittings Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
3	Siam Sanitary Ware Co., Ltd.																	✓	✓
4	Siam Sanitary Ware Industry Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
5	Siam Sanitary Ware Industry (Nongkae) Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
6	SCG Ceramics Public Company Limited (HK plant/NK1 plant/NKIE plant)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	Sosuco Ceramic Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
	SCG Chemicals (SCGC)																		
1	SCG Chemicals Public Company Limited	NR	NR	NR	NR				NR	NR	NR	NR			NR	NR	NR	✓	✓
2	Rayong Engineering & Plant Service Co., Ltd.	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓
3	Protech Outsourcing Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓
4	Repco Maintenance Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓
5	Texplore Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓
6	Vina SCG Chemicals Co., Ltd.																		
7	WTE Company Limited																		
8	SMH Co., Ltd.																		
9	Total Plant Service Co., Ltd.																		
10	Rayong Pipeline Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓

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**Governance for Sustainable Growth** Strategy & Risk Management Road to Inclusive Green Growth Performance

		_		v Mater	ials						Enviro	nmer	nt						-
	Business/Company	Production	Total Rawmaterial	Raw Mat Recycled	Mat vable	Ene	ergy		А	ir				Wate	r			Safety	Occupational Illness
		Pr	To	Raw	Raw Mat Renewable	Thermal	Electrical	Dust	SO <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	Ŋ	000
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	✓	✓
13	SENFI Ventures Company Limited																		
14	Thai Polyethylene Co., Ltd.	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	RIL 1996 Co., Ltd.	NR	NR	NR	NR	NR	✓	NR	NR	NR	✓	NR	NR	✓	✓	✓	✓	✓	✓
16	Thai Plastic and Chemicals Public Company Limited	✓	✓	✓	✓	✓	✓	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	TPC Paste Resin Co., Ltd.	✓	✓	✓	✓	✓	✓	NR	NR	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓
18	Nawaplastic Industries Co., Ltd. (Rayong/ Saraburi)	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	NR	✓	✓	✓	✓	✓	✓	✓
19	Nawa Intertech Co., Ltd.	NR	✓	✓	✓	✓	✓	NR	NR	NR	✓	NR	NR	NR	NR	NR	✓	✓	✓
20	SCG ICO Polymers Company Limited	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓	NR	NR	NR	✓	✓	✓
21	Map Ta Phut Tank Terminal Co., Ltd.	NR	NR	NR	NR	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓
22	Rayong Olefins Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
23	Map Ta Phut Olefins Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
24	Circular Plas Company Limited	✓	✓	✓	✓	✓	✓	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25	Teamplas Chemical Company Limited																		
26	Teamplas Circular Solutions Company Limited																		
27	Teamplas R&D Company Limited																		
	SCGP																		
1	SCG Packaging Public Company Limited																	✓	✓
2	SKIC International Co., Ltd.)																		
3	Siam Kraft Industry Co., Ltd. (Kanchanaburi, Ratchaburi)	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Vexcel Pack Co., Ltd.	✓	NR	NR	NR	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	NR	✓	✓
5	Precision Print Co., Ltd.	✓	NR	NR	NR	✓	✓	NR	NR	NR	✓	✓	NR	✓	✓	✓	✓	✓	✓
6	Invenique Co., Ltd.																		
7	SCGP Excellence Training Center Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓
8	SCG Paper Energy Co., Ltd.	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓
9	SCGP Solutions Co., Ltd.																		
10	SCGP Rigid Plastics Co., Ltd.																		
11	International Healthcare Packaging Co., Ltd.																		
12	Thai Cane Paper Public Company Limited (Kanchanaburi, Prachinburi)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	Thai Containers Group Co., Ltd. (Navanakorn, Ratchaburi, Samut Prakarn, Pathumthani, Songkhla, Chonburi, Prachinburi, Saraburi, Kamphaeng Phet)	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	Thai Containers Khonkaen Co., Ltd.	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	✓	✓
15	Thai Containers Rayong Co., Ltd.	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
16	Orient Containers Co., Ltd. (Samutsakorn, Omnoi, Nakorn Pathom)	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
17	Phoenix Pulp & Paper Public Company Limited	<b>√</b>	<b>√</b>	NR	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>

		e	Rav	v Mater						E	nviro	nmei	nt						<u>-</u>
	Business/Company	Production	Total Rawmaterial	Raw Mat Recycled	Raw Mat Renewable	Ene	rgy		А	ir				Wate	r		o o	Safety	Occupational Illness
		ž	Rawm	Raw	Raw	Thermal	Electrical	Dust	so <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	S	000
18	Thai Paper Co., Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
19	The Siam Forestry Co., Ltd.	✓	NR	NR	NR	✓	✓	NR	NR	NR	✓	NR	NR	NR	NR	NR	NR	✓	✓
20	Panas Nimit Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
21	Thai Panason Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
22	Thai Panadorn Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
23	Thai Panaram Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
24	Suanpa Rungsaris Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
25	Siam Panawes Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
26	Thai Panaboon Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
27	Thai Wanabhum Co., Ltd.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
28	Prepack Thailand Co., Ltd. (Samutsakorn, Samut Songkhram, Rayong)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
29	TC Flexible Packaging Co., Ltd.																		
30	SCGP-T Plastics Co., Ltd.																		
31	Tawana Container Co., Ltd.	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
32	Conimex Co., Ltd.	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓
33	VEM (Thailand) Co., Ltd.																		
34	Packworks Co., Ltd.																		
35	Siam Nippon Industrial Paper Co., Ltd.																		
36	Sahagreen Forest Co., Ltd.																		
	Others																		
1	Cementhai Holding Co., Ltd.																		
2	Cementhai Property (2001) Public Company Limited																		
3	Property Value Plus Co., Ltd.																		
4	SCG Accounting Services Co., Ltd.																		
5	SCG Legal Counsel Limited																		
6	CTO Management Co., Ltd.																		
7	SCG Cleanergy Co., Ltd.																	✓	<b>✓</b>
8	Jieng Cleanergy Co., Ltd.																		
9	T-Volt Co., Ltd.																		
10	NP Watt Co., Ltd.																		
11	CN Watt Co., Ltd.																		
12	BNN Energy Co., Ltd.																		
13	SCG Learning Excellence Co., Ltd.																		



		_		w Mate	rials						Enviro	nmer	nt						-
	Business/Company	Production	Total Rawmaterial	Raw Mat Recycled	Raw Mat Renewable	Ene	ergy		А	ir				Wate	r		0	Safety	Occupational Illness
		Ě	Rawm	Rav	Rav	Thermal	Electrical	Dust	so <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	0,	000
14	Add Ventures Capital International Co., Ltd.																		
15	A.I. Technology Co., Ltd.																		
16	Add Ventures Capital Co., Ltd.																		
17	SCG HR Solutions Co., Ltd.																		
18	Bangsue Industry Co., Ltd.																		
19	Cleanergy ABP Co., Ltd.																		
20	SCG Cleanergy Inter Holding Co.,Ltd.																		
21	Siam GNE Solar Energy Co., Ltd.																		
22	BIT Innovation Company Limited																		
23	SCG Marketplace Holding Company Limited																		
24	Nexter Ventures Co., Ltd.																		
25	Greenvolt Co., Ltd.																		
26	Mega Lux Co., Ltd.																		
27	SJ Sol Co., Ltd.																		
28	Gold Solar Co., Ltd.																		
29	Solar Rich Co., Ltd.																		
30	Sun AS Co., Ltd.																		

<sup>\*</sup> List of subsidiaries company according to One Report 2024

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

Office/Investment/Sales/Service where the collection of environmental, safety and occupational illness 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

## Subsidiaries included in Sustainability Report 2024\* (Abroad)

				Rav	w Mate	rials						nviro	nmer	nt						_
	Business/Company	Country	Production	al	Mat	Raw Mat Renewable	Ene	rav		А	ir				Wate	r			Safety	Occupational Illness
	Dasiness, company	8	Pro	Total Rawmaterial	Raw Mat Recycled	Raw		Electrical	Dust	SO,	NO,	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	S	Occup
	SCG Cement and Green Solutions (CGS)																			
1	Khammouane Cement Co., Ltd.	Lao PDR	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	NR	✓	✓
2	PT SCG Pipe and Precast Indonesia	Indonesia	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	NR	NR	✓	✓
3	PT Semen Lebak	Indonesia	<b>✓</b>	NR	NR	NR	✓	<b>✓</b>	NR	NR	NR	✓	<b>✓</b>	NR	NR	NR	NR	<b>✓</b>	✓	<b>✓</b>
4	PT SCG Readymix Indonesia	Indonesia	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
5	PT CPAC Surabaya	Indonesia	<b>✓</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR	<b>✓</b>	NR	NR	NR	NR	<b>✓</b>	✓	<b>√</b>
6	Vietnam Construction Materials Joint Stock Company	Vietnam																		
7	Song Gianh Cement Joint Stock Company	Vietnam	<b>√</b>	NR	NR	NR	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	NR	NR	NR	<b>√</b>	✓	<b>√</b>
8	Mien Trung Cement One Member Company Limited	Vietnam	<b>√</b>	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
9	Danang Cement One Member Company Limited	Vietnam	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓
10	Phu Yen Cosevco Cement Company Limited	Vietnam	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓
11	Buu Long Industry and Investment Joint Stock Company	Vietnam	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	NR	NR	NR	NR	✓	✓	✓
12	PT Semen Jawa	Indonesia	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
13	Mawlamyine Cement Limited	Myanmar	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
14	Kampot Cement Co., Ltd.	Cambodia	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
15	CPAC Cambodia Co., Ltd.	Cambodia	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	NR	NR	NR	✓	✓	✓
16	SCG Myanmar Concrete and Aggregate Co., Ltd.	Myanmar	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	NR	NR	NR	✓	✓	✓
17	PT Pion Quarry Nusantara	Indonesia	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	NR	NR	NR	NR	NR	✓	✓
18	PT Tambang Semen Sukabumi	Indonesia	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
19	Kampot Land Co., Ltd.	Cambodia																		
	SCG Smart Living and SCG Distribution and Retail (SL and	D&R)																		
1	SCG International Middle East Trading L.L.C	United Arab Emirates																	✓	✓
2	SCG Cement-Building Materials Vietnam Limited Liability Company	Vietnam		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
3	Cementhai Ceramics Philippines Holdings, Inc.	Philippines	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓
4	Cementhai Gypsum (Singapore) Pte. Ltd.	Singapore																		
5	SCG Concrete Roof (Vietnam) Co., Ltd.	Vietnam	✓	✓	NR	NR	✓	✓	✓	NR	NR	NR	✓	NR	NR	NR	NR	✓	✓	✓
6	SCG Concrete Roof (Cambodia) Co., Ltd.	Cambodia	✓	✓	NR	NR	✓	✓	✓	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓
7	PT SCG Lightweight Concrete Indonesia	Indonesia	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	SCG International Australia Pty. Ltd.	Australia																	✓	✓

				Rav	w Mate	rials					-	Enviro	nmei	nt			-			_
	Business/Company	Country	Production	Total Rawmaterial	Raw Mat Recycled	Mat	Ene	ergy		Δ.	lir				Wate	r		0	Safety	Occupational Illness
		ŭ	Pro	To	Raw	Raw Mat Renewable	Thermal	Electrical	Dust	SO <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	v.	0000
9	SCG International China (Guangzhou) Co., Ltd.	China																	✓	✓
10	SCG International Hong Kong Limited	Hong Kong																	✓	✓
11	SCG International (Philippines) Corporation	Philippines																	✓	✓
12	SCG International USA Inc.	USA																	<b>✓</b>	<b>✓</b>
13	PT SCG International Indonesia	Indonesia																	<b>✓</b>	<b>✓</b>
14	SCG International Laos Co., Ltd.	Lao PDR																	<b>✓</b>	✓
15	SCG Marketing Philippines Inc.	Philippines																		
16	SCG International Malaysia Sdn. Bhd.	Malaysia																	<b>✓</b>	<b>✓</b>
17	SCG International (Cambodia) Co., Ltd.	Cambodia																	<b>✓</b>	<b>✓</b>
18	SCG International India Private Limited	India																	<b>✓</b>	<b>✓</b>
19	Unify Smart Tech Joint Stock Company	Vietnam																		
20	Myanmar CBM Services Co., Ltd.	Myanmar																		
21	SCG Home Vietnam Co.,Ltd	Vietnam																		
22	Prime - Ngoi Viet Joint Stock Company	Vietnam	<b>√</b>	<b>√</b>	<b>√</b>	NR	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
23	PT Kokoh Inti Arebama Tbk.	Indonesia																		
24	PT Surya Siam Keramik	Indonesia	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	✓
25	SCG-Boonthavorn (Cambodia) Co., Ltd.	Cambodia																	✓	✓
26	SCG International Bangladesh Company Limited	Bangladesh																	✓	✓
27	Mingalar Motor Co., Ltd.	Myanmar																	✓	✓
28	PT Siam-Indo Gypsum Industry	Indonesia	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
29	PT Siam-Indo Concrete Products	Indonesia	✓	✓	✓	✓	✓	✓	NR	NR	NR	NR	✓	NR	NR	NR	NR	✓	✓	✓
30	SCG Distribution and Retail (Cambodia) Co., Ltd.	Cambodia																		
31	PT Living Platform Indonesia	Indonesia																		
32	SCG International Corporation Vietnam Co., Ltd.	Vietnam																		
33	SCG International Arabia Limited	Saudi Arabia																		
34	PT Karya Makmur Kreasi Prima	Indonesia																		
	SCG Decor (SCGD)																			
1	SCG Ceramics – Ly Heng Chhay (Cambodia) Co., Ltd	Cambodia																		
2	Prime Group Joint Stock Company	Vietnam																	✓	✓
3	Prime Trading, Import and Export One Member Limited Liability Company	Vietnam																	✓	✓
4	Prime Pho Yen Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Prime - Yen Binh Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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			_	_	w Mate	rials						Enviro	nmer	nt						_
	Business/Company	Country	Production	Total Rawmaterial	Raw Mat Recycled	Raw Mat Renewable	Ene	ergy		A	ir				Wate	r			Safety	Occupational Illness
		J	¥.	To	Raw	Raw	Thermal	Electrical	Dust	SO <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	, s	000
6	Prime - Tien Phong Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	Prime - Vinh Phuc Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Prime - Truong Xuan Joint Stock Company	Vietnam	✓	NR	NR	NR	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓
9	Prime Dai An Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	PT KIA Keramik Mas	Indonesia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	PT Keramika Indonesia Assosiasi, Tbk.	Indonesia	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓
12	Prime Dai Viet Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	Prime Thien Phuc Joint Stock Company	Vietnam	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	✓	✓
14	Prime Phong Dien Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	Prime Dai Loc Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	Mariwasa-Siam Ceramics, Inc.	Philippines	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR
17	Prime Hao Phu Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR
18	Prime Dai Quang Joint Stock Company	Vietnam	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
19	V Ceramic Mekong Delta Limited Liability Company	Vietnam																		
	SCG Chemicals (SCGC)																			
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																		
10	Sirplaste - Sociedade Industrial de Recuperados de Plástico, S.A.	Portugal																		
11	REPCO NEX (Vietnam) Company Limited	Vietnam	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
12	Long Son Petrochemicals Co., Ltd.	Vietnam																		
13	Norner AS	Norway																		
14	Norner Research AS	Norway																		
15	PT TPC Indo Plastic and Chemicals	Indonesia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	Chemtech Co., Ltd.	Vietnam	✓	✓	✓	✓	NR	✓	NR	NR	NR	✓	NR	✓	✓	NR	NR	NR	✓	✓
17	Xplore S.R.L.	Italy																		
18	SENFI UK Limited	UK																		

					w Mate	rials					ı	Enviro	nmei	nt						<u>-</u>
	Business/Company	Country	Production	Total Rawmaterial	Raw Mat Recycled	Raw Mat Renewable	Ene	ergy		A	lir				Wate	r		ä	Safety	Occupational Illness
			•	Raw	Ra	Ra	Thermal	Electrical	Dust	so <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste		ŏ
19	Grand Nawaplastic Myanmar Co., Ltd.	Myanmar																		
20	Viet-Thai Plastchem Co., Ltd.	Vietnam																		
21	TPC Vina Plastic and Chemical Corporation Ltd.	Vietnam																		
22	Nawaplastic (Cambodia) Co., Ltd.	Cambodia																		
23	Binh Minh Plastics Joint Stock Company	Vietnam																		
24	North Binh Minh Plastics Limited Company	Vietnam																		
25	PT Berjaya Nawaplastic Indonesia	Indonesia																		
26	SCG Chemicals Trading Singapore Pte.Ltd.	Singapore																		
27	SCG Chemicals (Singapore) Pte. Ltd.	Singapore																		
28	Tuban Petrochemicals Pte. Ltd.	Singapore	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
29	Hexagon International, Inc.	USA																		
30	SENFI Norway AS	Norway																		
31	SCGN AS	Norway																		
32	SENFI Swiss GmbH	Switzerland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
33	PT Nusantara Polymer Solutions	Indonesia	✓	✓	✓	✓	NR	✓	NR	NR	NR	✓	NR	✓	✓	NR	NR	NR	✓	✓
34	REKS LLC	Kosovo																		
35	Teamplus Chemical Japan Company Limited	Japan																		
	SCGP																			
1	Jordan Trading Inc.	USA																		
2	Peute Recycling B.V.	The Netherlands																		
3	Peute Papierrecycling B.V.	The Netherlands																		
4	Peute Plasticrecycling B.V.	The Netherlands																		
5	Peute Recycling International B.V.	The Netherlands																		
6	Peute Portugal, Unipessoal Lda	Portugal																		
7	Peute Recycling Spain S.L.	Spain																		
8	Peute Investments B.V.	The Netherlands																		
9	Infiniplast B.V.	The Netherlands																		
10	Go-Pak UK Limited	United Kingdom																		✓
11	Go-Pak Vietnam Limited	Vietnam																	✓	✓
12	Go-Pak Paper Products Vietnam Co., Ltd.	Vietnam																	✓	✓
13	SCGP Solutions (Singapore) Pte. Ltd.	Singapore																		

				Rav	w Mater	rials						Enviro	nmei	nt						-
	Business/Company	Country	Production	Total Rawmaterial	Raw Mat Recycled	Raw Mat Renewable	Ene	ergy		А	ir				Wate	r			Safety	Occupational Illness
		J	F.	To	Raw	Raw	Thermal	Electrical	Dust	so <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste	S	000
14	SCGP Rigid Packaging Solutions Pte. Ltd.	Singapore																		
15	Deltalab Global, S.L.	Spain																		
16	Deltalab, S.L.	Spain																		
17	Keylab, S.L.U.	Spain	✓	NR	NR	NR	NR	✓	NR	NR	NR	✓	NR	NR	NR	NR	NR	NR	✓	✓
18	Nirco, S.L.	Spain																		
19	Envases Farmaceuticos, S.A.	Spain																	✓	✓
20	Equilabo Scientific, S.L.U.	Spain																		
21	United Pulp and Paper Co., Inc.	Philippines	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓
22	Vina Kraft Paper Co., Ltd.	Vietnam	✓	✓	NR	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
23	Vina Corrugated Packaging Company Limited	Vietnam	✓	✓	NR	✓	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓
24	PT Indoris Printingdo	Indonesia	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓
25	Peute UK Limited	United Kingdom																		
26	PT Indocorr Packaging Cikarang	Indonesia	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
27	Duy Tan Plastics Manufacturing Corporation	Vietnam																	✓	✓
28	Duy Tan Long An Co., Ltd.	Vietnam																	✓	✓
29	Duy Tan Precision Mold Co., Ltd.	Vietnam																	✓	✓
30	Duy Tan Binh Duong Plastics Co., Ltd.	Vietnam																	✓	✓
31	Mata Plastic Co., Ltd.	Vietnam																	✓	✓
32	TCG Solutions Pte. Ltd.	Singapore																		
33	Interpress Printers Sendirian Berhad	Malaysia	✓	✓	NR	✓	✓	✓	NR	NR	NR	✓	✓	NR	NR	NR	NR	✓	✓	✓
34	PT Primacorr Mandiri	Indonesia	✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
35	Bien Hoa Packaging Joint Stock Company	Vietnam																	✓	✓
36	PT Fajar Surya Wisesa Tbk.	Indonesia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
37	PT Dayasa Aria Prima	Indonesia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
38	PT Indonesia Dirtajaya Aneka Industri Box	Indonesia																	✓	✓
39	PT Bahana Buana Box	Indonesia																	✓	✓
40	PT Rapipack Asritama	Indonesia																	✓	✓
41	Tin Thanh Packing Joint Stock Company	Vietnam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	✓	✓	✓
42	Law Print & Packaging Management Limited (UK)	United Kingdom																		
43	Law Print & Packaging Management Limited (IE)	Ireland																		
44	Bicappa Lab S.r.L.	Italy																		

			_		w Mate	rials					ı	Enviro	nmer	nt						<u>=</u>
	Business/Company	Country	Production	Total Rawmaterial	Raw Mat Recycled	Raw Mat Renewable	Ene	ergy		Α	ir				Water	r		e.	Safety	Occupational Illness
		Ĭ	<u>*</u>	Rawn	Ray	Rav	Thermal	Electrical	Dust	so <sub>x</sub>	NO <sub>x</sub>	GHG	Water Withdrawal	Recycled Water	BOD	COD	TSS	Waste		ő
45	Starprint Vietnam JSC	Vietnam	✓	✓	✓	✓	✓	✓	NR	NR	NR	✓	✓	✓	✓	✓	✓	✓		
46	P&S Holding Corporation	Philippines																		
47	Re Ose SAS	France																		
	Others																			
1	Cementhai Captive Insurance Pte. Ltd.	Singapore																		
2	SCG Vietnam Co., Ltd.	Vietnam																		
3	PT SCG Indonesia	Indonesia																		
4	PT SCG Cleanergy Indonesia	Indonesia																		
5	SCG Cleanergy Philippines Corporation	Philippines																		

<sup>\*</sup> List of subsidiaries company according to One Report 2024

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

Office/Investment/Sales/Service where the collection of environmental, safety and occupational illness 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



## ASSURANCE STATEMENT

#### SGS (THAILAND) LIMITED'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE SIAM CEMENT PUBLIC COMPANY LIMITED'S FOR 2024

#### NATURE OF THE ASSURANCE/VERIFICATION

SGS (Thailand) Limited (hereinafter referred to as SGS) was commissioned by The Siam Cement Public Company Limited (hereinafter referred to as SCG) to conduct an independent assurance of SCG 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'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 SCG. 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's stakeholders.

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

The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognised assurance guidance and standards. Assurance has been conducted at a limited level of 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
- GCCA Sustainability Framework Guidelines February 2022
- 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 by quality (BOD, COD and TSS (tons))
  - Oxides of Nitrogen (NOx), Oxides of Sulfur (SOx), dust and other significant air emissions data including VOCs and Mercury (tons)
  - Production and raw materials (thousand 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 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
- c) Governance dimension performance indicators or in
  - o Business ethics assessment
  - Double materiality assessment
  - o 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
  - o 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

- SCG'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 8 Sites of 5 business units for onsite visit as below:
  - o 2 Sites of SCG Cement and Green Solutions including, The Siam Cement Co., Ltd. (Khao Wong) and Khammouane Cement Co., Ltd.
  - o 2 sites of SCGP including, Thai Paper Co., Ltd. (Pulp Production-Wangsala) and VINA Corrugated Packaging Company Limited
  - o 2 sites of SCG Chemicals (SCGC) including, Rayong Olefins Co., Ltd and PT TPC Indo Plastic and Chemicals
  - o 1 site of SCG Decor (SCGD), SOSUCO Ceramic Co., Ltd
  - 1 site of SCG Smart Living, Quality Construction Products Public Company Limited (Bang Pa-In)

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

#### LIMITATIONS AND MITIGATION

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

#### STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from SCG, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 9001, ISO 14001, ISO 50001, 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 methodology 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 fairly stated and has been prepared, in all material respects, in accordance with the reporting criteria. For future reporting, more descriptions of SCG 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.

Sianed:

For and on behalf of SGS (Thailand) Limited

Montree Tangtermsirikul

**General Manager** 

Mortre T.

238 TRR Tower, 19th-21st Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120, Thailand

21 February 2025

WWW.SGS.COM

### **GRI Content Index**

				OMISSIO	ON	
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	ASSURANCE
General disclosu	res					
GRI 2: General	2-1 Organizational details	SR 05-06				
Disclosures 2021	2-2 Entities included in the organization's sustainability reporting	SR 86-91				
	2-3 Reporting period, frequency and contact point	SR 68-70				
	2-4 Restatements of information	SR 68-70				
	2-5 External assurance	SR 92-94				
	2-6 Activities, value chain and other business relationships	SR 26				
	2-7 Employees	SR 05-06, 79-81				
	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 18-21				
	2-10 Nomination and selection of the highest	AR 229-231				
	governance body					
	2-11 Chair of the highest governance body	AR 249				
	2-12 Role of the highest governance body in overseeing	AR 250-253				
	the management of impacts					
	2-13 Delegation of responsibility for managing impacts	AR 253				
	2-14 Role of the highest governance body	SR 20-21				
	in sustainability reporting					
	2-15 Conflicts of interest	AR 252-253, 285-286				
	2-16 Communication of critical concerns	AR 252-253, 285-286				
	2-17 Collective knowledge of the highest governance body	AR 233-236				
	2-18 Evaluation of the performance of the highest	AR 231-232				
	governance body					
	2-19 Remuneration policies	https://www.scgsustain-				
		ability.com/en/corporate-				
		governance/				
	2-20 Process to determine remuneration	https://www.scgsustain-				
		ability.com/en/corporate-				
		governance/				
	2-21 Annual total compensation ratio		a, b, c	Confidentiality constraints	This information is for internal use.	
	2-22 Statement on sustainable development strategy	SR 04				
	2-23 Policy commitments	SR 07				
	2-24 Embedding policy commitments	SR 18-21				
	2-25 Processes to remediate negative impacts	SR 30-33				
	2-26 Mechanisms for seeking advice and raising	SR 30-33				
	concerns					
	2-27 Compliance with laws and regulations	SR 07, 76				
	2-28 Membership associations	SR 15-16				
	2-29 Approach to stakeholder engagement	SR 30-33				
	2-30 Collective bargaining agreements	SR 79				
Material topics						
GRI 3: Material	3-1 Process to determine material topics	SR 35-41				
Topics 2021	3-2 List of material topics	SR 35-41				

GRI STANDARD/				OMISSIC	N	
OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	ASSURAN
Economic perfor	mance					
GRI 3: Material Topics 2021	3-3 Management of material topics	AR 21, SR 71				
GRI 201: Eco-	201-1 Direct economic value generated and distributed	AR 21, SR 71				
nomic	201-2 Financial implications and other risks and opportunities	Climate Report;				
Performance 2016	due to climate change	https://file.scgsustainability.com/ wp-content/uploads/2024/ 09/13172859/SCG-Climate- Report-2024.pdf				
	201-3 Defined benefit plan obligations and other retirement plans		a, b, c, d, e	Confidentiality constraints	This information is for internal use.	
	201-4 Financial assistance received from government	SR 71				
Market presence						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 62-63, 79-81				
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	SR 79-81				
	202-2 Proportion of senior management hired from the local community	SR 79-81				
Indirect economi						
GRI 3: Material Topics 2021	3-3 Management of material topics					
GRI 203: Indirect Economic Im- pacts 2016	203-1 Infrastructure investments and services supported		a, b, c	Information unavailable/ incomplete	This information has been included in community investment.	
	203-2 Significant indirect economic impacts		a, b	Information unavailable/ incomplete	Impact valuation has been conducted by project base such as Sharing the Dream, Learn to Earnt, The Power of Community, Skills Development School, and Q-CHANG.	
Procurement pra	ctices					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 64, 85				
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	SR 85				
Anti-corruption						
GRI 3: Material Topics 2021	3-3 Management of material topics	AR 281-291				
GRI 205:	205-1 Operations assessed for risks related to corruption	AR 281-291				
Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	AR 281-291				
	205-3 Confirmed incidents of corruption and actions taken	AR 281-291				
Anti-competitive						
GRI 3: Material Topics 2021	3-3 Management of material topics	AR 281-291				
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	AR 281-291				

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GRI STANDARD/			OMISSION					
OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	ANCE		
Гах								
GRI 3: Material	3-3 Management of material topics	- Tax Policy; https://file.						
Topics 2021		scgsustainability.com/						
		wp-content/uploads/2022/						
		03/15125509/SCG-Tax-						
		Policy-2021_EN.pdf						
GRI 207:	207-1 Approach to tax	- Tax Policy ; https://file.						
Tax 2019		scgsustainability.com/						
		wp-content/uploads/2022/						
		03/15125509/SCG-Tax-						
		Policy-2021_EN.pdf						
	207-2 Tax governance, control, and risk management	- Tax Policy ; https://file.						
		scgsustainability.com/						
		wp-content/uploads/2022/						
		03/15125509/SCG-Tax-						
	207.2 (4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	Policy-2021_EN.pdf						
	207-3 Stakeholder engagement and management of concerns related to tax	- Tax Policy ; https://file.						
	of concerns related to tax	scgsustainability.com/ wp-content/uploads/2022/						
		03/15125509/SCG-Tax-						
		Policy-2021_EN.pdf						
	207-4 Country-by-country reporting	AR 115, SR 71, 81						
Materials	207 4 Country by Country reporting	AR 113, 317 71, 01						
GRI 3: Material	3-3 Management of material topics	SR 35-41, 59-61						
Topics 2021	· ·							
GRI 301:	301-1 Materials used by weight or volume	SR 72						
Materials 2016	301-2 Recycled input materials used	SR 72						
	301-3 Reclaimed products and their packaging materials		a, b	Information	Information of			
				unavailable/	reclaimed products			
				incomplete	and packaging			
					materials are			
					collected by business unit for efficient			
					production and			
					quality improvement.			
Energy					quality improvement.			
GRI 3: Material	3-3 Management of material topics	SR 35-41, 50-54						
Topics 2021								
GRI 302: Energy	302-1 Energy consumption within the organization	SR 73				Yes		
2016	302-2 Energy consumption outside of the organization		a, b, c, d	Confidentiality	Energy data are			
				constraints	very confidentality			
					of suppliers,			
					transporters,			
					customers and			
					related stakeholders			
					in value chain.			
	302-3 Energy intensity	SR 73						
	302-4 Reduction of energy consumption	SR 50-54, 73						
	302-5 Reductions in energy requirements of products	SR 53-54						
M-1 1 60	and services							
Water and efflue		SD 40. 45						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 40, 45						
GRI 303:	303-1 Interactions with water as a shared resource	SR 45						
Water and	303-2 Management of water discharge-related impacts	SR 45						
Effluents 2018	303-3 Water withdrawal	SR 74				Yes		
	303-4 Water discharge	SR 74				Yes		
	303-5 Water consumption	SR 74						

GRI STANDARD/				OMISSION				
OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	ASSUR- ANCE		
Biodiversity								
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 40, 55-58						
GRI 101:	101-1 Policies to halt and reverse biodiversity loss	SR 55-58						
Biodiversity 2024	101-2 Management of biodiversity impacts	SR 55-58						
	101-3 Access and benefit-sharing	SR 55-58						
	101-4 Identification of biodiversity impacts	SR 55-58						
	101-5 Locations with biodiversity impacts							
	101-6 Direct drivers of biodiversity loss							
	101-7 Changes to the state of biodiversity							
	101-8 Ecosystem services							
Emissions								
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 40, 50-54 43, 45						
GRI 305:	305-1 Direct (Scope 1) GHG emissions	SR 43, 72				Yes		
Emissions 2016	305-2 Energy indirect (Scope 2) GHG emissions	SR 43, 72				Yes		
	305-3 Other indirect (Scope 3) GHG emissions	SR 72				Yes		
	305-4 GHG emissions intensity	SR 72						
	305-5 Reduction of GHG emissions	SR 72						
	305-6 Emissions of ozone-depleting substances (ODS)		a, b, c, d	Information unavailable/ incomplete	Collection of data is not required by law or corporate.			
	305-7 Nitrogen oxides (NO $_{\chi}$ ), sulfur oxides (SO $_{\chi}$ ), and other significant air emissions	SR 75				Yes		
Spills								
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 75						
GRI 306: Effluents and Waste 2016	306-3 Significant spills				Tier1: 2 cases Tier2: 1 case (Refer to API RP 754)			
Waste								
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 44						
GRI 306: Waste	306-1 Waste generation and significant waste-related impacts	SR 44						
2020	306-2 Management of significant waste-related impacts	SR 44						
	306-3 Waste generated	SR 75				Yes		
	306-4 Waste diverted from disposal	SR 75				Yes		
	306-5 Waste directed to disposal	SR 75				Yes		
Supplier environn	nental assessment							
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 47						
GRI 308: Supplier	308-1 New suppliers that were screened using environmental	SR 47, 85						
Environmental Assessment 2016	criteria	https://www.scgsustainability. com/en/supplier- management-towards-						
		sustainable-value/				Yes		
	308-2 Negative environmental impacts in the supply chain and actions taken	SR 47, 85				Yes		
Employment	and decions taken							
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 41, 48, 83						
GRI 401:	401-1 New employee hires and employee turnover	SR 79						
Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees		a, b	Information unavailable/	The benefit vary by country and type of			
				incomplete	employment.			

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	ASSUR- ANCE
Labor/manageme	ent relations					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 41, 47-48, 62-63, 83				
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods regarding operational changes		a, b	Information unavailable/incomplete	Under Labor Protection Act as minimum.	
Occupational hea	alth and safety					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 41, 46, 83				
GRI 403:	403-1 Occupational health and safety	AR 121-122, SR 41, 46, 83				
Occupational	management system					
Health and Safety	403-2 Hazard identification, risk assessment, and incident investigation	AR 121-122, SR 41, 46				
2018	403-3 Occupational health services	AR 121-122, SR 41, 46				
	403-4 Worker participation, consultation, and communication on occupational health and safety	AR 121-122, SR 41, 46				
	403-5 Worker training on occupational health and safety	AR 121-122, SR 41, 46				
	403-6 Promotion of worker health	AR 121-122, SR 41, 46				
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	AR 121-122, SR 41, 46				
	403-8 Workers covered by an occupational health and safety	AR 176-206				
	management system					
	403-9 Work-related injuries	SR 77-78, 82				Yes
	403-10 Work-related ill health	SR 77-78, 82				Yes

			OMISSION		
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) REASON OMITTED	EXPLANATION	ASSUR- ANCE
Training and edu	cation				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 41, 48, 62-63			
GRI 404: Training	404-1 Average hours of training per year per employee	AR 271-273, SR 80			
and Education	404-2 Programs for upgrading employee skills and transition	AR 271-273, SR 48, 62-63, 79-80			
2016	assistance programs				
	404-3 Percentage of employees receiving regular	SR 63			
	performance and career development reviews				
Diversity and equ	ual opportunity				
GRI 3: Material	3-3 Management of material topics	SR 41, 47-48, 62-63, 83			
Topics 2021					
GRI 405:	405-1 Diversity of governance bodies and employees	AR 260-262, SR 22, 79			
Diversity	405-2 Ratio of basic salary and remuneration of women	SR 79			Yes
and Equal	to men				
Opportunity					
2016					
Non-discriminati	on				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 41, 47-48, 62-63, 83			
GRI 406:	406-1 Incidents of discrimination and corrective	AR 123, 149, 270 SR 7, 47			
Non-	actions taken	Alt 123, 143, 270 3lt 7, 47			
discrimination	detions taken				
2016					
	ciation and collective bargaining				
GRI 3: Material	3-3 Management of material topics	SR 41, 47-48, 62-63, 83			
Topics 2021	5 5 management of material topies	5,6, 62 65, 65			
GRI 407:	407-1 Operations and suppliers in which the right to	SR 7, 47-48, 80			
Freedom of	freedom of association and collective bargaining may be	, , , , , , , , , , , , , , , , , , , ,			
Association	at risk				
and Collective					
Bargaining 2016					
Child labor					
GRI 3: Material	3-3 Management of material topics	SR 41, 47-48, 83			
Topics 2021	,				
GRI 408: Child	408-1 Operations and suppliers at significant risk for	SR 7, 47-48, 80			
Labor 2016	incidents of child labor				
Forced or compu	Isory labor				
GRI 3: Material	3-3 Management of material topics	SR 41, 47-48, 83			
Topics 2021 GRI 409: Forced	409-1 Operations and suppliers at significant risk	SR 7, 47-48, 80			
or Compulsory	for incidents of forced or compulsory labor	511 7, 47 40, 00			
Labor 2016	for incidents of forced or compaisory labor				
Security practice	<b>.</b>				
GRI 3: Material	3-3 Management of material topics	SR 41, 47			
Topics 2021	3.3 Management of material topics	31(41, 47			
GRI 410:	410-1 Security personnel trained in human rights policies or	AR 247, SR 83			
Security	procedures	Alt 247, 31t 03			
Practices 2016	procedures				
Rights of indigen	ous neonles				
GRI 3: Material	3-3 Management of material topics	SR 41, 47, 83			
Topics 2021	3.3 Management of material topics	Ji -1, -1, UJ			
GRI 411: Rights	411-1 Incidents of violations involving rights	SR 7, 47			
of Indigenous	of indigenous peoples	•			
Peoples 2016					

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			OMISSION			
GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	ASSUR- ANCE
Local communitie	es					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 33, 41, 48, 65-66				
GRI 413: Local	413-1 Operations with local community engagement, impact	SR 48, 65-66, 80				
Communities	assessments, and development programs					Yes
2016	413-2 Operations with significant actual and potential negative impacts on local communities	SR 65-66, 80				
Supplier social as	sessment					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 41, 47, 64, 84-85				
GRI 414: Supplier	414-1 New suppliers that were screened using social	AR 123				
Social Assess-	criteria	SR 85				
ment 2016		https://www.scgsustainability.				
		com/en/sustainable-value-to-				
	44.2 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	wards-suppliers-en/				
	414-2 Negative social impacts in the supply chain and actions taken	SR 47, 64, 84-85				
Public policy						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 71				
GRI 415: Public	415-1 Political contributions	SR 71				
Policy 2016						
Customer health	•					
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 32, 40				
GRI 416: Customer Health	416-1 Assessment of the health and safety impacts of product and service categories	AR 121-122				
and Safety 2016	416-2 Incidents of non-compliance concerning the health and	SR 77				
	safety impacts of products and services					
Marketing and la						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 41, 47				
GRI 417: Marketing and	417-1 Requirements for product and service information and labeling	SR 40,43				
Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling	SR 77				
	417-3 Incidents of non-compliance concerning marketing communications	SR 77				
Customer privacy	1 11111					
GRI 3: Material Topics 2021	3-3 Management of material topics	AR 136				
GRI 418:	418-1 Substantiated complaints concerning breaches of cus-	AR 232				
Customer Privacy 2016	, ,					

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# **Task Force on Climate-related Financial Disclosures (TCFD)**

	Percommendations		lose
	Recommendations	AR	SR
	Disclose the organization's governance around climate-related risks and opportunities.		
	a) Describe the board's oversight of climate-related risks and opportunities.		
GOVERNANCE	b) Describe management's role in assessing and managing climate-related risks and opportunities.	114-115, 248-253	18-21
	Disclose the actual and potential impacts of climate-related risks and opportunities on the or strategy, and financial planning where such information is material.	rganization's b	usinesses,
	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.		
STRATEGY	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.		29,40,43, 50-54
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.		
	Disclose how the organization identifies, assesses, and manages climate-related risks.		
	a) Describe the organization's processes for identifying and assessing climate-related risks.		
	b) Describe the organization's processes for managing climate related risks.	116-118	27-29, 35-36
RISK MANAGEMENT	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	110-110	
	Disclose the metrics and targets used to assess and manage relevant climate-related risks and where such information is material.	d opportunities	5
	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.		
METRICS and TARGETS	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	146-149,	7, 26, 43, 50-54, 72
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.		73, 85

AR = One Report

# **Sustainability Accounting Standards Board Response (SASB)**

ТОРІС	METRIC	CATEGORY	UNIT OF MEASURE	CODE	RESPONSE/ REFERENCE
Activity Metrics	Production by major product line	Quantitative	Metric tons (t)	EM-CM-000.A RT-CH-000.A RT-CP-000.A	P.72
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)	EM-CM-110a.1 RT-CH-110a.1 RT-CP-110a.1	P.72
	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	EM-CM-110a.2 RT-CH-110a.2 RT-CP-110a.2	P.40, 43, 50-54
Air Quality	Air emissions of the following pollutants: (1) NO <sub>x</sub> (excluding N <sub>2</sub> O), (2) SO <sub>x</sub> , (3) particulate matter (PM10), (4) dioxins/furans, (5) volatile organic compounds (VOCs), (6) polycyclic aromatic hydrocarbons (PAHs), and (7) heavy metals	Quantitative	Metric tons (t)	EM-CM-120a.1 RT-CH-120a.1 RT-CP-120a.1	(1) (2) (3) P.75 (4) (5) (6) (7) P.82
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage alternative, (4) percentage renewable*	Quantitative	Gigajoules (GJ), Percentage (%)	EM-CM-130a.1 RT-CH-130a.1 RT-CP-130a.1	(1) (2) (3) (4) P.73
Water Manage- ment	<ul><li>(1) Total fresh water withdrawn, (2) percentage recycled*,</li><li>(3) percentage in regions with High or Extremely High Baseline Water Stress</li></ul>	Quantitative	Thousand cubic meters (m³), Percentage (%)	EM-CM-140a.1 RT-CH-140a.1 RT-CP-140a.1	(1) (2) (3) P.74
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	RT-CH-140a.2 RT-CP-140a.3	P.76
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	RT-CH-140a.3 RT-CP-140a.2	P.29, 45
Waste Management	Amount of waste generated, percentage hazardous, percentage recycled*	Quantitative	Metric tons (t), Percentage (%)	EM-CM-150a.1 RT-CH-150a.1 RT-CP-150a.1	P.75

<sup>\*</sup>Represents group level only

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SR = Sustainability Report

#### **CONSTRUCTION MATERIALS Specific**

ТОРІС	METRIC	CATEGORY	UNIT OF MEASURE	CODE	RESPONSE/ REFERENCE
Biodiversity Impacts	Description of environmental management policies and practices for active sites	Discussion and Analysis	n/a	EM-CM-160a.1	P.56-57
	Terrestrial acreage disturbed, percentage of impacted area restored	Quantitative	Acres (ac), Percentage (%)	EM-CM-160a.2	3,522 ac, 8.8%
Workforce Health & Safety	<ul><li>(1) Total recordable incident rate (TRIR)* and</li><li>(2) near miss frequency rate (NMFR)*</li><li>for (a) fulltime employees and</li><li>(b) contract employees</li></ul>	Quantitative	Rate	EM-CM-320a.1	P.77 Safety KPIs are disclosed in accordance with GRI and GCCA.
	Number of reported cases of silicosis	Quantitative	Number	EM-CM-320a.2	P.77
Product Innova- tion	Percentage of products that qualify for credits in sustainable building design and construction certifications	Quantitative	Percentage (%) by annual sales revenue	EM-CM-410a.1	P.71
	Total addressable market and share of market for products that reduce energy, water, and/or material impacts during usage and/or production	Quantitative	Reporting currency, Percentage (%)	EM-CM-410a.2	P.71
Pricing Integrity & Transparency	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities	Quantitative	Reporting currency	EM-CM-520a.1	No case found in 2024

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#### **CHEMICALS Specific**

TOPIC	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	P.33
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	P.77-78 Safety KPIs are disclosed in accordance with GRI
	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	P.29, 31
Product Design for Use-phase Efficiency	Revenue from products designed for use-phase resource efficiency	Quantitative	Reporting currency	RT-CH-410a.1	P.71
Safety & Environmental Stewardship of Chemicals	<ul> <li>(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances,</li> <li>(2) percentage of such products that have undergone a hazard assessment</li> </ul>	Quantitative	Percentage (%) by revenue, Percentage (%)	RT-CH-410b.1	(1) P.77 (2) P.77
	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 Community Relations	RT-CH-410b.2	P.43
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 & Regu- latory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	n/a	RT-CH-530a.1	Annual Report 2024, P.130
Operational Safety, Emergency	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Quantitative	Number, Rate	RT-CH-540a.1	P.77
Preparedness & Response	Number of transport incidents*	Quantitative	Number	RT-CH-540a.2	P.77

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<sup>\*</sup>Represents group level only
\*\*Applies the same practice as SCG

#### **CONTAINERS & PACKAGING Specific**

TOPIC	METRIC	CATEGORY	UNIT OF MEASURE	CODE	RESPONSE/ REFERENCE
Activity Matric	Percentage of production as: (1) paper/wood, (2) glass, (3) metal, and (4) plastic	Quantitative	Percentage (%) by revenue	RT-CP-000.B	(1) 81.7% (4) 12.5%
	Number of employees	Quantitative	Number	RT-CP-000.C	P.6
Product Lifecycle Management	Percentage of raw materials from: (1) recycled content, (2) renewable resources, and (3) renewable and recycled content	Quantitative	Percentage (%) by weight	RT-CP-410a.1	(3) 98.1%
	Revenue from products that are reusable, recyclable, and/or compostable	Quantitative	Reporting currency	RT-CP-410a.2	78,683 MB (Green Choice)
	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	RT-CP-410a.3	SCGP Sustainability Report 2024 P.37-38, 64-65
Product Safety	Number of recalls issued, total units recalled	Quantitative	Number	RT-CP-250a.1	Zero recall
	Discussion of process to identify and manage emerging materials and chemicals of concern	Discussion and Analysis	n/a	RT-CP-250a.2	SCGP Sustainability Report 2024 P.64-65
Supply Chain Management	Total wood fiber procured, percentage from certified sources	Quantitative	Metric tons (t), Percentage (%)	RT-CP-430a.1	2.5 MT, 100% of FSC™-CW/ COC : FSC-C133879
	Total aluminum purchased, percentage from certified sources	Quantitative	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)	RT-CP-430a.2	Not Applicable

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