



Water Management 2023-2024

Message from the CEO



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

SCGP is committed to conducting its business in alignment with the ESG 4 Plus approach, encompassing Net Zero, Go Green, Reduce Inequality, Enhance Collaboration, Plus Trust through Transparency in all operations. In 2023, SCGP established an ESG Committee for overseas businesses to enhance environmental, social, and governance management efficiency. In the environmental dimension, SCGP aims to achieve the net zero target by 2050 by increasing the use of renewable energy to replace fossil fuels, thereby reducing greenhouse gas emissions. We have successfully increased the proportion of renewable energy used to 28.6% and have promoted tree planting for carbon dioxide absorption following the Natural Climate Solution (NCS) approach. To date,

We have planted over 2 million trees and have undergone verifications by an external third party to certify the amount of carbon dioxide removal compared to the base year, achieving a 19.5% reduction in greenhouse gas emissions from the base year. SCGP continues registering the Carbon Footprint of Product (CFP) with relevant agencies. As of 2023, 59 products have been certified with the CFP mark. In the social dimension,

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

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

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



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

(Wichan Jitpukdee)
CEO and Chairman of ESG Committee
Sustainability Report 2023
SCG Packaging

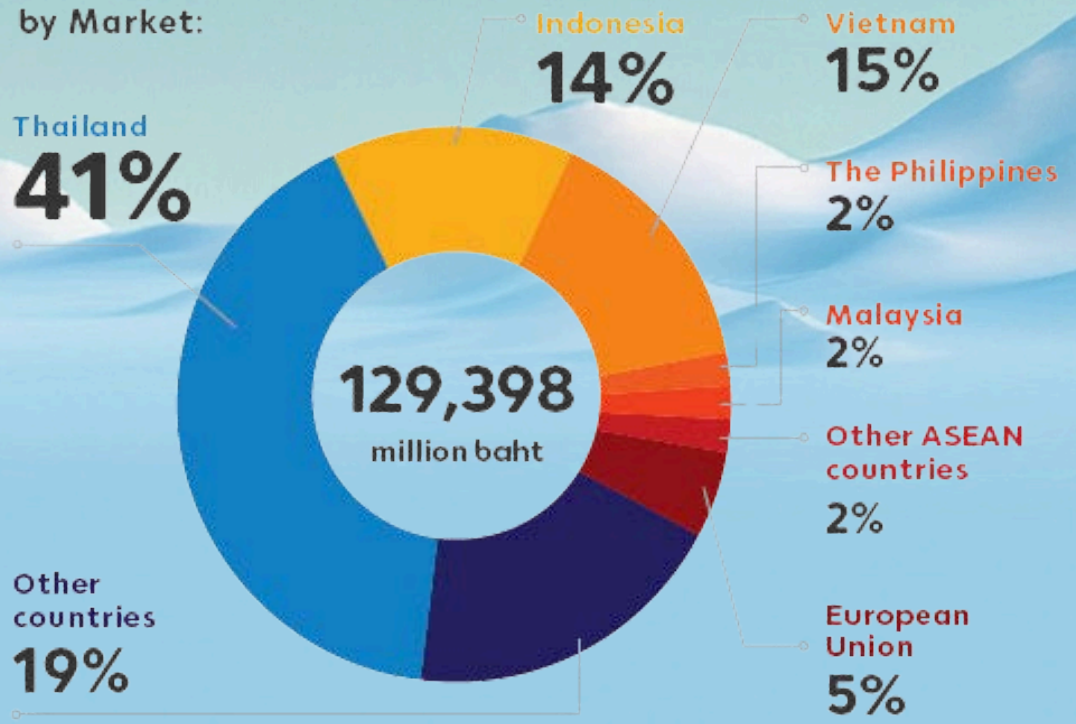
SCGP Products

SCGP has developed a wide range of products and services to cover customer needs throughout the supply chain. It has also offered extensive innovative solutions that promote sustainable business operations. To support a full range of packaging services and to address customers' unique needs, the diagram below shows how the Company can respond with products and services for each packaging requirement.

Packaging Solutions



Revenue Breakdown by Market:



Primary Packaging



Secondary Packaging



Tertiary Packaging



Promotional and Display Packaging



Exhibition & Marketing Events

Sustainable Development Approach



SOCIAL

Create values not exclusively for profitability, but for mutual benefits for all stakeholders



ENVIRONMENT

Commit to conservation of the environment and natural resources, recognition of consumption value of resources, and sustainable preservation of ecological balance



GOVERNANCE

Adhere to ethical business conduct, social responsibility and life quality improvement in communities where SCG operates



Reduce water withdrawal by 35% by 2025

Compared with business as usual (BAU) at the base year of 2014.



In the dynamic world of business, effectively managing water resources is a top priority for companies. This requires a thoughtful and strategic approach to governance that helps organizations reach their goals, improve competitiveness, reduce risks related to water use in the supply chain, and strengthen their value proposition. It is important for companies to embrace environmental responsibility. Considering water-related issues proactively helps companies prepare for future environmental regulations.

SCGP has set a goal to reduce water consumption by 35% by 2025 compared to 2014 levels. Progress towards this goal will reach 28.6% by 2023. Additionally, a dedicated task force has conducted a thorough review of water usage efficiency management and monitoring across different levels of the organization, from corporate to factory levels. This framework allows the organization to identify areas for improvement, encourage innovation, and continuously enhance operational practices.

Reference : SCGP SD Report 2023



Water Contents



**Water Efficiency
Management
Program**

**Water
Consumption**

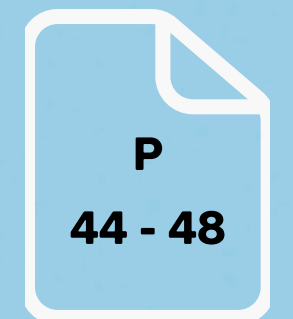
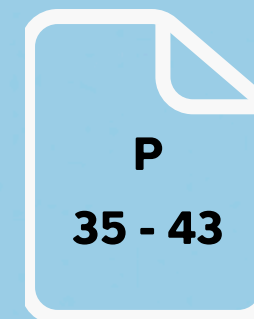
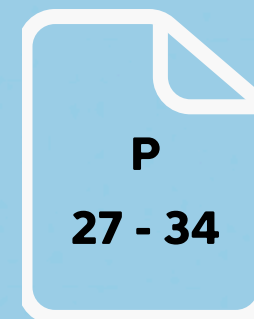
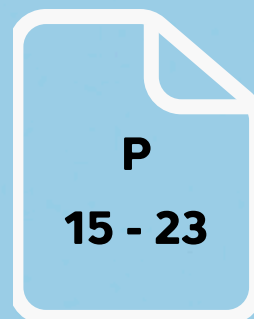
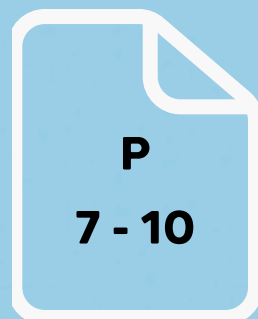
**Water Consumption
in Water-Stressed
Areas**

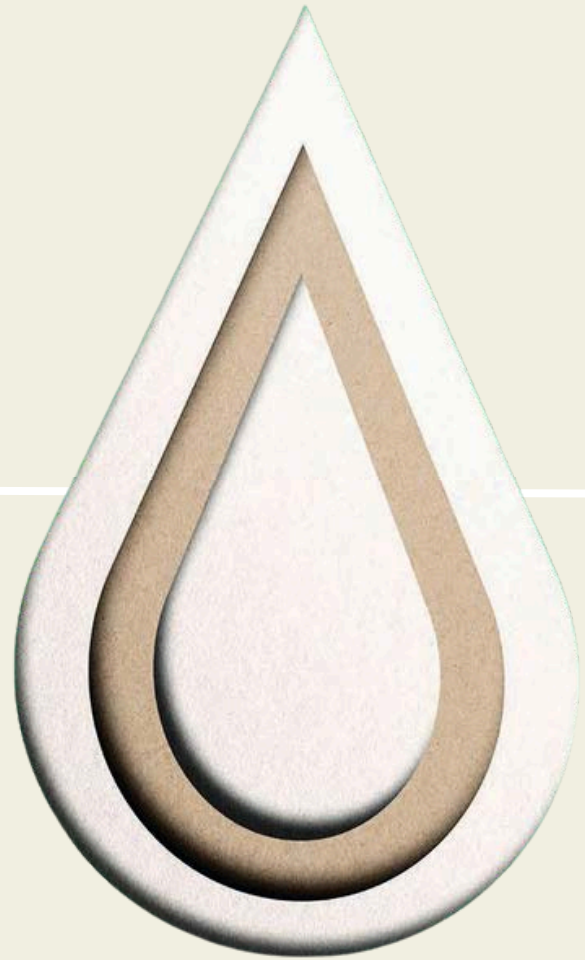
**Exposure to
Water Stressed
Areas**

**Business Impacts
of Water Related
Incidents**

**Water Risk
Management
Programs**

**Risk &
Opportunities**



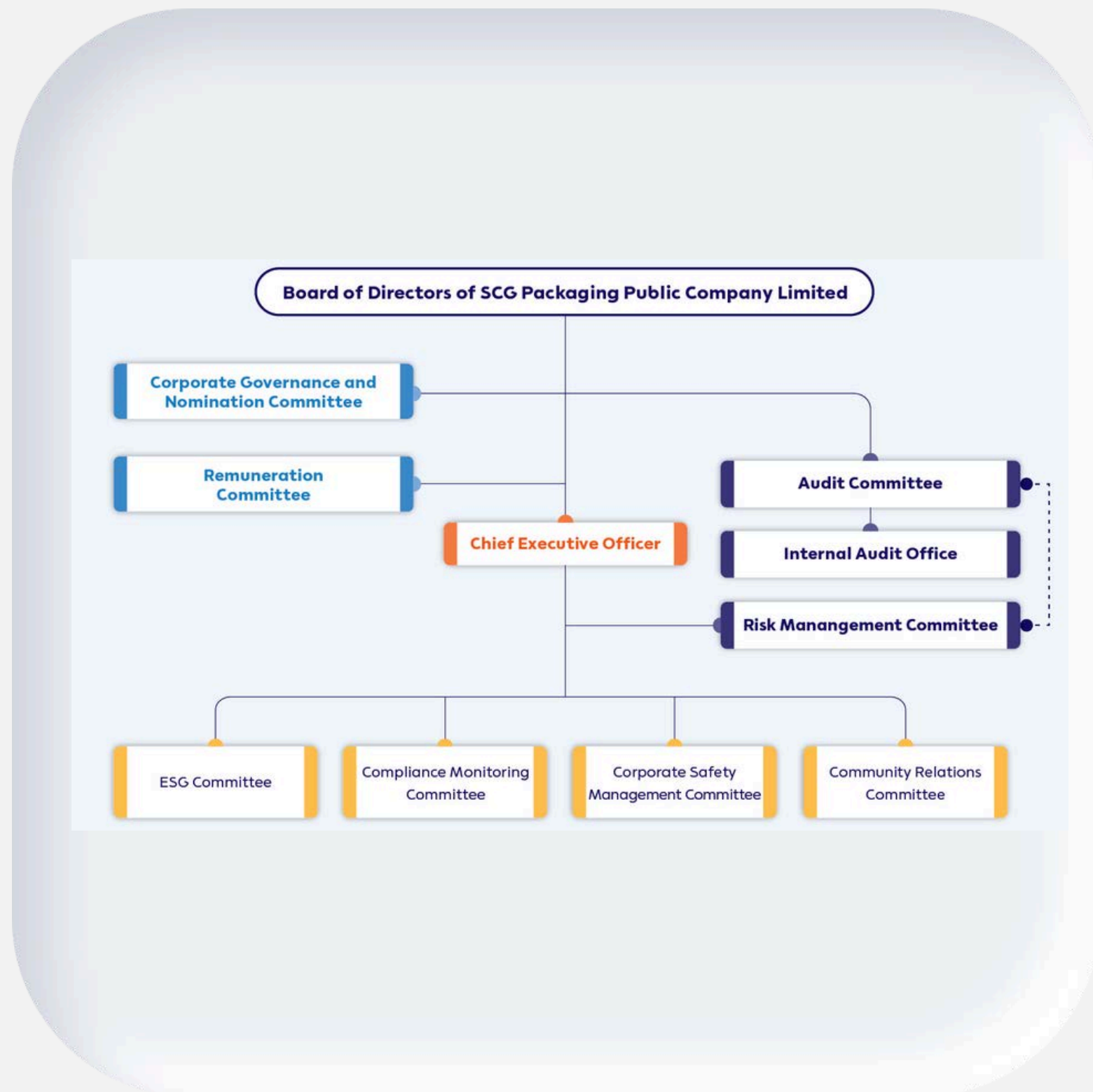


Water Efficiency Management Program

Responsibilities Committee Collaborated

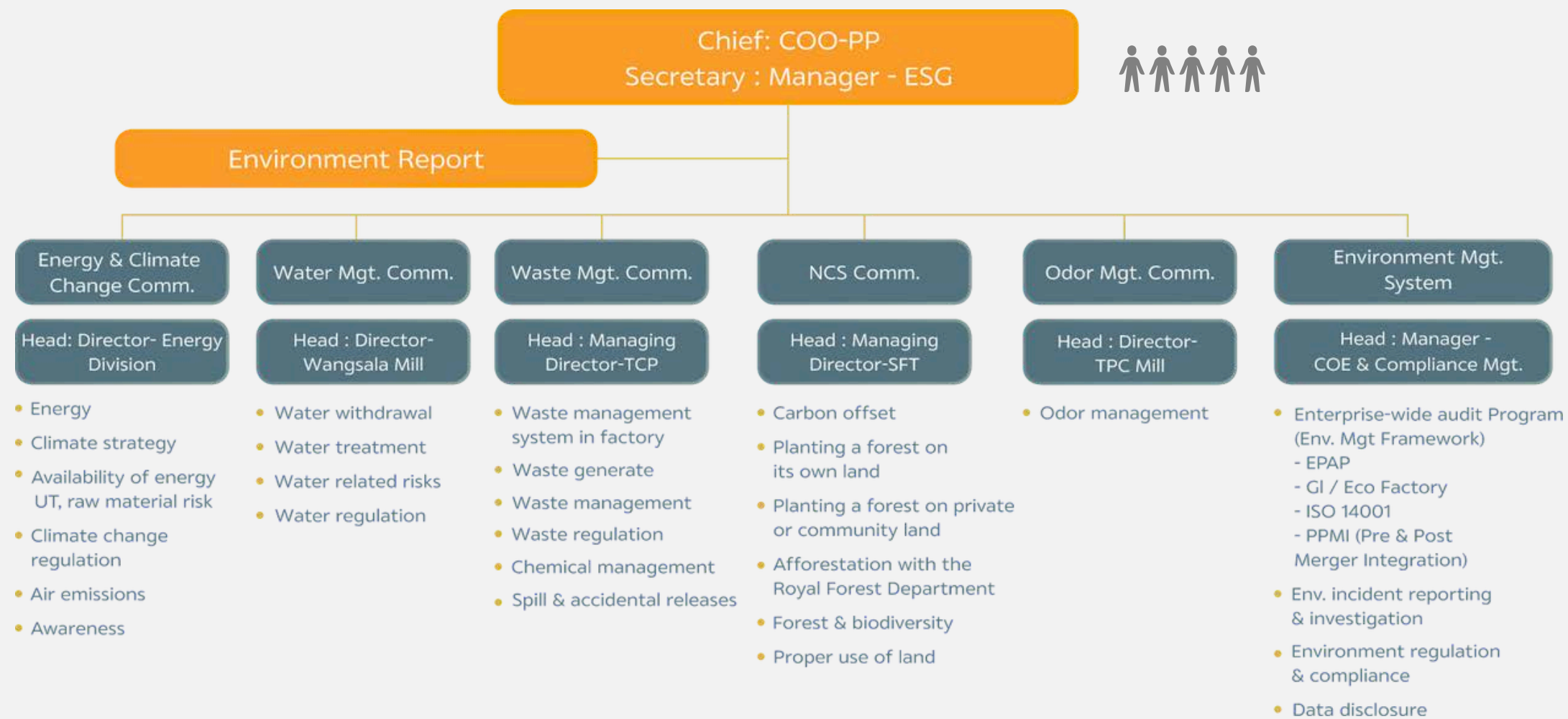
SCGP specifies the risks and opportunities arising from significant sustainable development issues with aiming to reduce risks that may have negative impacts on the organization while seeking opportunities to further create added value, considering the impacts on all stakeholders both inside and outside the organization and implement effective operations and control processes,

We structured the work with the responsibility of monitoring this part of each working team to make that works efficiency. Conducting or supervising New law and updating regulation change , including implementing corrective actions / making recommendations to management regarding corrective actions



ESG Committee Collaborated

SCGP has set water committee to direct and monitor water consumption through relevant policies, management, idea generation to improve overall water performance with leading managers (as shown on the figure below) that set water consumption as one of key performance indicators due to environmental impact focus.



Water management strategies

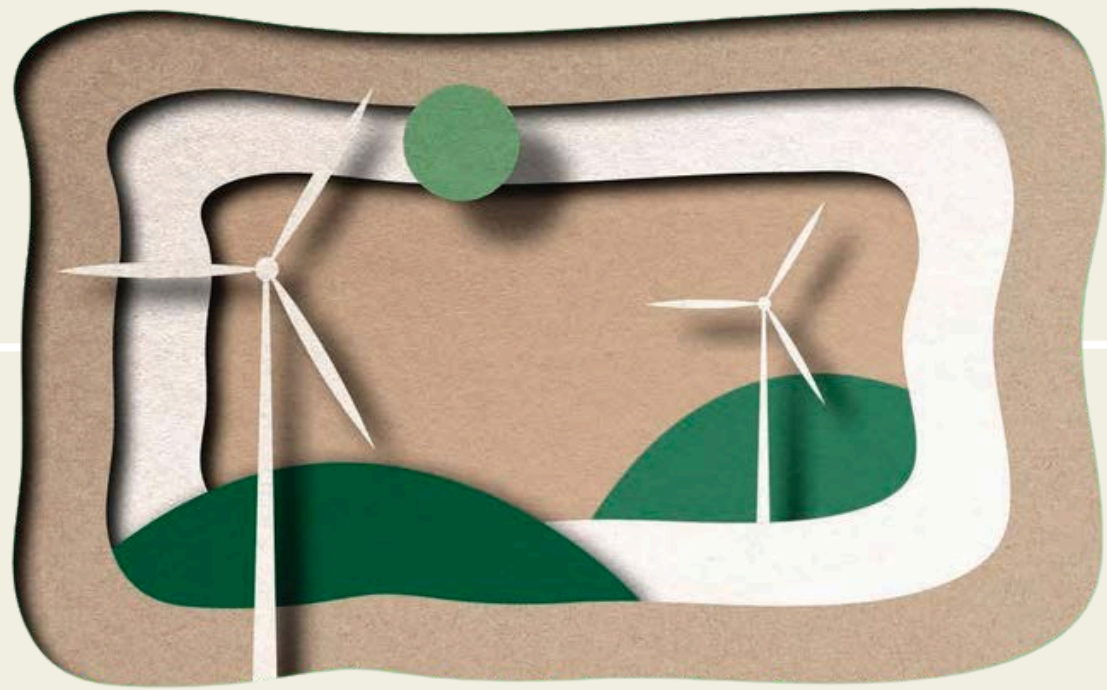


Water is an essential resource for SCGP's operations. As a consequence, SCGP implemented the 3R principle to improve the manufacturing process with the goal to reduce the amount of water consumed, reuse, and recycle the water used in the manufacturing process, in addition to regenerate natural water resources. Climate change conditions, such as unseasonal and inconsistent rainfall patterns, no rains occurring in the headwater area, and decrease of water volume in dams, have a significant effect on water management today. Furthermore, growing population needs for water consumption could result in water scarcity, affecting the manufacturing process and nearby communities.

SCGP committed to leveraging water management knowledge via the Integrated Water Management Committee, which consists of participants from all businesses, to establish a strategy to address water-related hazards and improve water efficiency. Water-related concerns are monitored, collaborated with the government and industrial sectors, digital technology is implemented, and innovation is generated for improved water usage efficiency in the manufacturing process and reuse the treated water. The following are water management strategies:

- 1) Water-related risk mitigation through integrated water resources management
- 2) Increase water usage efficiency in production processes and products
- 3) Treat the effluent to meet quality standards, monitor, measure the effluent and its quality, report on the effluent issues, incident investigation, corrective action, and reduce effluent
- 4) Bring the recycled water after treatment to be used
- 5) Capability building of the person who is involved in water management
- 6) Rehabilitate the water sources' ecosystems and support water to communities and agriculture



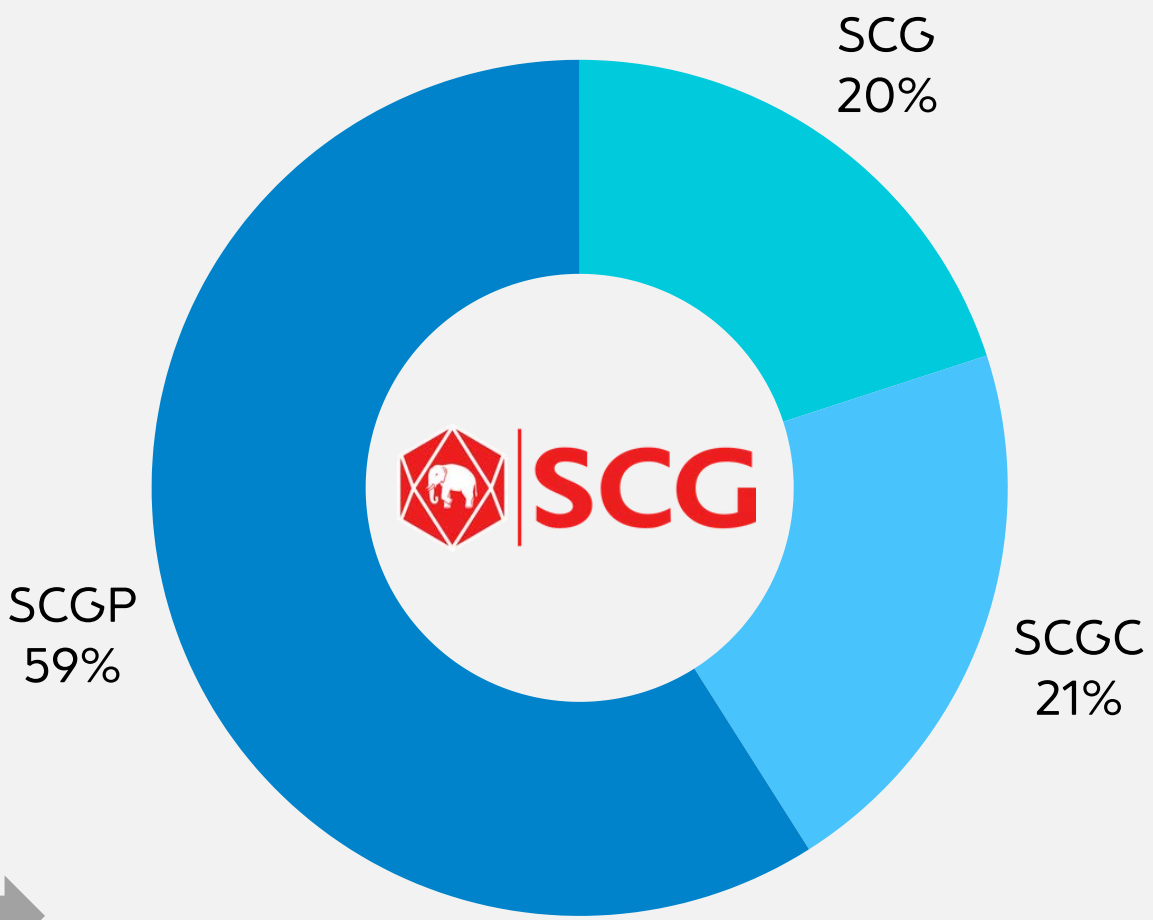


Water Consumption

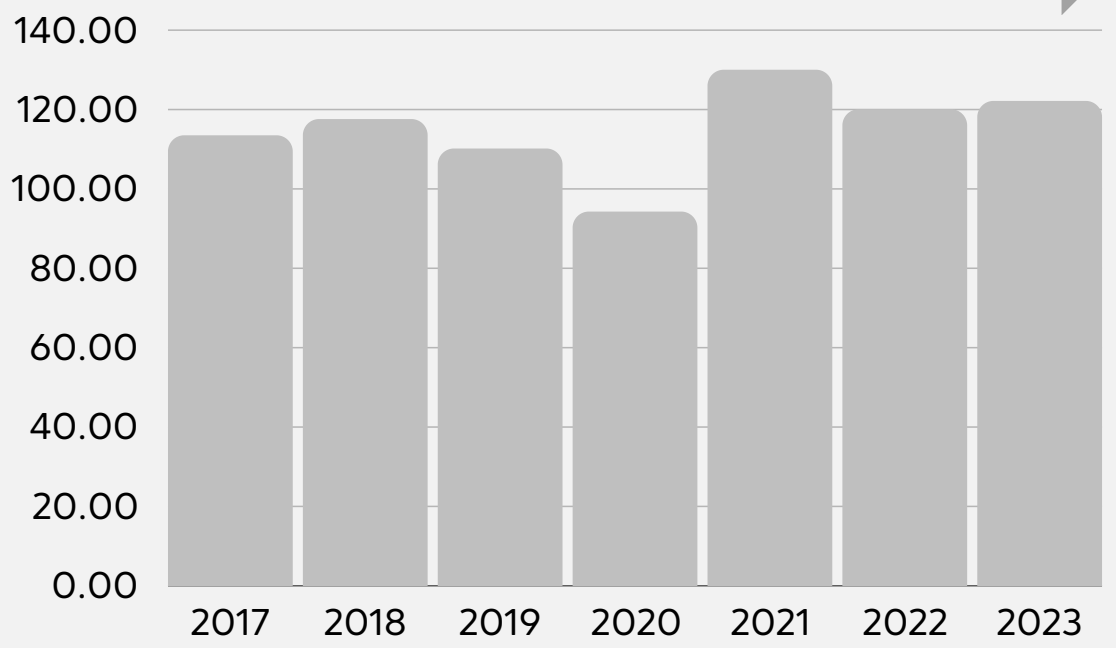
Water Withdrawal in SCG

122.17

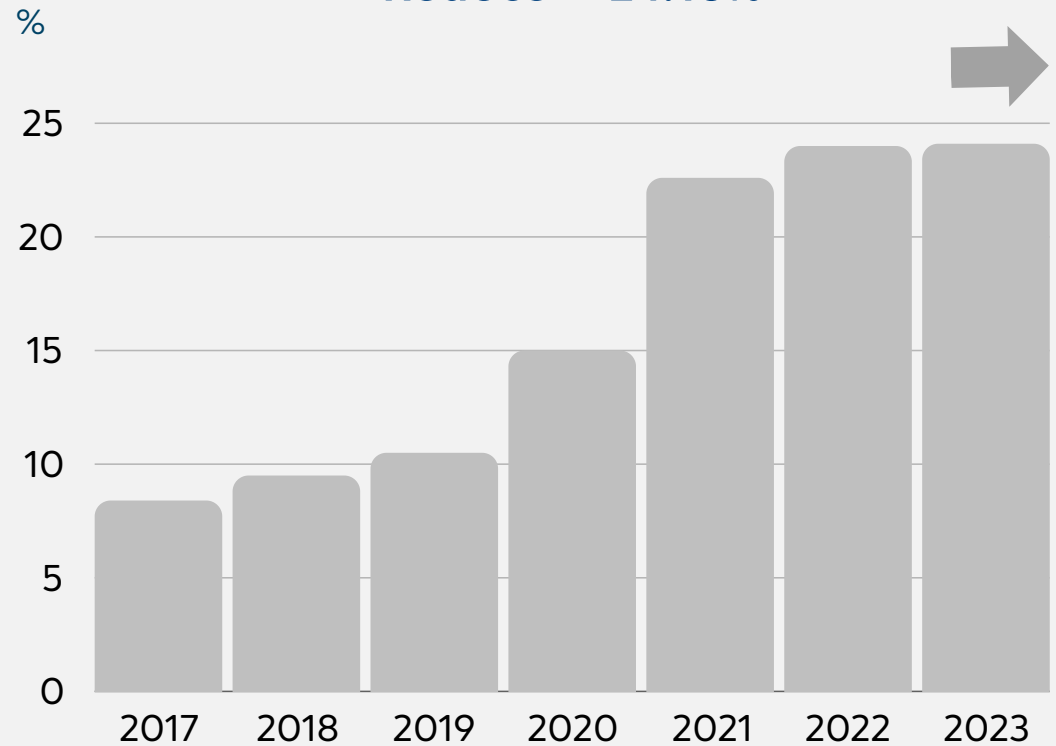
Unit : Million Cubic Meters



BAU 160.92 Mm³



Reduce = 24.10%



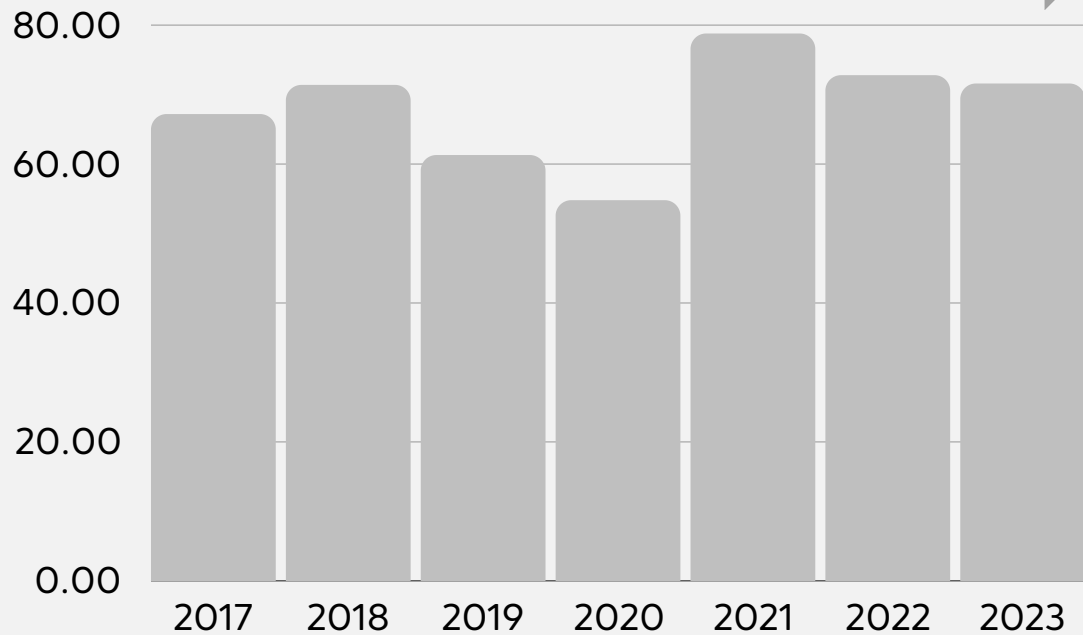
Water Withdrawal in SCGP

71.60

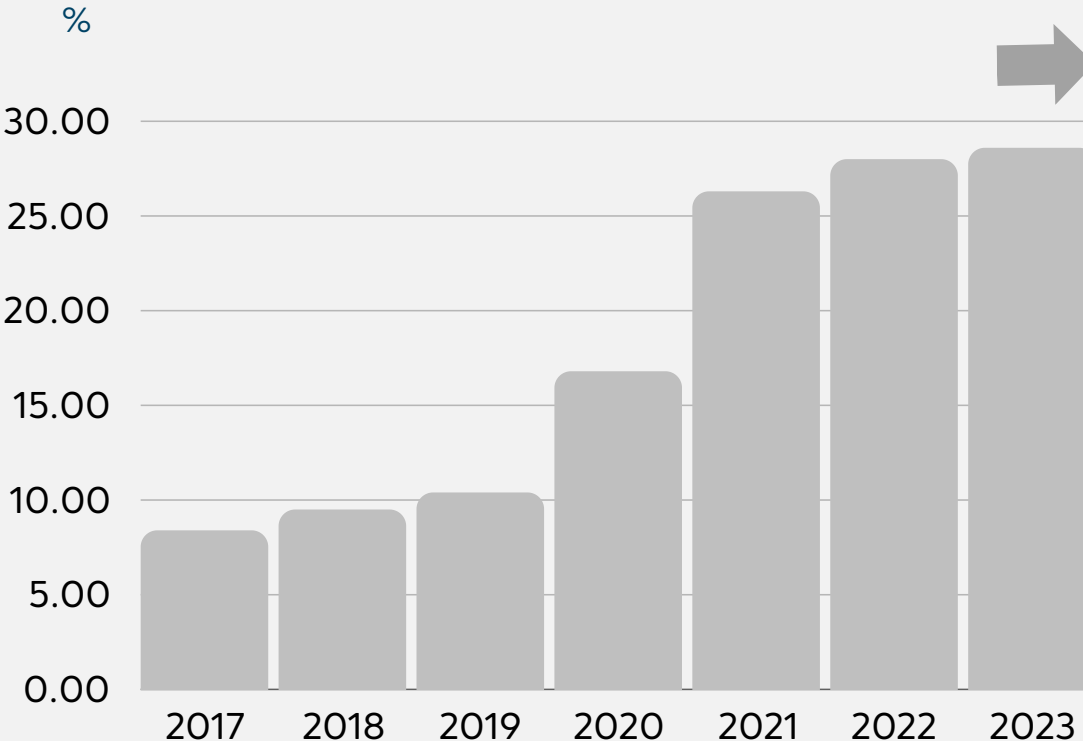
Unit : Million Cubic Meters



BAU 71.60 Mm³

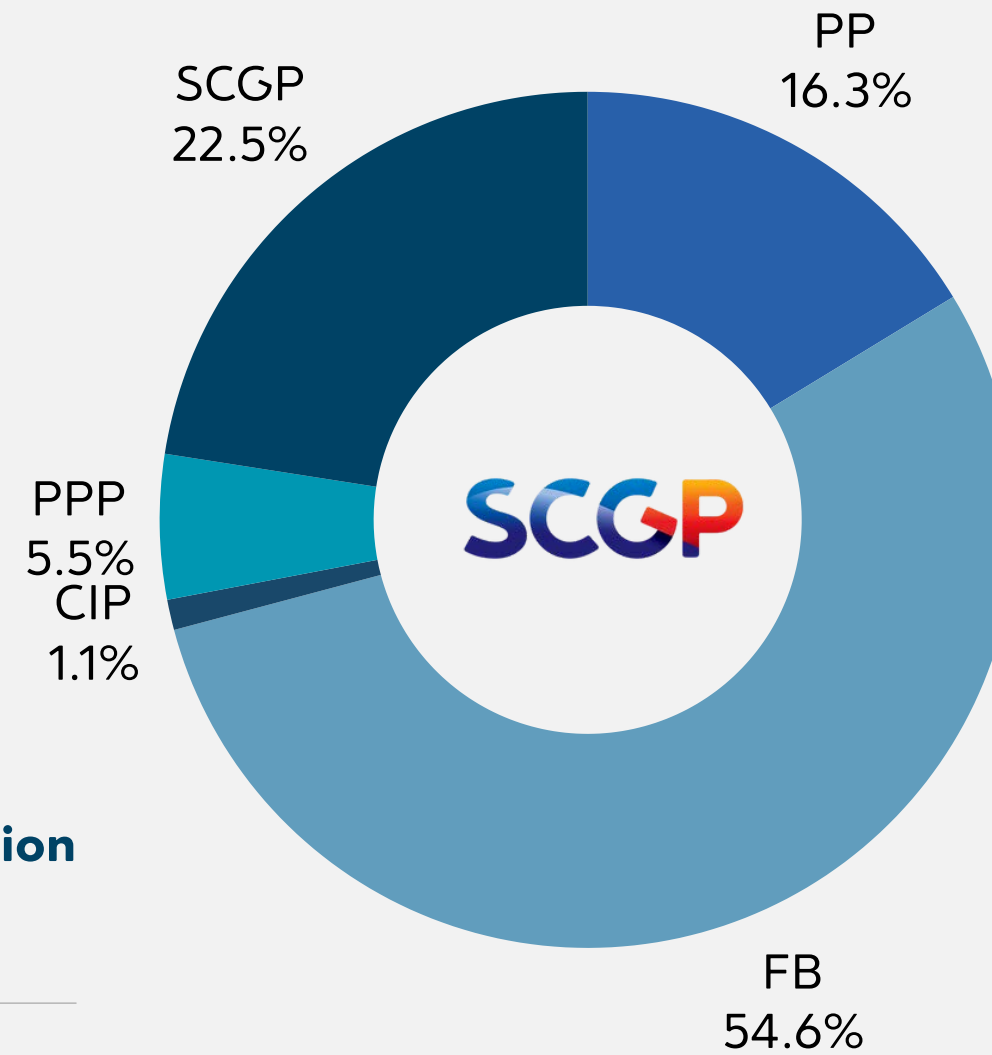


Reduce = 28.60%

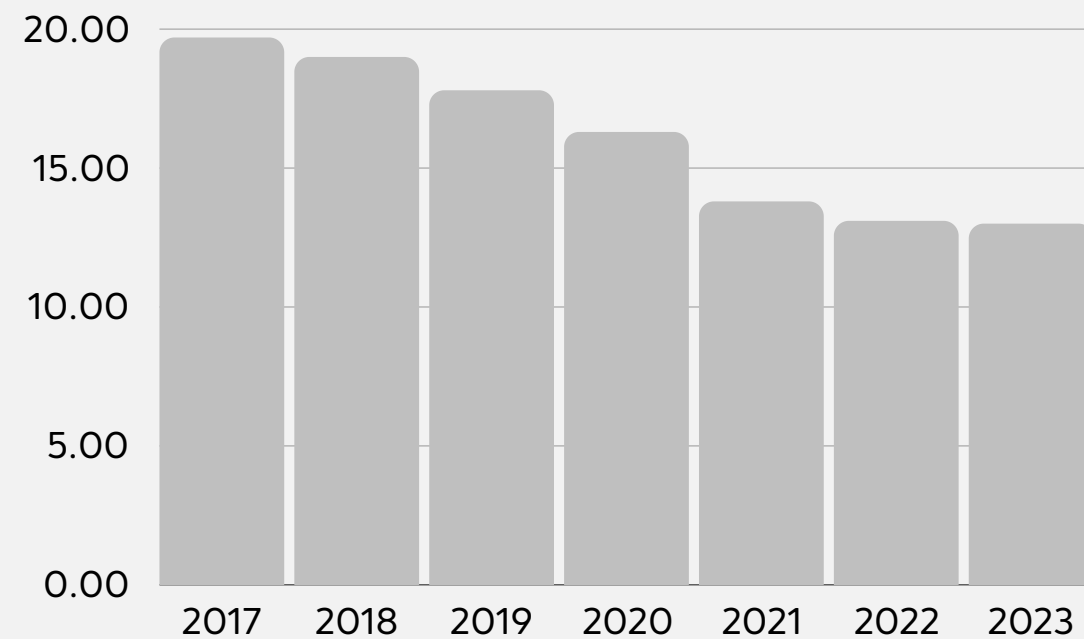


Water Withdrawal per Ton of Production by Business

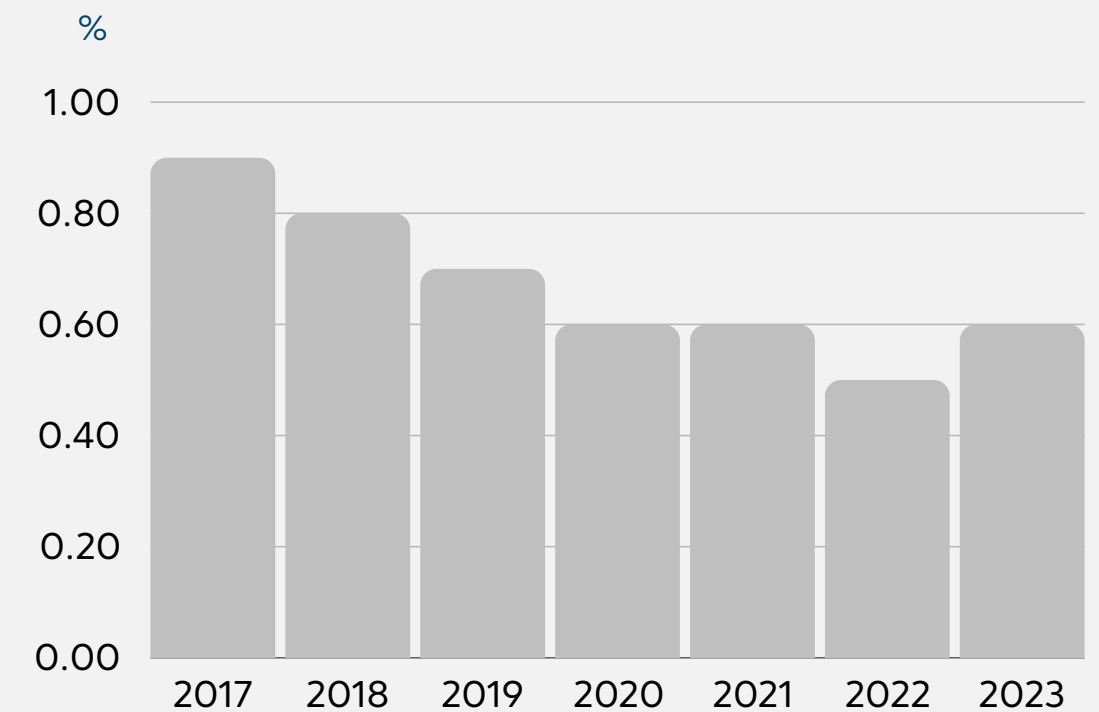
Unit : Million Cubic Meters

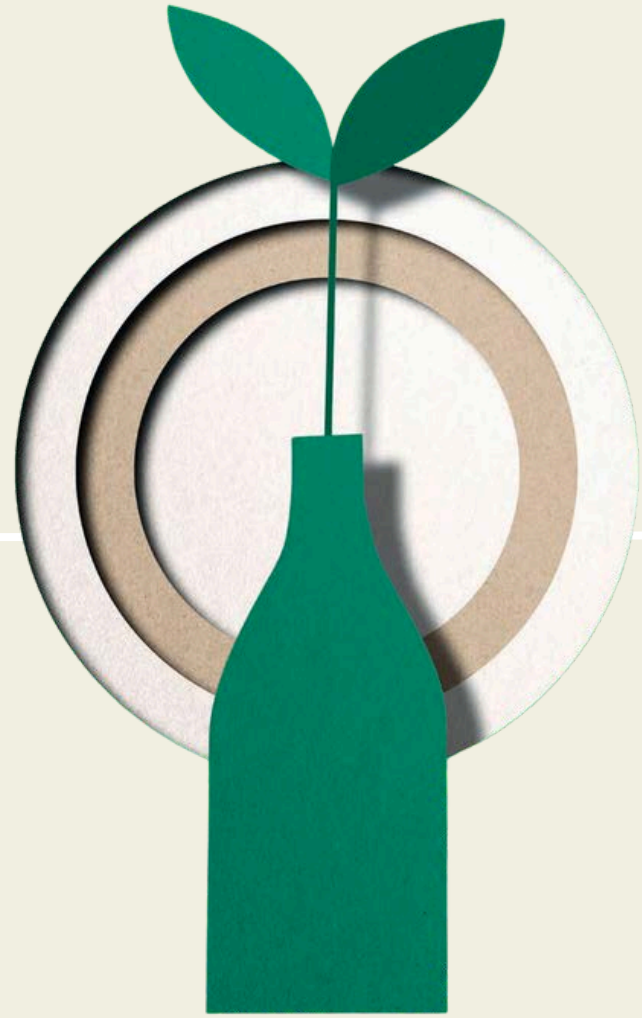


Water Withdrawal per Ton of Production



Water Withdrawal per Sale Revenue





Water Consumption in Water-Stressed Areas

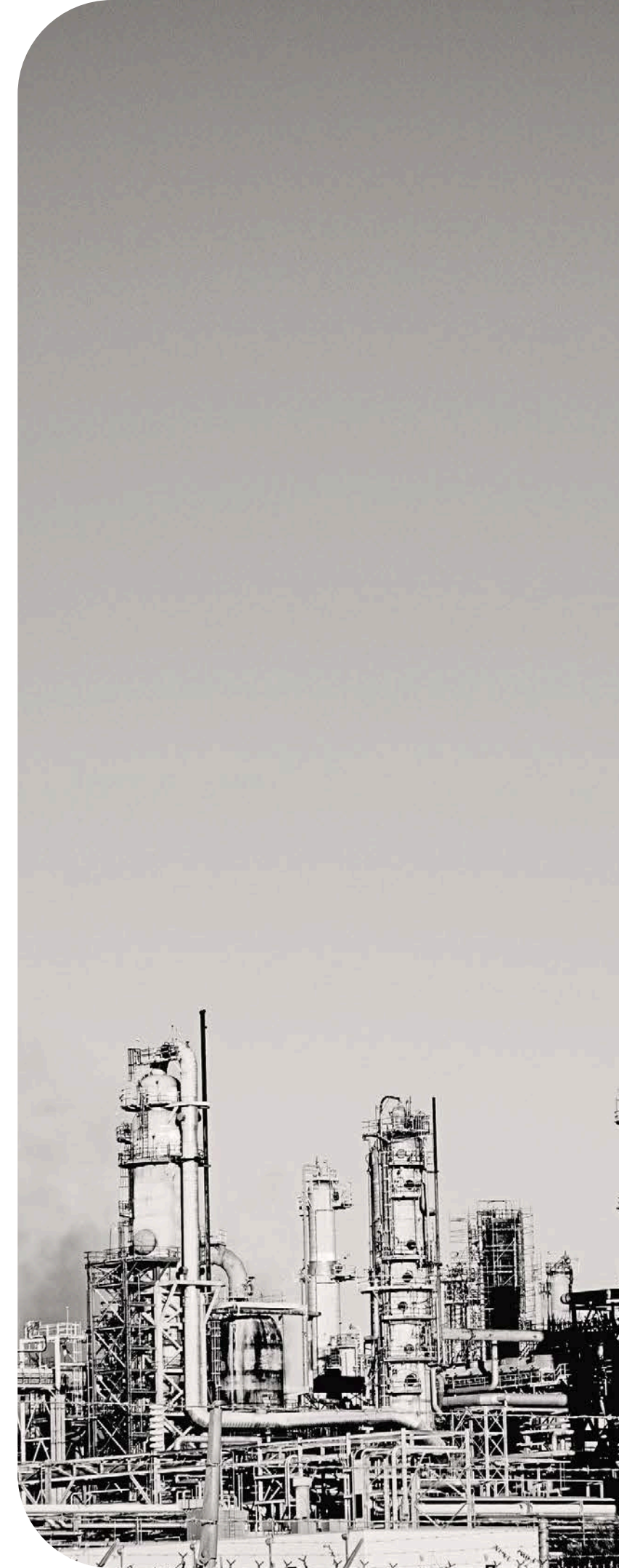
Climate Change Challenge

Climate change is a volatile challenge that has a direct impact on physical hazards such as floods, increased storm severity or cyclones, increased variability of water supplies, droughts, fires, higher temperatures, and so on. SCGP analyzes impacts using scenario analysis, a baseline for the existing year, the middle term in 2030, and the long term in 2050 for a considered method with tools to enhance strategic risk reduction.

SCGP conducts analyses against geographical locations where SCGP, supplier and major clients operate which include SCGP's plants 4 Midstream in Thailand, Vietnam, Philippines and Indonesia, 2 Critical Upstream and Downstream assessment with 3 scenarios are used for evaluating physical risk hazards as follows:

- SSP1-2.6 stays below 2.0°C warming relative to 1850-1900 (median) with implied net zero emissions in the second half of the century.
- SSP3-7.0 is a medium to high reference scenario resulting from no additional climate policy under the SSP3 socioeconomic development narrative. SSP3-7.0 has particularly high non-CO2 emissions, including high aerosols emissions.
- SSP5-8.5 is a high reference scenario with no additional climate policy. Emission levels as high as SSP5-8.5 are not obtained by Integrated Assessment Models (IAMs) under any of the SSPs other than the fossil fueled SSP5 socioeconomic development pathway

SCGP evaluated physical impact on 3 different natural hazard variables, which are Water Scarcity (Drought), Floods and Extreme Heat. Which are align with Baseline risk likelihood for relevant natural hazards were evaluated based on the review of an online tool (ThinkHazard) developed by the World Bank/Global Facility for Disaster Reduction and Recovery (GFDRR). The natural hazards are classified based on the following factors. Aqueduct developed by WRI and The Climate Change Knowledge Portal (CCKP) by World Bank.



Physical Risk

Drought



Acute Risk

- Damage to infrastructure and equipment
- Reduced efficiency of equipment
- Disruption of supply chain



- Capital costs
- Replacement costs
- Operating costs
- Maintenance costs

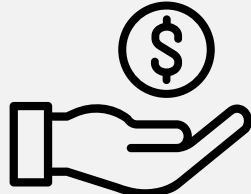
Cost of Sales

Attributes



Impacts

Profit and loss



Chronic Risk

- Increase insurance costs
- Reduced ability for employees to work efficiently
- Gradual loss of land due to permanent inundation

Flooding



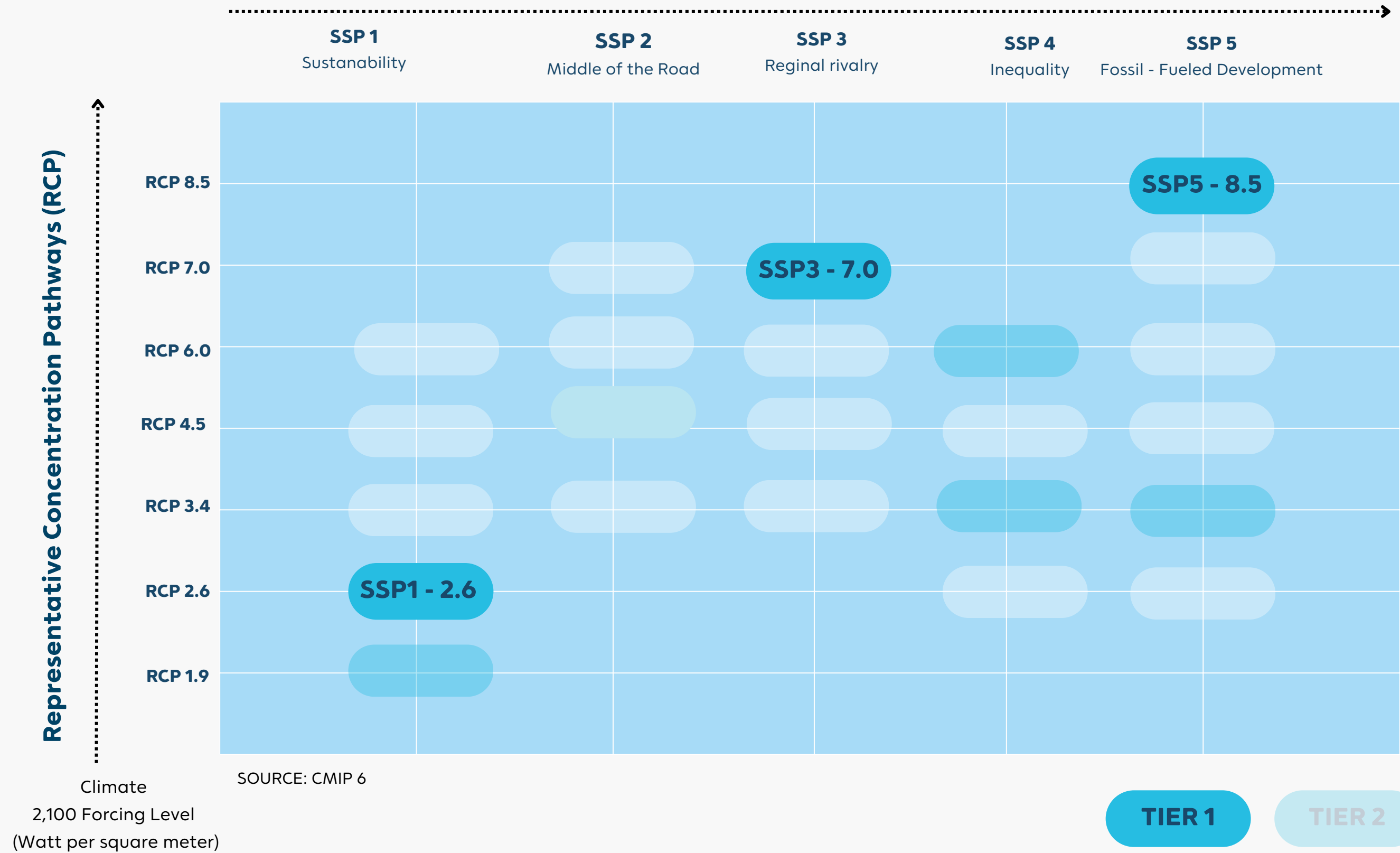
Extremely heat

- Impact to services and products
- Decreased services provided
- decreased product volume
- disruptions in production process

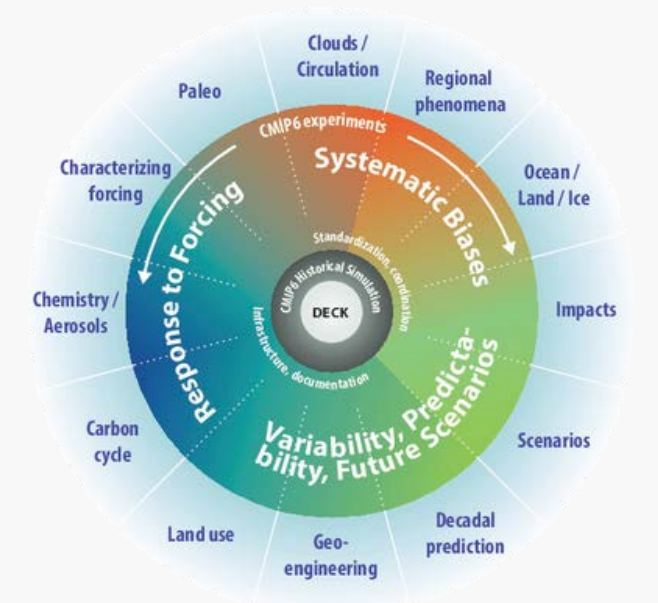
Revenue/Margin

Climate Change Projections

Shared Socioeconomic Pathways (SSPs)



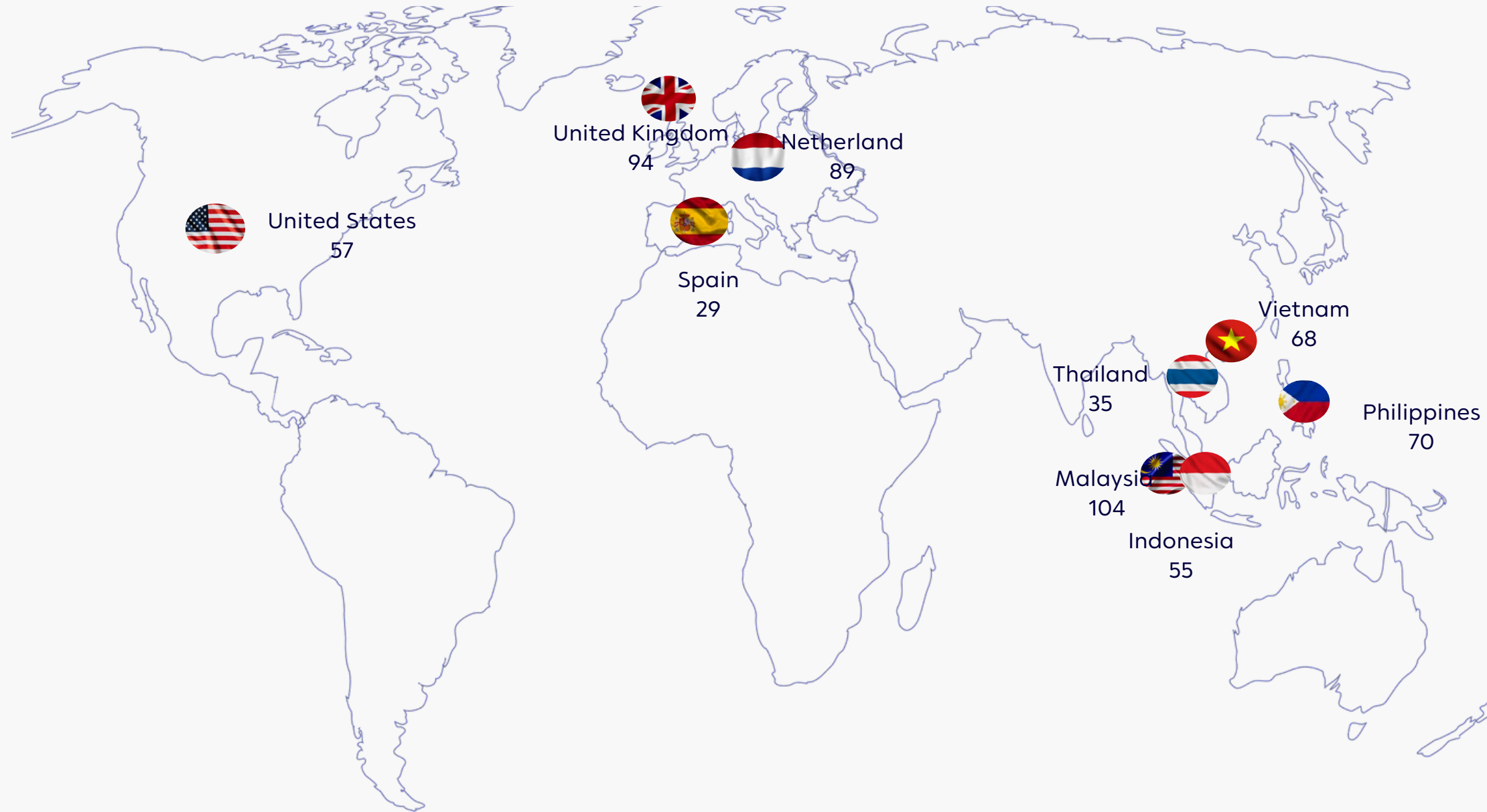
CMIP 6



Coupled Model Intercomparison Project

Water Stress Areas by Country

Ranking Country



70 Business operations:
10 Countries
65 Production facilities
5 Sale offices
21,882 Employees

SCGP acknowledges the potential ramifications of catastrophic events that could disrupt operations. Historical data and evolving global circumstances indicate that environmental metamorphoses may stem from three principal varieties of natural disasters: Flooding , Drought and Extremely heat . SCGP has conducted a comprehensive risk assessment using databases from government agencies and in-depth analysis from the Royal Irrigation Department, drawing on data analysis from the Aqueduct program, statistics, and experiences from past disaster events. The image above summarizes and presents the results of this assessment.

Climate Risk Country Profiles

Climate Risk Country Profiles

CCKP's Climate Risk Country Profiles present a high-level assessment of physical climate risks for a country, providing insight for decision-makers into the potential for increasing, expanding, and emerging risks across space and time, and for different climate futures. Projected climate data is derived from CMIP5, and CMIP6 the Coupled Model Intercomparison Project, Phase 5-6. The CMIP efforts are overseen by the [World Climate Research Program](#), which supports the coordination for the production of global and regional climate model compilations that advance scientific understanding of the multi-scale dynamic interactions between the natural and social systems affecting climate. The CMIP Collection used to inform each profile is listed by each country



Thailand

- Since the mid-20th century, there has been an increase in annual precipitation.
- By the 2090s, there will be an **increase of 0.95°C–3.23°C above the baseline**.
- **Proposed temperature increases are strongest in middle**.
- Floods are affecting the world's ten most affected countries. Drought and cyclone impacts.
- The number of people affected will be over 2 million by 2035–2044, and coastal flooding could affect 2.4 million by 2070–2100.
- Projections: **Due to rising temperatures**, the agriculture sector could be significantly affected by a changing climate.
- The combination of rising seas and sinking land, as well as the potential **impact of cyclone-induced storm surges on critical public and private infrastructure**,
- The aftermath of 2011's devastating floods. The studies show that post-flood, higher-income groups received more government compensation than lower-income groups.



Philippines

- The trend since the mid-20th century has seen an increase in temperature by 0.6°–2.9°C by the 2090s, which is 1°C less than the global average.
- Projections: Of the 16 climate models assessed, **15 projected at least some increase in precipitation**.
- The region has the highest disaster risk levels in the world, particularly due to its vulnerability to tropical cyclones, flooding, and landslides.
- **The number of tropical cyclones making landfall** also has greater intensity.
- Rising sea levels could flood up to one million people by 2070–2100, but investing in adaptation could potentially significantly reduce this number.
- Flooding and droughts could impact agricultural land, towards decreased productivity.
- The progress in effective adaptation and disaster risk reduction has slowed down.



Vietnam

- Vietnam is similar to the global average, between 1.0°C and 3.4°C by 2080–2099.
- Average temperatures likely impact human health, livelihoods, and ecosystems.
- **The current climate models' poor performance in simulating the El Niño Southern Oscillation (ENSO)**.
- Vietnam's low-lying coastal and river delta regions have a very high vulnerability to rising sea levels. By 2070–2100, coastal flooding will affect 6–12 million people.
- Fluvial flooding is projected to be in the range of 3–9 million people by 2035–2044.
- We project losses in **agricultural productivity** for key food and cash crops.
- **The increase in heat stress** on the Vietnamese population will lead to negative health outcomes.
- Vietnam faces disaster, poverty, and inequality across multiple regions and sectors.



Indonesia

- Indonesia anticipates **warming between 0.8°C and 1.4°C** by the 2050s.
- With an increase in average annual rainfall, and increase in droughts in western Indonesia by the second half of the 21st century.
- Climate risk, including flooding and extreme heat, ranks Indonesia in the top third of countries. **An extreme river flood could grow by 1.4 million** by 2035–2044.
- **Sea-level rise, ranked fifth in the world**, is likely to expose people to permanent flooding by the period 2070–2100 and could reach over 4.2 million people.
- Rice productions are likely to impact from higher temperatures an agricultural production, Indonesia faces multiple threats to its food security.
- There are impacts on water availability, disaster, urban impact, especially in coastal zones, and health and nutrition, which can lead to poverty and inequality.
- According to the ND-GAIN Country Index, there is a reduction in the overall national-level risk of experiencing significant loss and damage.



Drought



Flooding



Extremely heat



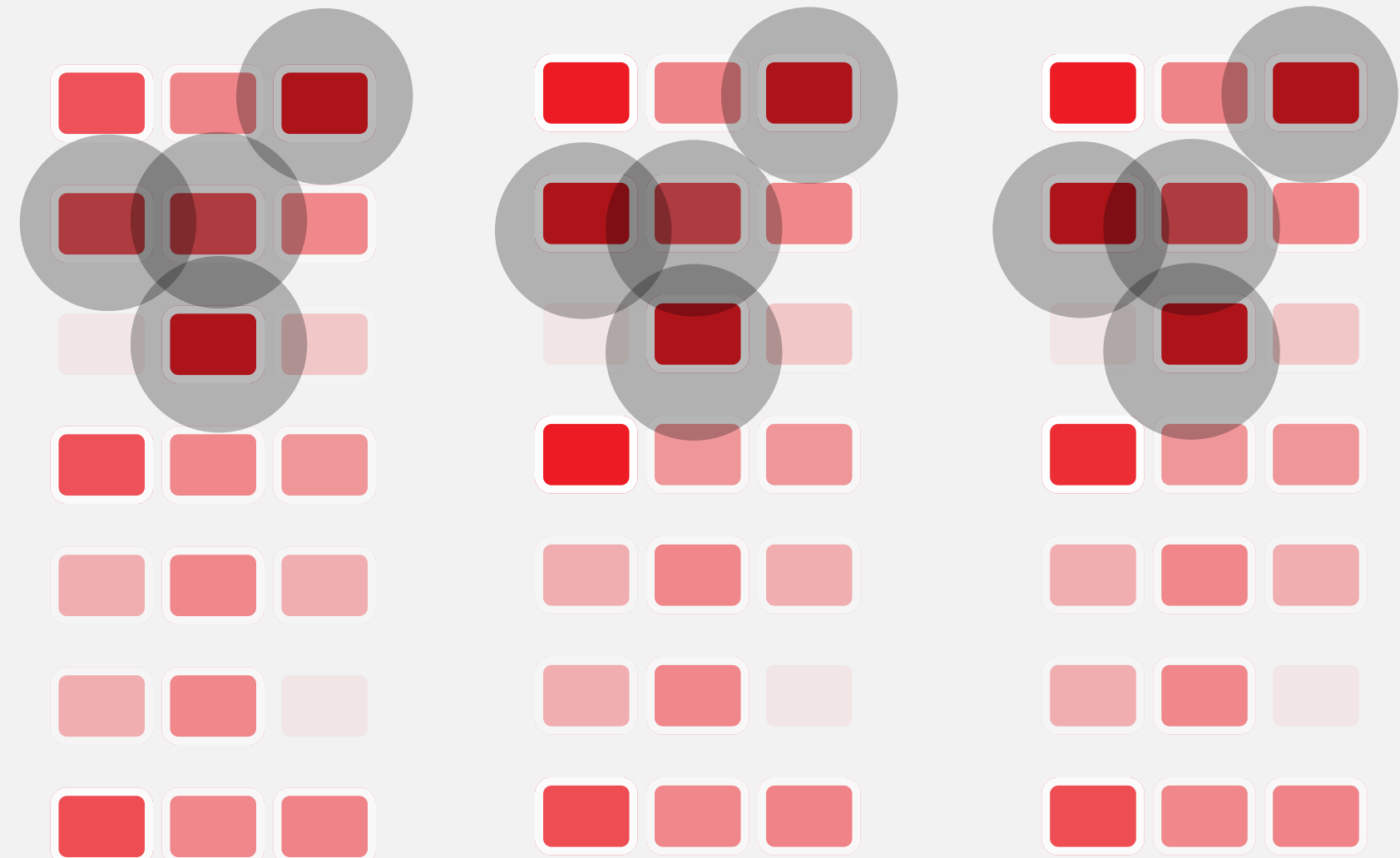
2020
Baseline



2030
Short Term

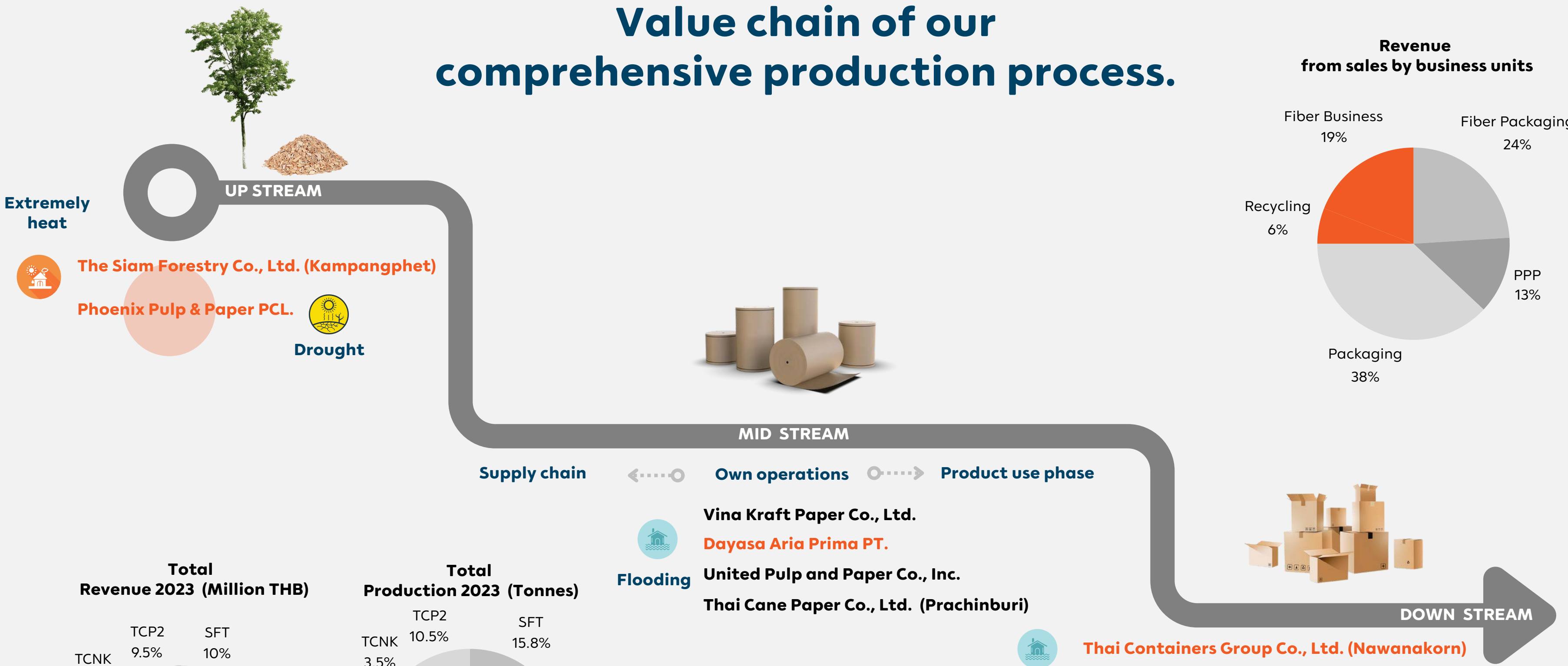


2050
Long Term



SCGP has previously gathered information on droughts and floods. These could have an effect on business in the Khon Kaen province area immediately impacted by the Mekong dam project. We consequently monitor and develop a strategy to be ready in case of drought in the area, that was developed several years ago.

Value chain of our comprehensive production process.



Extremely heat

UP STREAM

MID STREAM

DOWN STREAM



The Siam Forestry Co., Ltd. (Kampangphet)

Phoenix Pulp & Paper PCL.



Drought



Flooding



Flooding

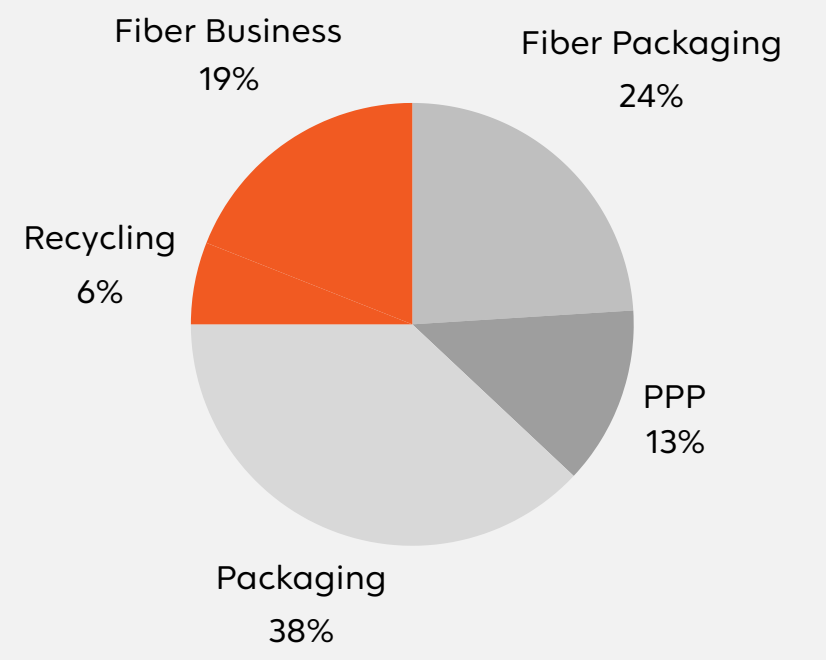
Supply chain

Own operations

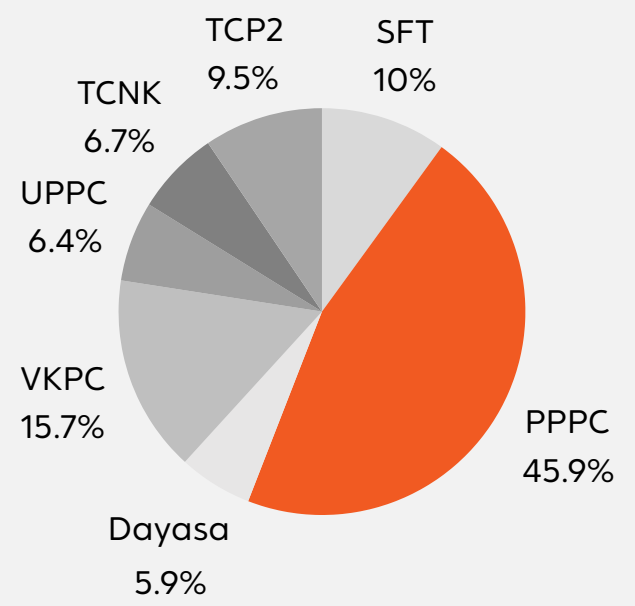
Product use phase



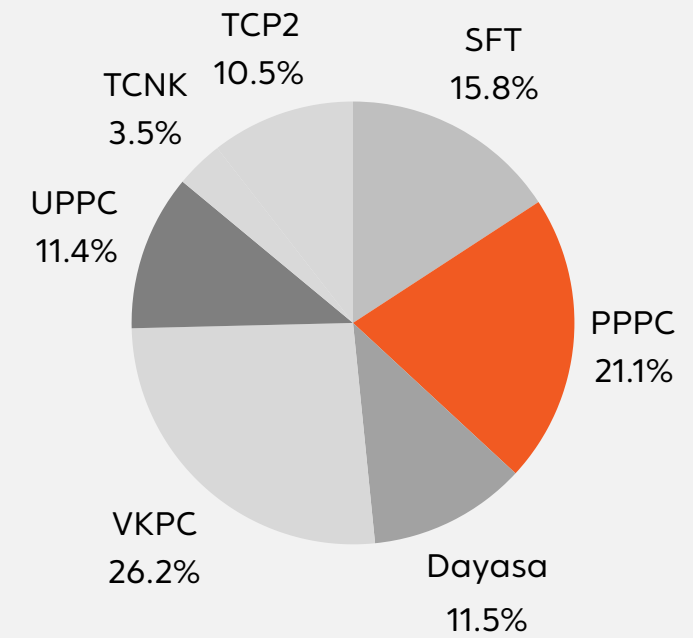
Revenue from sales by business units



Total Revenue 2023 (Million THB)



Total Production 2023 (Tonnes)



Vina Kraft Paper Co., Ltd.

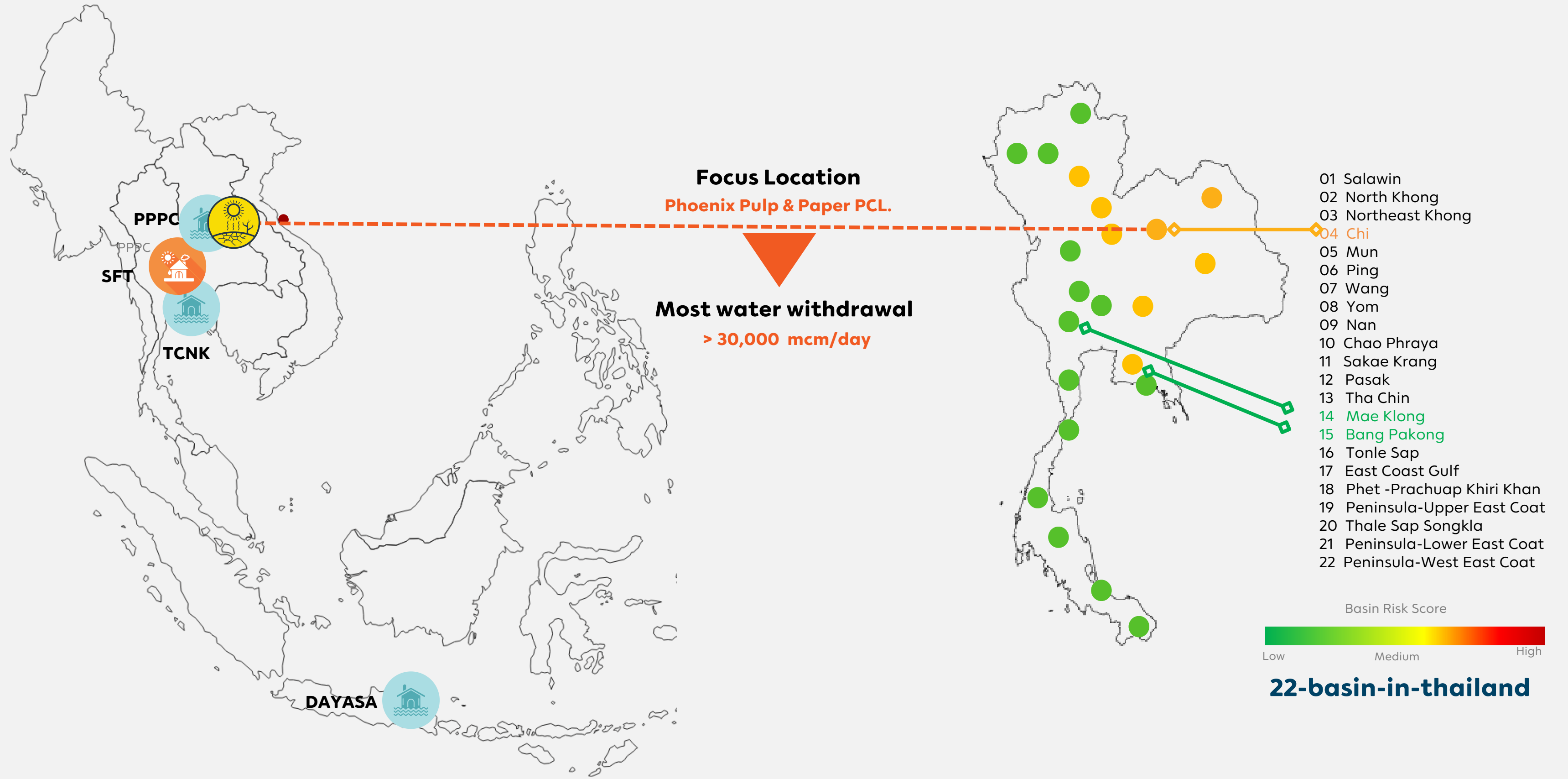
Dayasa Aria Prima PT.

United Pulp and Paper Co., Inc.

Thai Cane Paper Co., Ltd. (Prachinburi)

Thai Containers Group Co., Ltd. (Nawanakorn)

Focus location and most water withdrawal



SCGP has factories located across different regions of Thailand - in the west within the Mae Kong Basin which has abundant natural water resources, in the eastern provinces, and notably a **Phoenix Pulp & Paper PCL. (PPPC)** in Khon Kaen Province in the northeast **Chi River Basin area**. The northeast is particularly vulnerable to droughts and floods due to unpredictable rainfall and water reservoir levels. Given climate change, effective risk management for sustainability is crucial.



Business Impacts of Water Related Incidents

Non Incident within water-related In the past 4 years

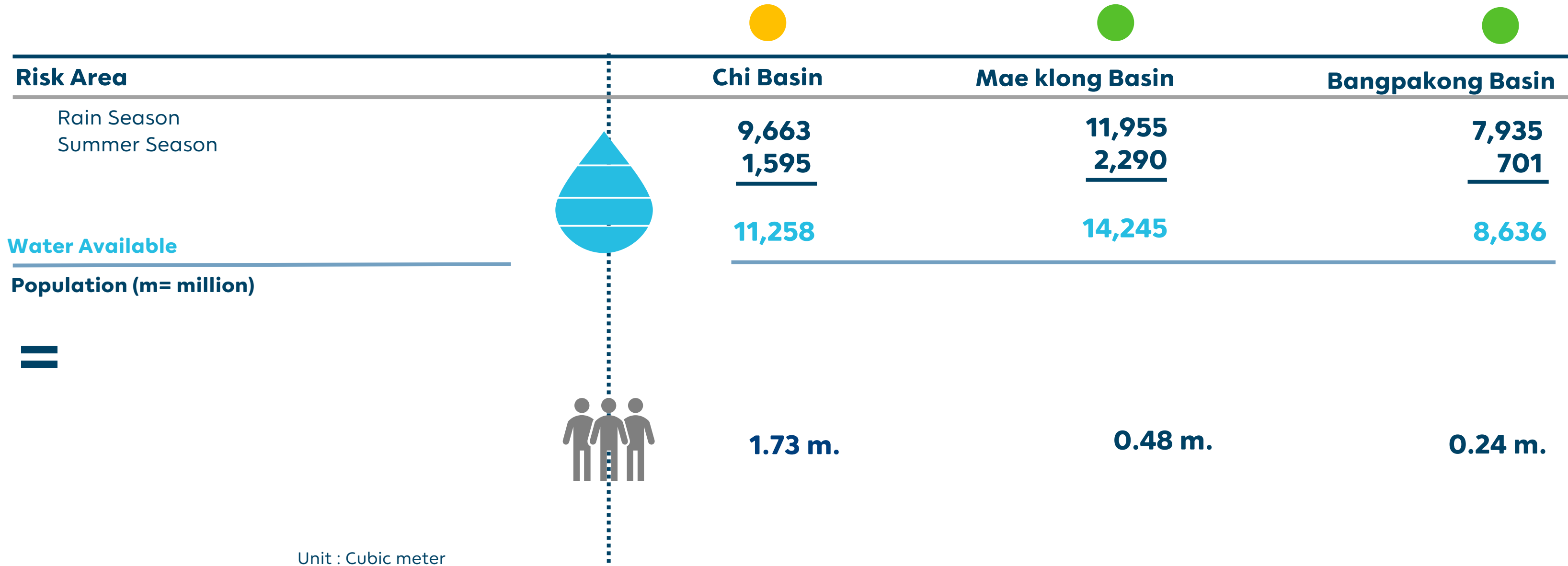
0 Case

2019 - 2021 - 2022 - 2023

Subject to any water-related incidents (operation interruptions/plant closures etc.) with substantial (more than 10,000 USD) impacts on costs/revenues in the last four fiscal years

SCGP has both internal and external procedures, monitoring, and tracking concerning possible incidents. We had assigned the team collaborated with community to continuously observe, effects, or signal any event that could have a negative effect on the community, society, or environment over four years previously, here has not been an issue.

Water stressed areas (Indicator)

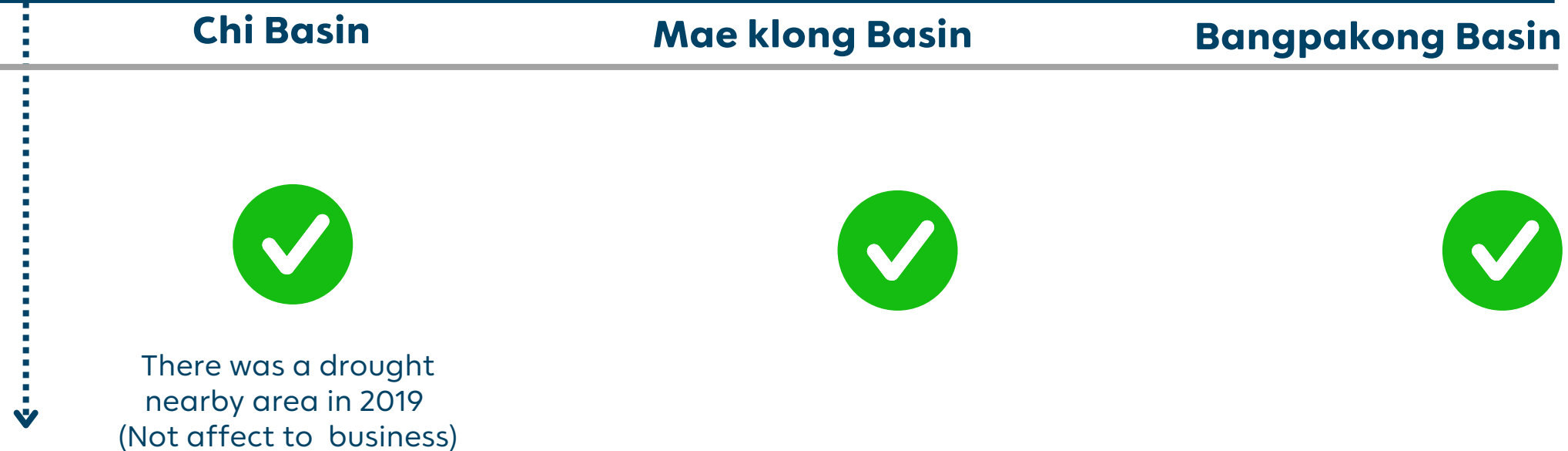


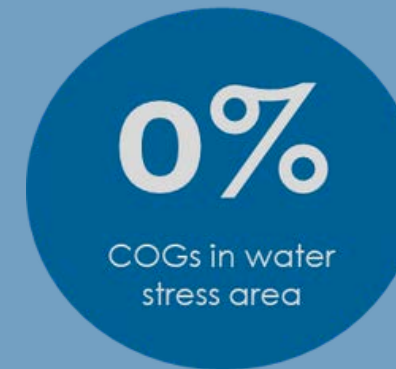
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Water stressed areas (Indicator)

Unit : Million Cubic meter

Water/year	Category
>1,700 m ³	No Stress
1,000-1,700 m ³	Stress
500-1,000 m ³	Scarcity
<500 m ³	Absolute Scarcity





Exposure to Water Stressed Areas

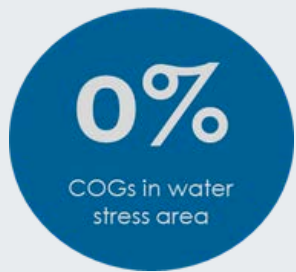
Water distribute plan during the **rain and summer season**

Risk Area		Chi Basin	Mae klong Basin	Bangpakong Basin
Water Available	Rain Season	9,663	11,955	7,935
	Summer Season	1,595	2,290	701
		11,258	14,245	8,636
Reservoir capacity	Ubolratana	2,431	Srinakarin 18,770 Vachirarongkorn 11,000	Prapong 97 Prasatung 65
			Srinakarin 4,277 Vachirarongkorn 5,908	Prapong 442 Prasatung 201
Total Inflow (year2023)		Ubolratana 5,579	10,185	642
Water distibue plan	Rain Season	250	1,912 2,000	210
	Summer Season	1,250	1,800 2,200	250
		1,500	7,912	460
Reserve for safety		4,079	2,273	182

Info : https://water.egat.co.th/dryplan/stat_inflow.php

<https://egatwater.egat.co.th/info/wetRelPlanRegion>

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Compared to the regional water availability, the quantity of water used was **minimal**.



Risk Area

Chi Basin

Mae klong Basin

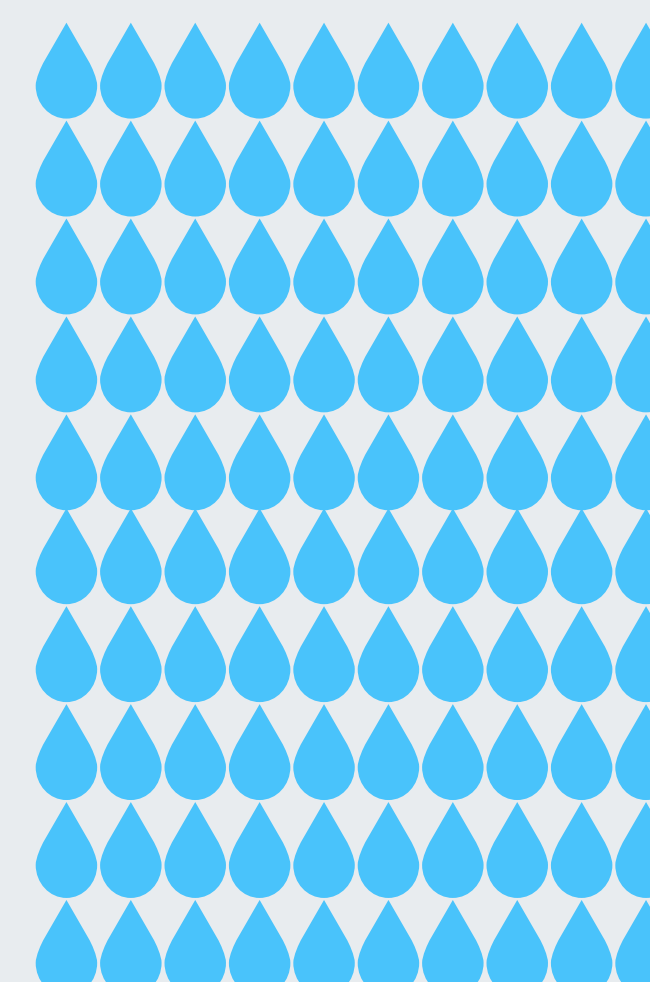
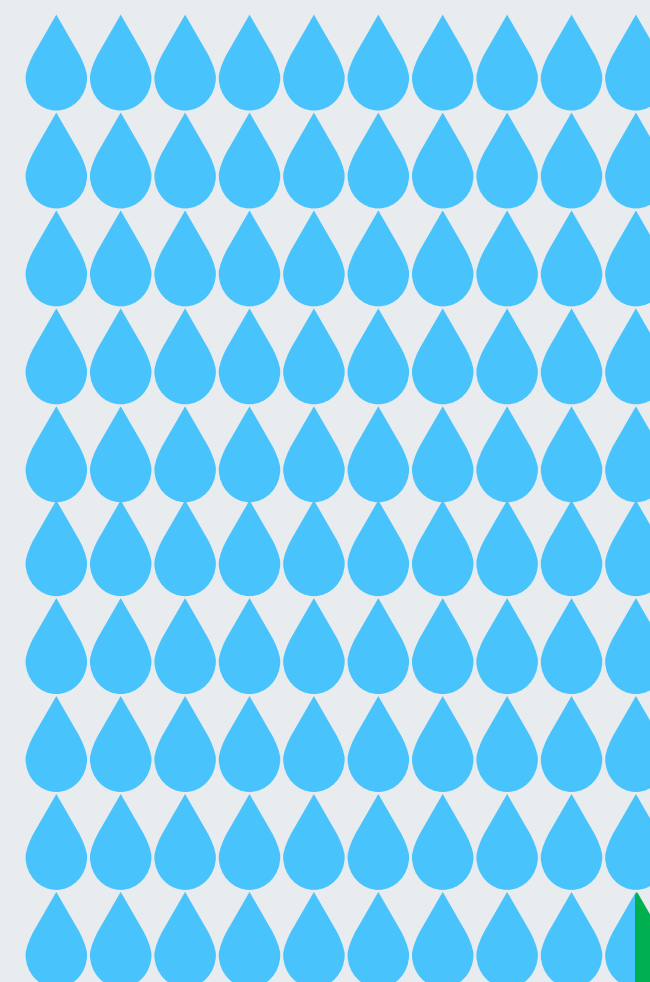
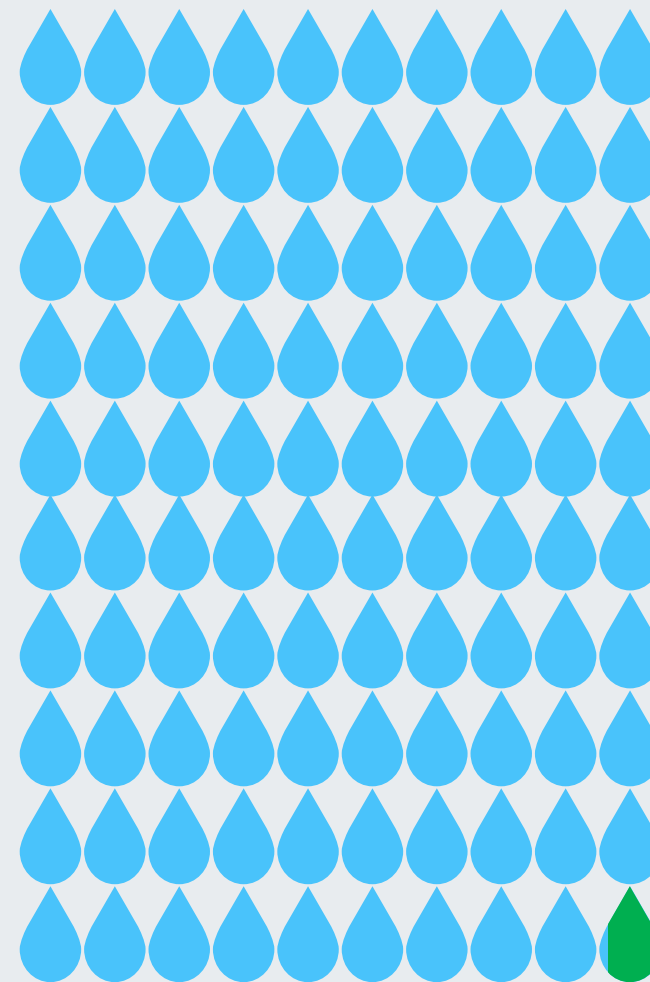
Bangpakong Basin

1,500

7,912

460

Water distribution plan during 1 Jan – 31 Dec 23



PPPC

West Plant

TCP-PB

Water withdrawal

0.93%

0.43%

0.33%

Unit : Million Cubic meter

14

26

(6 Plant)

2

Estimates of future water demand 2020-2050

Households



+10-15%

Biodiversity



±0%

Agricultures



+20%

Industrial



±0%

Traveling



±0%

Reserved



±0%

Nong Wai Irrigation and Maintenance Project

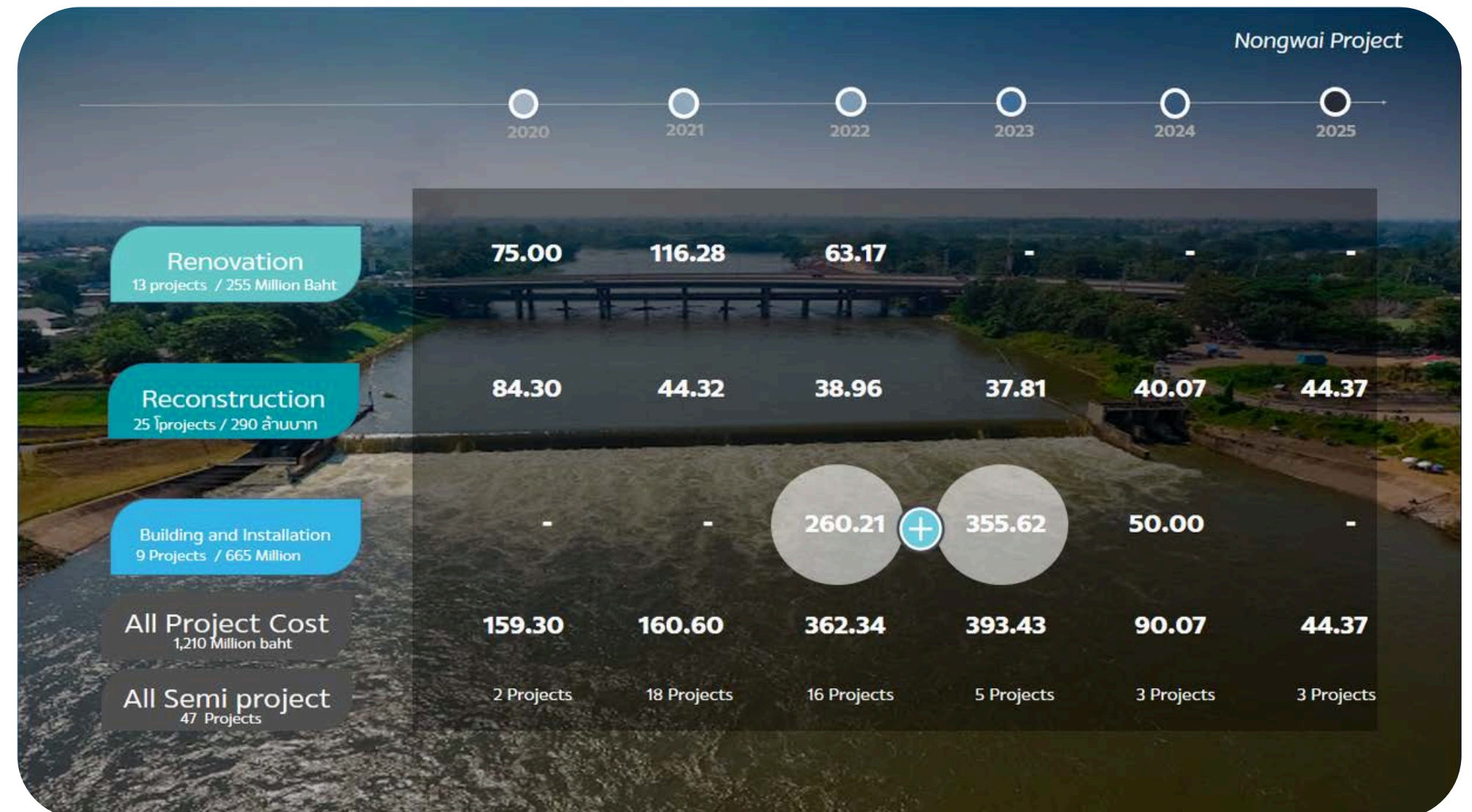
Estimated finish by 2027

According to the feasibility study in year 2018-2019 , for improvement of Nong Wai Irrigation and Maintenance Project in Khon Kaen Province to clarify the background Objectives and overall project results As well as limitations on development for those involved in the area, as well as listening to opinions of relevant agencies and people. Attendees include Provincial authority Agencies under the Royal Irrigation Department, district level offices, local administrative organizations Water user group representatives Leaders in the area Educational institutions, hospitals, Community , religious institutions, private companies and media representatives,

After the project has been through a public hearing in 2019 they Has been send a project summary into the government also adjust some topic that might related with budget and compliance. Nowadays they are prepared for Construction management and budget, which the Royal Irrigation Department has proposed and improved according to the construction plan completely. And when the project is finished Will bring great benefits According to the construction plan, it will take a period of 5 years

Expect Outcome

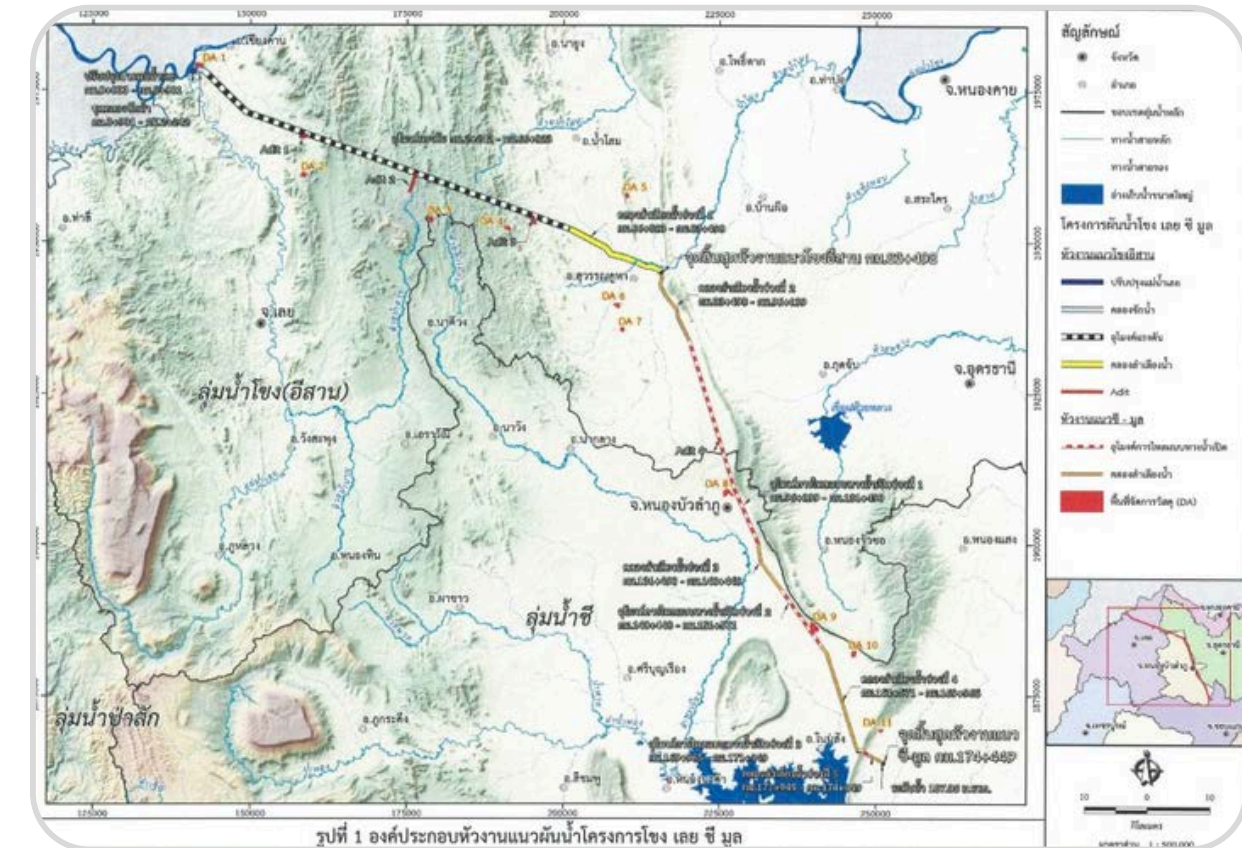
- Capacity +110 mcm / **reserve from 1 to 3 years**
- Solve the problem of subsidence Along the banks of the canal
- reduce the risk of both drought and flooding
- Increasing land effectiveness 4 % (previous 430,000 Rai)
- Produce water for community in year 2040 (+25 mcm)
- Increasing capability **households** and **Agricultures 15%-20%**
- Reduce the damage of the water transmission system



Reference : Nong Wai Operation and Maintenance Project Khonkhen Province (August, 2021)

Mekong-Chi-Mun water Project

Estimated finish by 2030



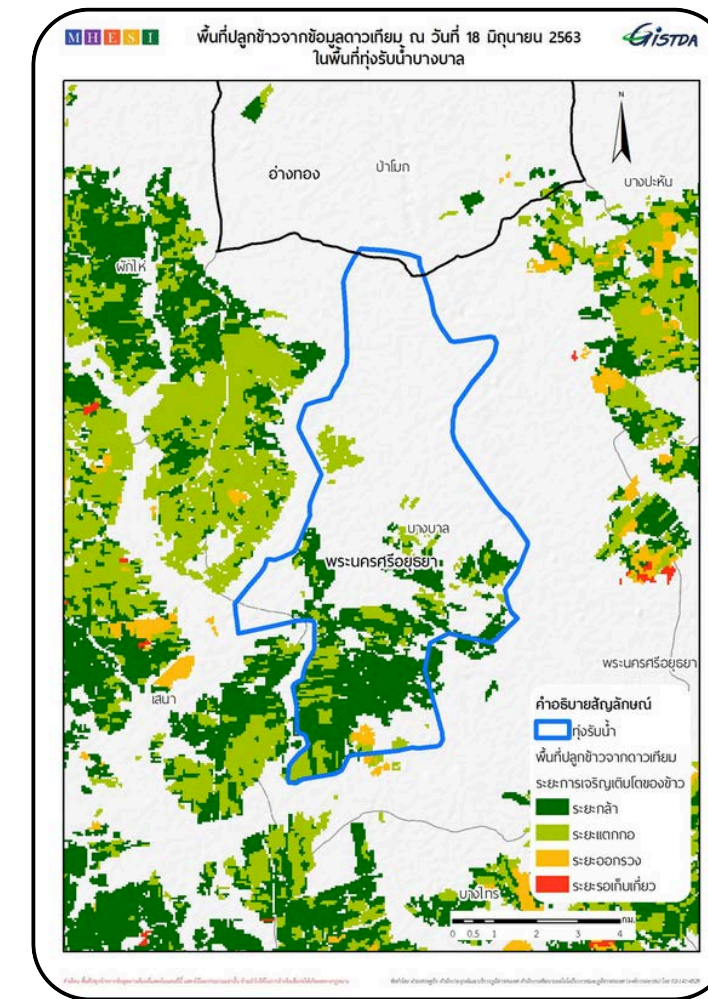
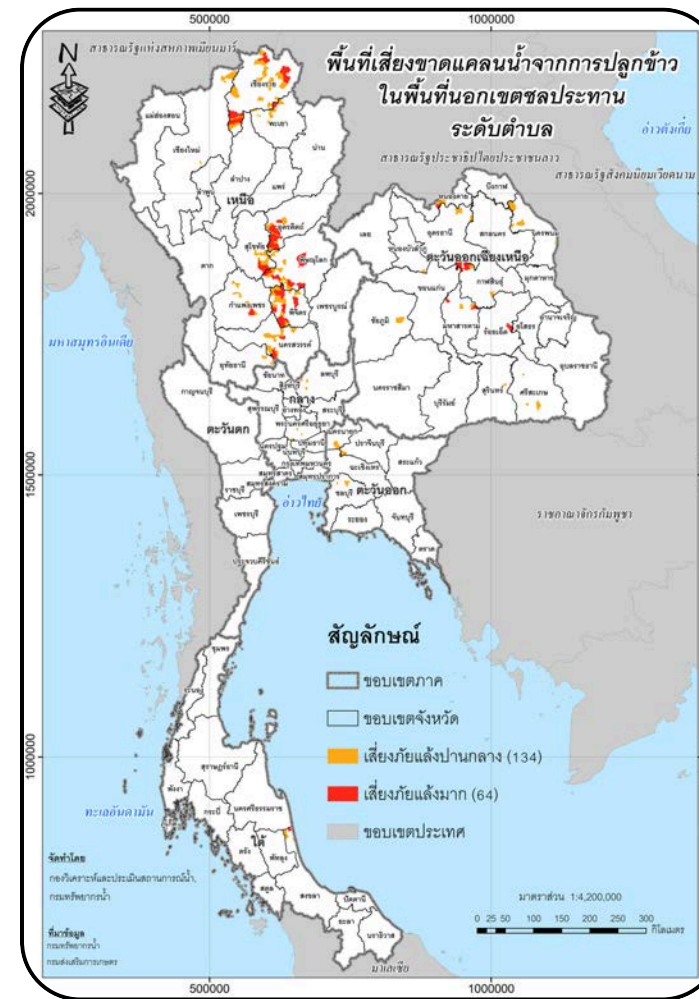
Reference : Internews's Earth Journalist Network

The main concept of the Mekong-Chi-Mun water diversion project is to divert water from the Mekong River that flows through upper Isaan. down to the Moon River Basin and the Chi River Basin in the lower Northeast Increase the amount of water in dams, reservoirs, weirs, and irrigation canals for agricultural use. including solving flood problems Alleviate Isan floods by draining water through various structures.

Over the past three decades of the "Mega Water Management Project of the Northeast", there are dams and other structures. To control the flow of water, about 14 dams have been built, most of them dams on the Mun River, Chi River, and its tributaries such as Sirindhorn Dam and Pak Mun Dam. Ubon Ratchathani Province Rasi Salai Dam and Hua Na Dam Sisaket Province Ubonrat Dam Khon Kaen Province, etc. has spent more than 10,000 million baht budget.

Monitor rice cultivation and other agriculture production

Seasonal water supply planning



“Monitors and evaluates rice cultivation and economic crop production using satellite technology”

Thai farmers often face water scarcity issues, especially when cultivating off-season or "na prang" rice, which requires significant water resources. To address this, the Geo-Informatics and Space Technology Development Agency (GISTDA) utilizes satellite technology to monitor rice cultivation and other crop production. The satellite imagery data allows them to identify crop types, growth stages, and overall conditions across agricultural areas. By integrating this information with rainfall patterns, soil moisture, and irrigation infrastructure data, GISTDA can evaluate water requirements for each region. This satellite monitoring system helps optimize water allocation, enabling proactive measures like adjusting irrigation schedules, promoting water-saving practices, or temporarily limiting cultivation in specific areas to conserve water resources. Ultimately, this technology supports sustainable agriculture, improves crop yields, enhances water resource management, and contributes to Thailand's food security and the well-being of farmers.

SCGP has consistently studied new technologies to upgrade wastewater treatment operation efficiency.

Monitors and improve a water quality



SCGP treats wastewater from the factory's production process before releasing it into the environment. Also, regularly measures the quality of water with the internal control standards that are more stringent than the official standards before releasing it to natural water sources, the wastewater treatment system of Industrial Estate, and the farmer areas for cultivation. The company monitors water quality in natural water sources before and after the factory by measuring various parameters such as the total dissolved solids (TDS) according to the standard method. It is to classify the water intake quality to ensure that the treated effluent does not affect nature and continually enhances the company's efforts to improve wastewater quality.

SCGP selected the high-efficiency water treatment technology by installing an anaerobic treatment system in factories both in Thailand and abroad, from Vina Kraft Paper Company in Vietnam, then expanded to other factories, Siam Kraft Industry Co., Ltd. (Ban Pong and Wangsala) in Thailand, the Philippines, and Indonesia. The technology has reduced wastewater contamination before entering the aerobic treatment system, so it helps to improve the process efficiency. In addition, it can reduce energy use while producing biogas as an alternative fuel for steam and electricity generation.



Water Risk Management Programs

Investments for risks reductions and mitigations

SCGP has monitored the water usage situation in business via connected digitalization with essential information from various country sources, such as the Royal Irrigation Department, the Meteorological Department, Pollution Control Department, etc. following disaster reduction measures by the United Nations Office for Disaster Risk Reduction: UNDRR, with the Sendai Framework 2015–2030, focuses on the adoption of measures that address the three dimensions of disaster risk (exposure to hazards, vulnerability and capacity, and the hazard’s characteristics) in order to prevent the creation of new risks, reduce existing risks, and increase resilience.

Water is an essential resource for SCGP's business operations. Regarding the use of water resources with the most value and most significant benefit, SCGP has applied the **3R principle** to improve the production process to **reduce** the amount of water, **reuse**, and **recycle** the water used in the production process, including the restoration of the natural water resources. To discharge water to public sources, SCGP strictly complies with laws & regulations to prevent any impact on the environment or communities.

In addition, SCGP implements the risk trigger point method, which can be described as the degree of risk that determines the decision to take action. When the risk of suffering an impact exceeds an acceptable level, events will require advance notice. To manage risk reduction Setting a goal to estimate any possible harm and evaluate the actual damage after the occurrence finishes. Priority could be focused on reducing the loss of people and property impact on business

Project for Supply Chain Initiative

SCGP conducts water risk assessment using Life Cycle Assessment (LCA) to identify suppliers most impacted by SCGP water-related risk. Moreover, SCGP plans to educate suppliers on GHG (risk & opportunity and management) and Water Management to minimize physical risk.

1

Water Management Collaborations

2

SCGP Water Stress Monitoring

3

Early Warning System (EWS)

4

Business Continuity Management (BCM)

5

Community Engagement

6

Disaster Management Participated

Ordinarily, the country's water management involves allocating water resources to consumers in order to mitigate conflicts within various regions. For water management purposes, Thailand divides itself into 22 river basins. SCGP has worked collaboratively with civil society entities in water resource administration, providing insightful perspectives that align well with community needs. The company serves as an exemplar within the industrial sector for implementing projects aimed at reducing water consumption at manufacturing facilities. Additionally,

SCGP has undertaken several other initiatives, such as groundwater management, which enables the replenishment of aquifer systems and subsequent reuse of this water source. At the end of the previous year, SCGP implemented an innovative water monitoring system that integrated data from government agencies, enabling systematic water resource management. This platform, referred to as the Water Monitoring Dashboard, facilitates advanced awareness of water volumes, thereby allowing for effective area management and preparedness in the event of flood situations. For instance, the Nanakorn factory continuously monitors water levels from the Chao Phraya River station as an early warning system to identify abnormally high water discharge, potentially requiring the release of excess water. In such scenarios, advance warning enables the factory to implement appropriate preparedness and response measures. Concurrently, SCGP employs the Business Continuity Management System (BCMS) plan to ensure operational continuity in serving customers, stakeholders, and surrounding communities during contingencies. Preparatory measures include clearing waterways and canals to facilitate unimpeded water flow, thereby mitigating the risk of flooding in residential areas.

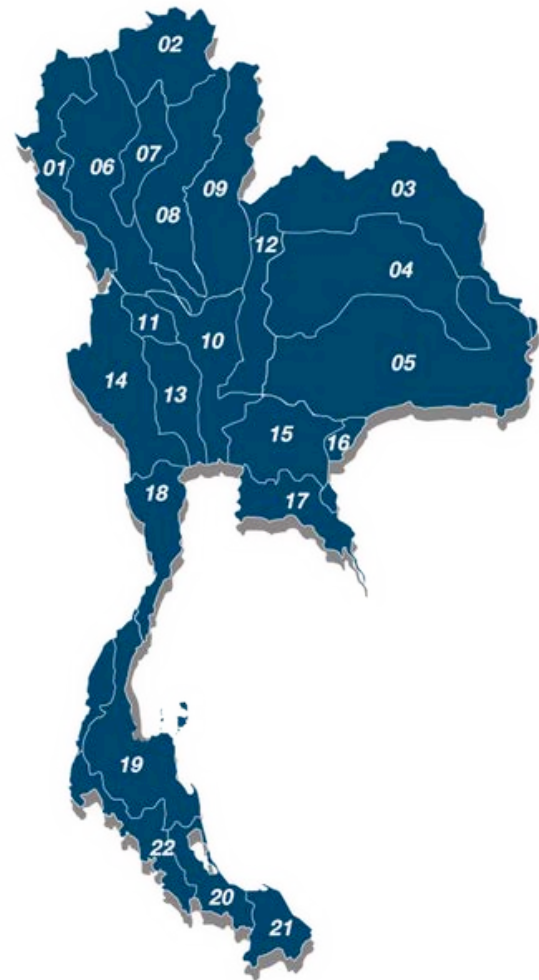
SCGP has supported employee volunteers in flooding-affected regions by establishing the SCGP Emergency Response Team (S.E.R.T.), which deploys to affected areas to assist distressed populations in collaboration with government authorities. It shown that SCGP adopts a systematic approach to water resource management, and over the past several years, this strategy has effectively prevented operational disruptions to the company's business activities while concurrently promoting sustainability for local communities, society, and the environment.

Water Management Committee

Public-Private Partnership (PPP)

Participate with Basin Committee

22 Basins



Priority Area		
Basin	Province	Factories
04. Chi	Khonkhen	PPPC, TCKK
08. Ping	Kampangphet	TCKP
10. Chaopaya	Bangkok Pratumtani Nonthaburi Samutprakarn	TCNK TCPT TCSP TWN, Conimex
12. Pa sak	Saraburi	TCSB
13. Thachin	Samuthsakorn Nakornphatom	Dyna, D-In, Orient, Precision, Prepack-SS
14. Mae klong	Kanchanaburi Ratchaburi Samuthsongkarm	SNP, TPC, TPC-BPP, SKIC-BP, SCGPE, TPC-WSP, SFT, SKIC-WS, TCP1, TCRB, Prepack-AM
15. Bangpakong	Prachinburi	TCP2, TCPB
17. East Coast	Chonburi Rayong	TCCB TCRY Prepack-RY Visy
20. Songkha Lake	Songkra	TCS

Responsible
<ol style="list-style-type: none"> 1. Exchange information and ideas on water resource use 2. Monitor water availability 3. Provide technical assistance in areas such as soil, water, and crop management, livelihood 4. Discuss potential projects and development (including climate change) that may affect water usage 5. Operate and maintain a water service or structure 6. Management of a water distribution system, including setting tariffs and collecting fees. 7. Estimates of future potential regulatory changes on a local level or water pricing specific in local.



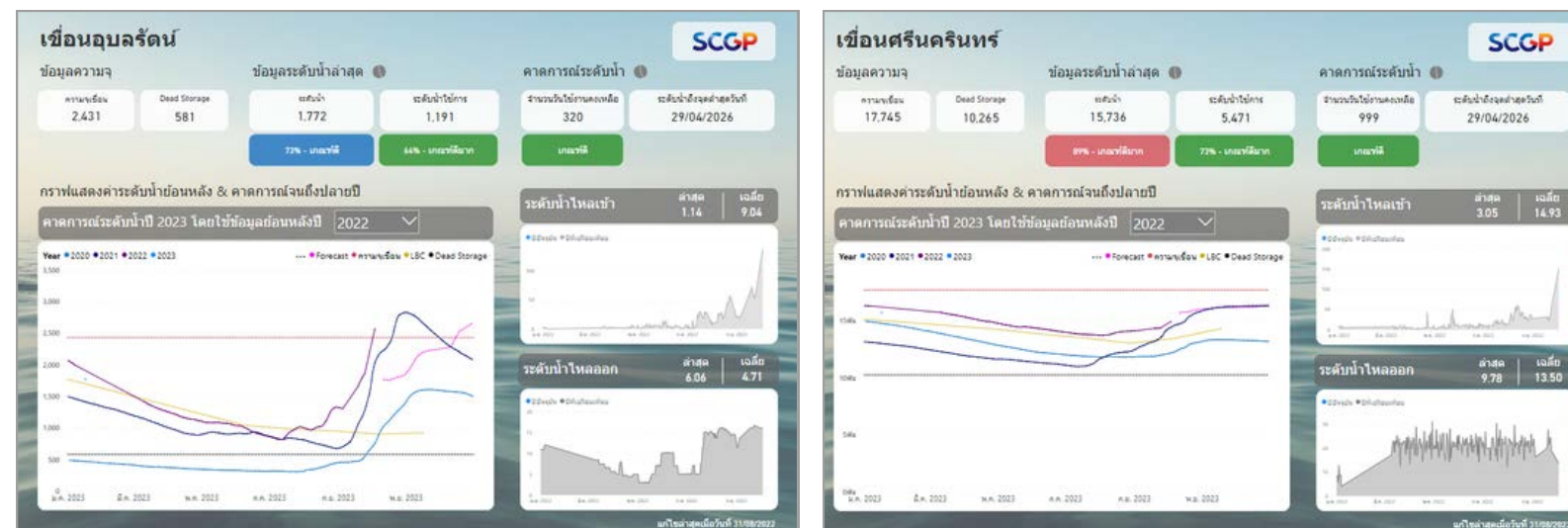
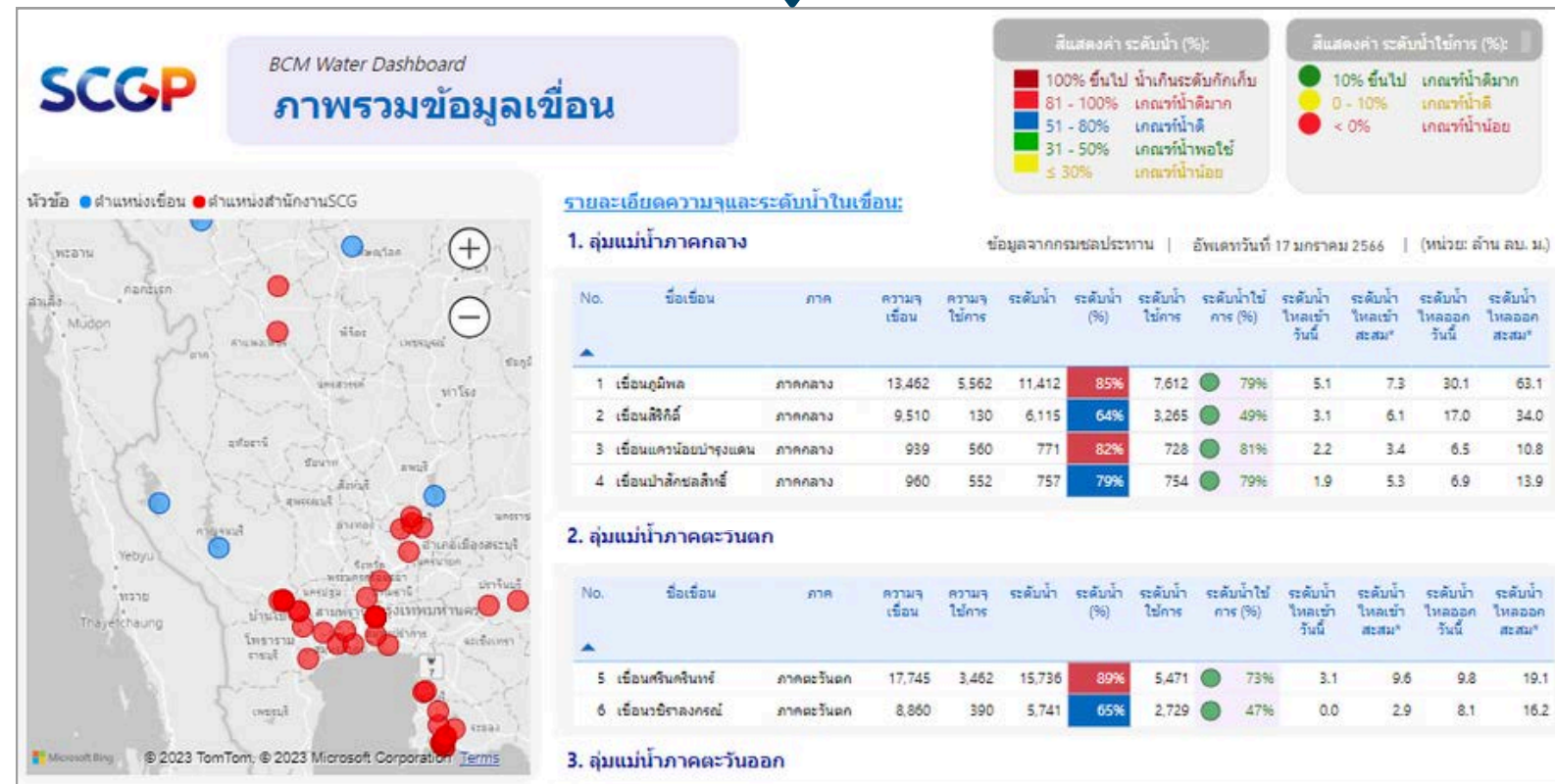
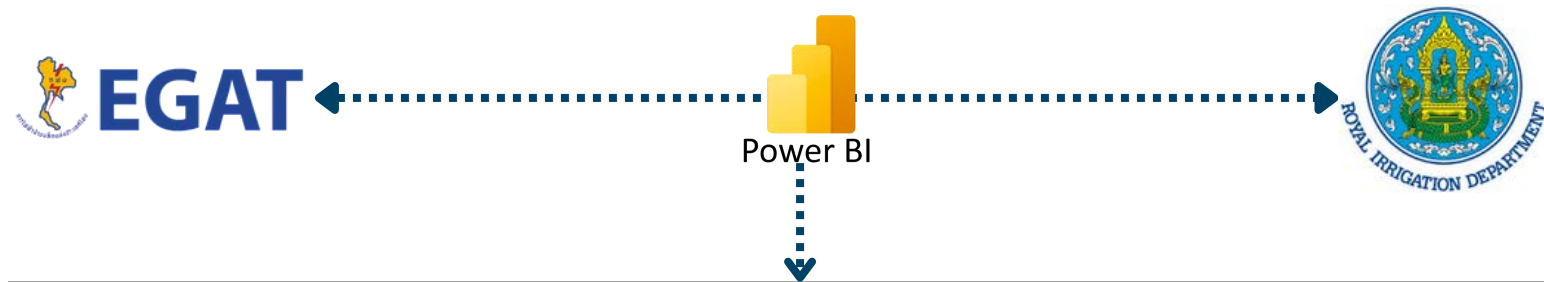
“Community-based water management, it increases the sustainability of the water and agricultural systems and boosts food production and security”

Water Management Collaborations



SCGP participates in the River Basin Committee's work to be part of water management in the area and monitor risks that may impact businesses, communities, and the environment. SCGP staff members join activities and provide perspectives on sustainable water management practices.

Track and Trace



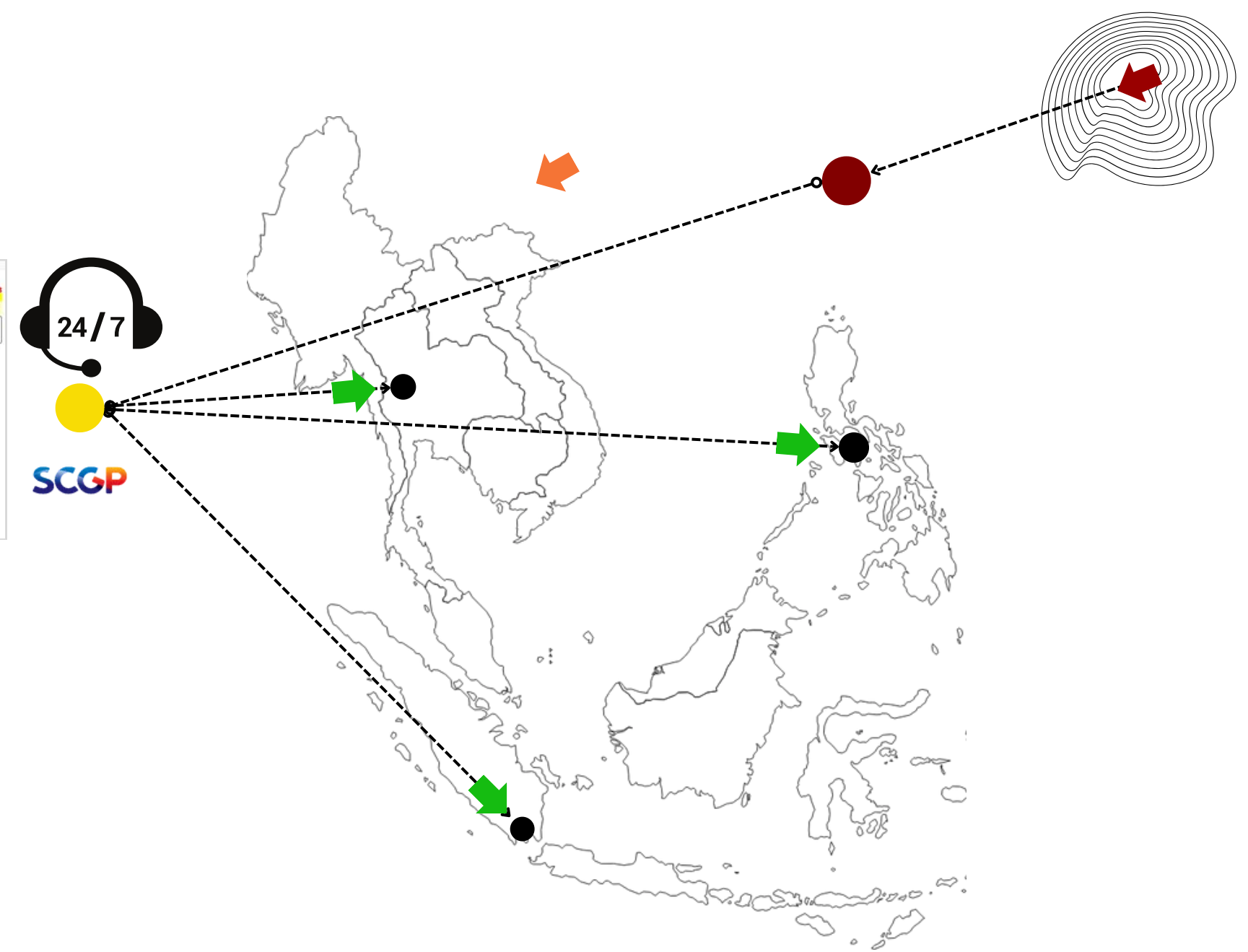
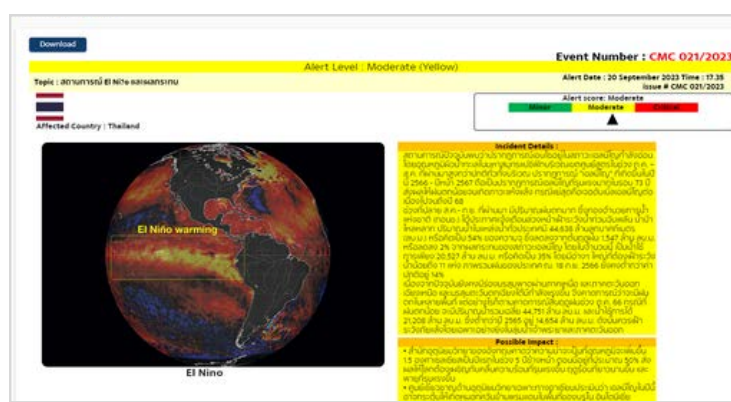
“Monitoring the water situation to ensure it does not adversely impact communities”

SCGP has track and analyze water data source linkages real time (API) data from government data base and related sources which for analyze water situation , forecast , monitor and manage water supply and demand issue.

Intelligence Information



Early Warnings for All

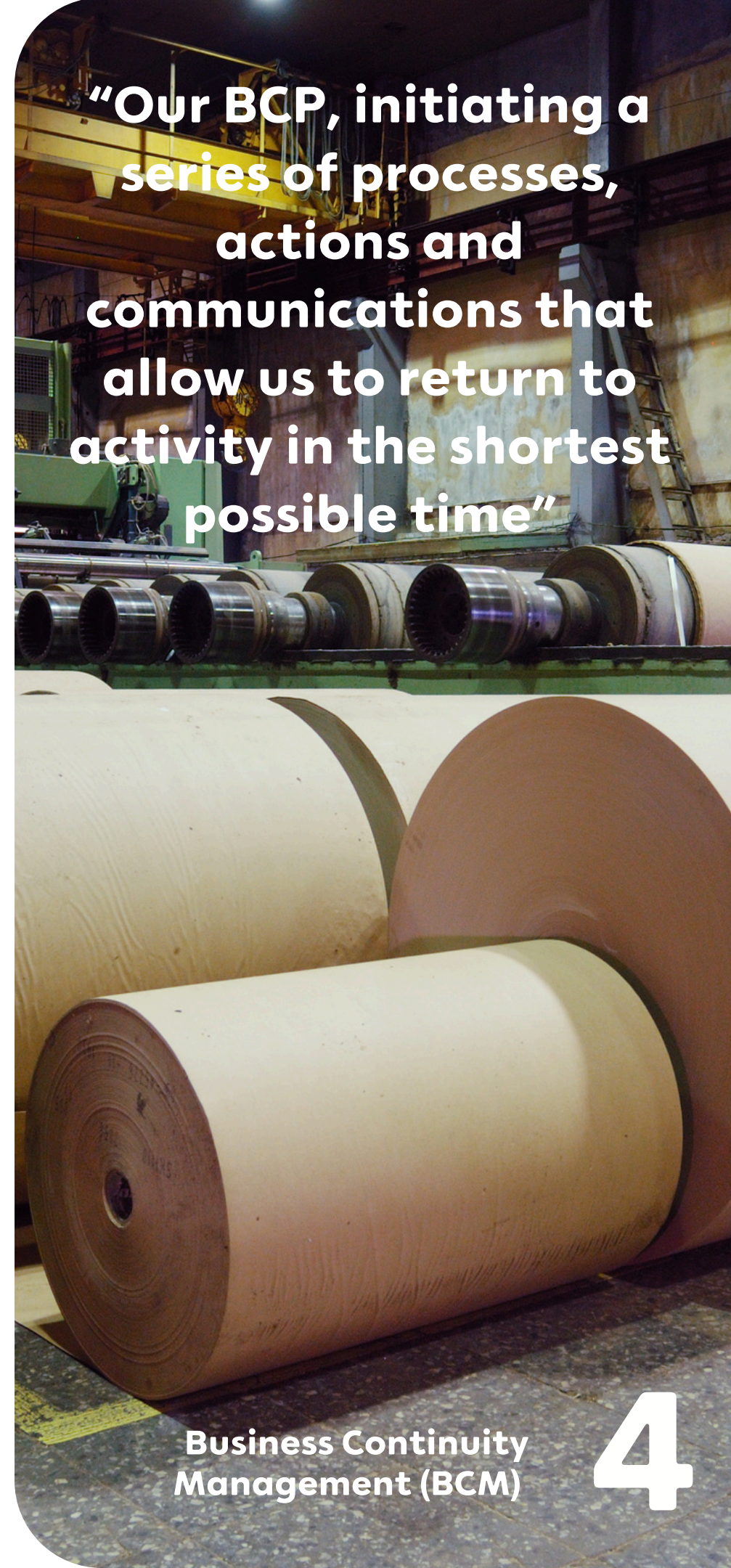
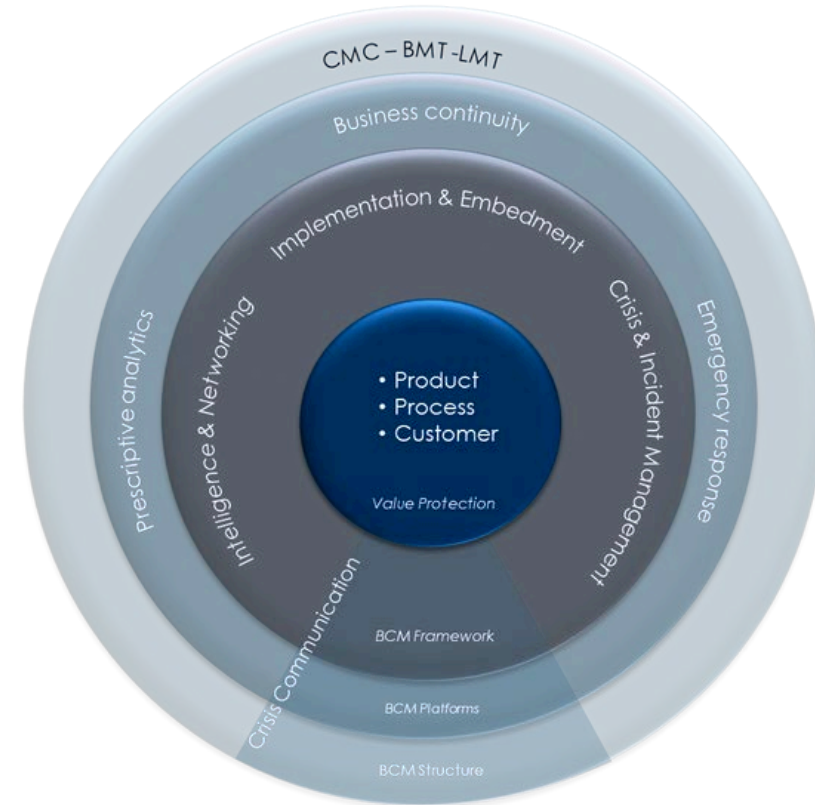


“Early Warning Systems Enable Mitigation of Business Disruptions and Financial Impact”

Early Warning System (EWS) 3

An advanced warning system for potential disasters in Thailand and abroad. SCGP has developed this system to improve preparedness and reduce the impact on individuals, businesses, communities, and the environment for sustainability.

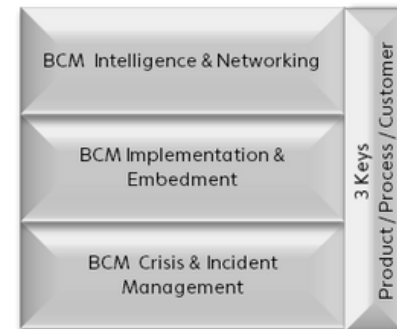
Business Distribution



Sendai Framework

1. Reduce Mortality
 2. Reduce The number of affected people
 3. Reduce Economic loss relation with revenue.
 4. Reduce Affected 3 keys activities /infrastructure / basic services
 5. increase Internal competency & risk reduction strategies.
 6. Increase Networking collaborated develops standardized
 7. Increase The effectiveness multi-hazard early warning systems.
- 7 Sendai Frame work

SCGP BCM Framework



BCM Structure



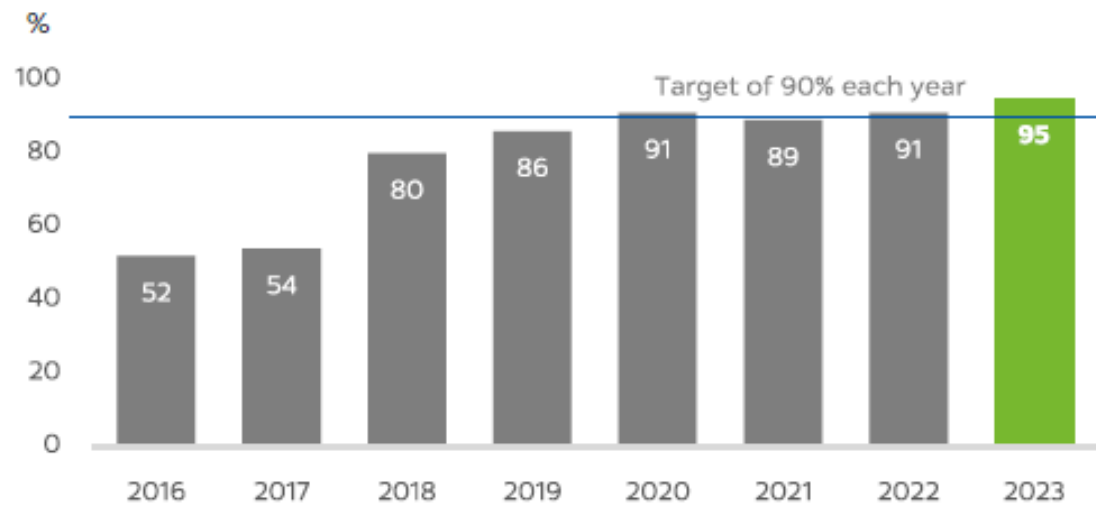
BCM Sustainability Guideline

Area	Guideline
1. Business Continuity	Ensure business operations are uninterrupted and aligned with the United Nations Office for Disaster Risk Reduction (UNDRR) and Sendai Framework 7 goals.
2. Crisis Management	Establish a Crisis Management Committee (CMC) at the Political Level, a Business Management Team (BMT) at the Strategic Level, and a Local Management Team (LMT) at the Operational Level.
3. Business Continuity	Implement Business Continuity Management (BCM) to ensure business operations are uninterrupted and aligned with the United Nations Office for Disaster Risk Reduction (UNDRR) and Sendai Framework 7 goals.

SCGP Business Continuity Management for Sustainability) to ensure that its business operations are uninterrupted and aligned with the United Nations Office for Disaster Risk Reduction (UNDRR) and Sendai Framework 7 goals.

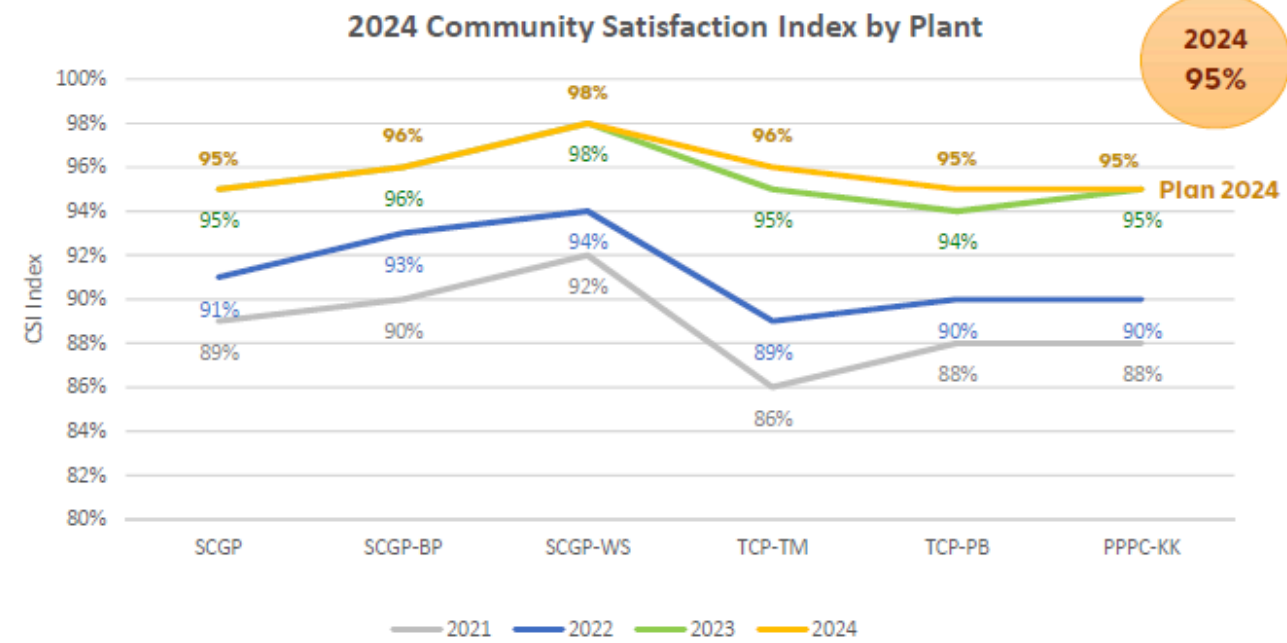
Business Continuity Management (BCM)

SCGP Community Satisfaction Index



2023 Sample survey of 1,921 individuals

- 1,373 groups of people
- 548 community leaders



Support the community build a water reservoir. And promote the planting of trees to prevent erosion of the water banks and Collaborated with community continue relations transfer acknowledge for improvement agriculture also hearing and exchange information between teams on activities for the most benefit the social



“SCGP tracks and monitors stakeholder conflicts by using the collaborative activity based approach through community engagement”

Community Engagement

5

SCGP engage with the community, such as promoting water conservation efforts during droughts, or digging canals to prevent flooding during the rainy season

Leave no one behind



PRECHACHART - SKIC WS

S.E.R.T. Commander



**Thanathorn
Coordinator
ICS master#96**

Rescue Team



CHAIYUT - SKIC BP



KITTISAK - SKIC WS



THANAPAT - SKIC BP



TOSAWAT - SKIC WS



CHUCHAI - TPC



ANAN SKIC WS



CHONRAVIT - TCPB



KITTIKUN - SKIC WS



“Humanitarian assistance for Relief Rescue Recovery and Community Activity for People & Community safe”

Disaster Management Participated



SCGP has established the SCGP Emergency Response Team (S.E.R.T.), which is a response team for emergency situations that occur Internal and outside the area factory. Cooperated with the government , Communities , Partnership

The background features a blue-tinted landscape with rolling hills and a grid pattern in the sky. The word "RISK" is prominently displayed in the center.

RISK

OPPORTUNITIES

Risk Driver

Drought



Flooding



Extremely heat



	Drought Scenario		Flooding Scenario		Extremely heat Scenario	
Physical Risk Scenario	Case 1. Water available shortage 10%-50% of Lower Balance Curve (LBC) water available		Case 1. (+5%) 15 day maximum rainfall		Case 1. (+0.5 - 1.5) celsius 30 Days/year	
	Case 2. Regulation pricing change + 1.50 - 4 Baht / Cu.m.		Case 2. (+10%) 15 day maximum rainfall		Case 2. (+1.5 - 2.5) celsius 30 Days/year	
			Case 3. (+20%) 15 day maximum rainfall		Case 3. (+2.5 - 3.5) celsius 30 Days/year	
Double materiality	Finance materiality	Impact materiality	Finance materiality	Impact materiality	Finance materiality	Impact materiality
	Case 1. 93 mb./day	-	-	-	-	-
	Case 2. 12 mb./ year	-	-	-	0.5 mb / day	1-4 mb./ year
			-	1 mb./day	2.5 mb / day	5 mb./ year
Investments for risks reductions and mitigations	<ul style="list-style-type: none"> Minimize water withdrawal 35% in 2025 at SCGP level Implement 3R Projects Inspect the backup water system within the factory. In each season, monitor community water allocation planning. Use a monitoring system to determine the factory's water volume transfer purchase orders to Backup plant 		<ul style="list-style-type: none"> Reduce production capacity within the factory and transfer purchase orders to Kamphaengphet, Ratchaburi, and Samut Prakan factories, as well as the Fajar factory. Activated the BCP management plan. Install a flood protection system for the factory worth approximately 10 million baht. 		<ul style="list-style-type: none"> Adjust the WFH (work from home) system. Enhance employee benefits regarding health check-ups. Adjust work plans and transportation systems during periods of high heat risk. Improve the spare parts monitoring system for machinery that may be damaged. 	

Risk Score

Drought



Flooding



Extremely heat



Focus location



Phoenix Pulp & Paper PCL.



Dayasa Aria Prima PT.

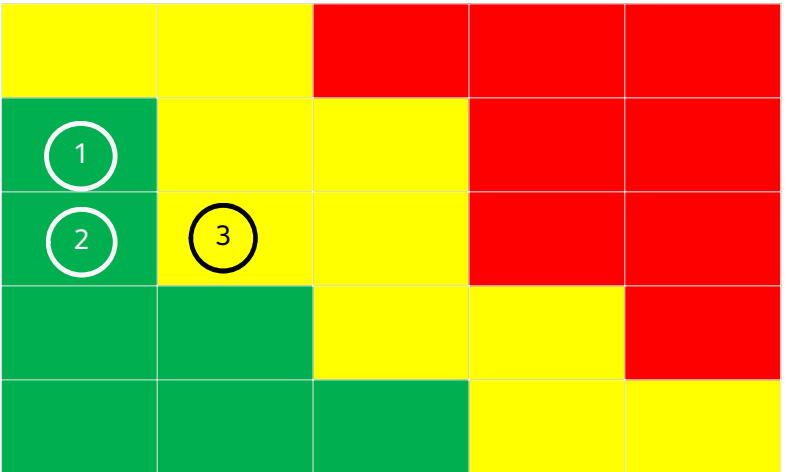
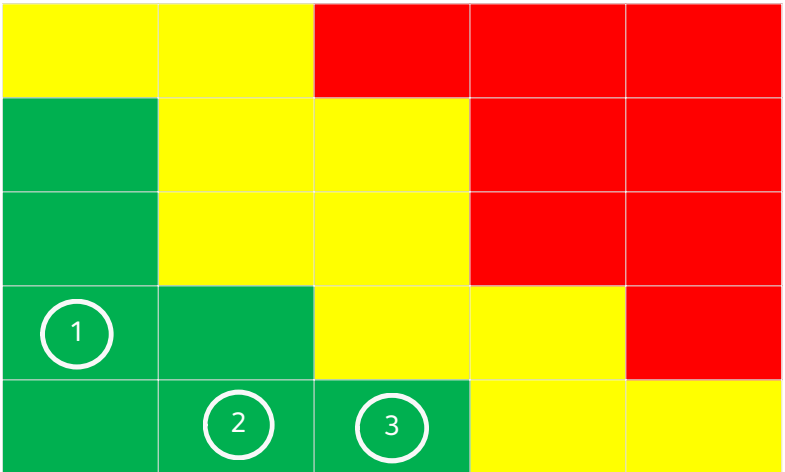
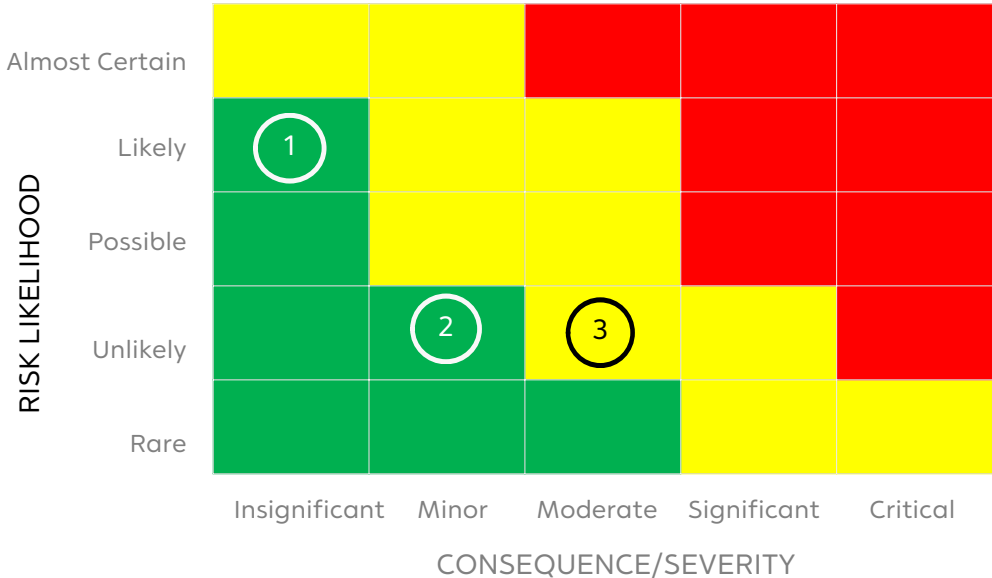


Thai Containers Group Co., Ltd.
(Nawanakorn)

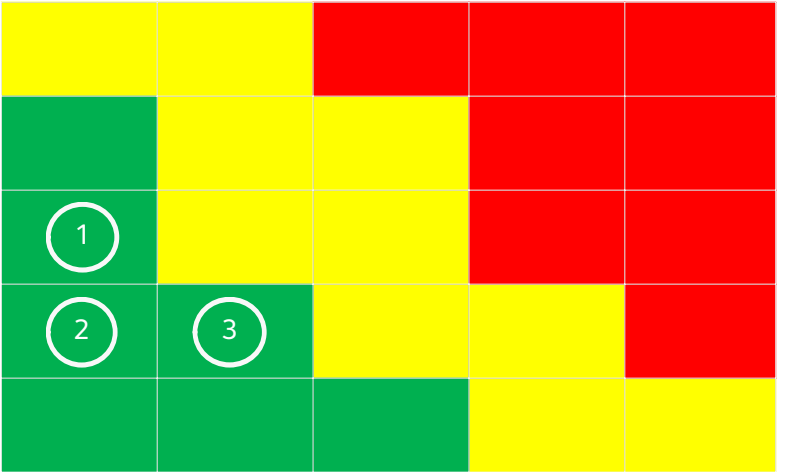
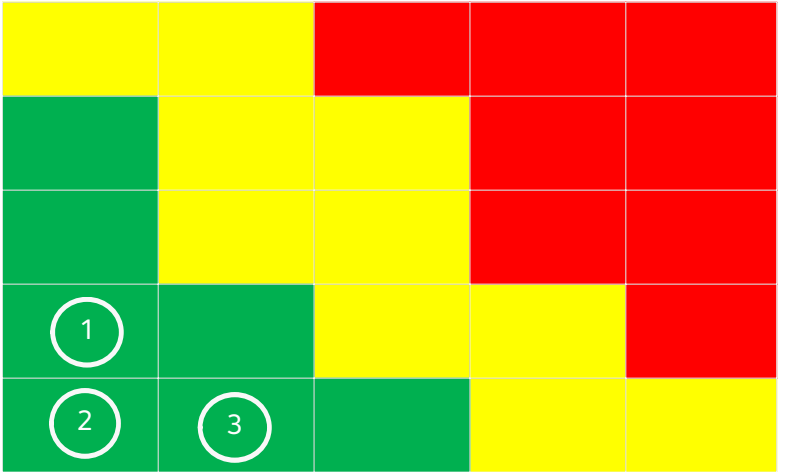
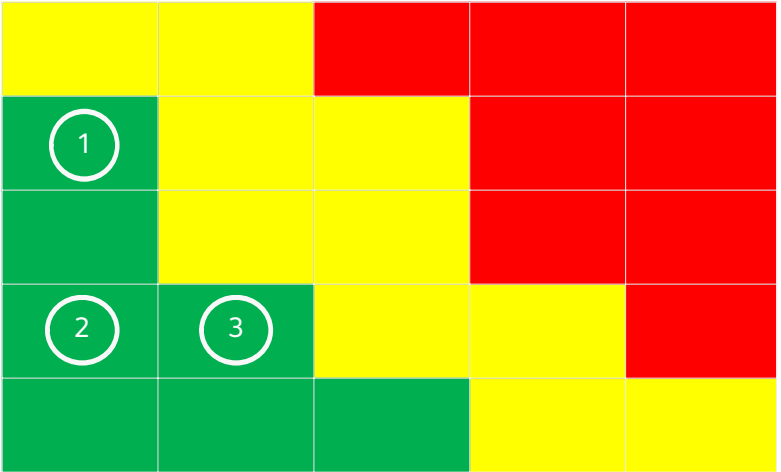


The Siam Forestry Co., Ltd.
(Kampangphet)

Gross risk Score

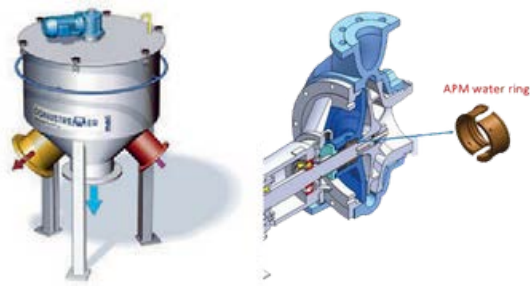


Net risk Score



Opportunities

ESG 4 Plus



Circular Economy

1. Leveraging waste and diverse raw materials due to a variety of industries.
2. Collaborating with customers to recycle waste into new products, in line with circular economy principles.

Climate Action

1. Investing in research and development of Carbon Capture, Utilization and Storage (CCUS) technologies and renewable energy.
2. Designing and developing products and services based on circular economy principles, promoting and increasing the use of recycled materials.
3. Implementing Internal Carbon Pricing (ICP) as a tool for investment consideration.
4. Collaborating with government, private sectors, industries, and global organizations to continuously monitor situations, assess risks, and develop response and business continuity plans in case of disasters.

Customer & Consumer Centricity

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

Control Risk & BCMs

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

The background features a blue-toned city skyline with white wireframe buildings. In the foreground, several lifestyle scenes are depicted: a man on a bicycle, a woman holding boxes, a woman walking a dog, a man on a phone, a man with a tablet, and a family with a shopping cart. The SCGP logo is prominently displayed in the center, with 'S', 'C', and 'G' in blue, and 'P' in a red-to-yellow gradient.

SCGP

EVOLVE THE WAY OF LIFE



www.SCGPackaging.com