

Water Management

Targets in 2023

Reduce water usage per unit of production (cubic meters per ton of production) by **20%**



Operational performance against targets

Water usage per unit of production (cubic meters per ton of production): **24.16**

The proportion of **treated wastewater** that is **reused** is **40%**



Volume of treated wastewater that is reused (cubic meters): **43,130** or **44.3%**

Background and relevance

Water is considered a crucial resource for both living beings and business operations. Economic growth and increasing population expansion have led to higher water demand from both the industrial and public sectors. This situation poses a future risk of water scarcity and impacts climate change. The recent viral pandemic, along with natural disasters caused by climate change, has heightened risks related to water quantity and quality. S&P recognizes the importance of efficient water management to ensure effective operations. Additionally, this demonstrates responsible water usage towards society and the environment, which is essential for a sustainable ecosystem.

Commitment

S&P recognizes the importance of water resources, quality, and potential water shortages that could have both short-term and long-term impacts. This is correspondent with S&P's water management practices. The aim is to manage water sustainably throughout the supply chain. This includes treating wastewater before releasing it into public areas and recycling water to maximize its utility. These practices enhance water use efficiency, maintain clean water standards, and protect crucial water sources essential for human life. This approach ensures equitable access to water as a fundamental human right and creates a sustainable balance between the economy, society, and the environment.

Practical approaches for water management



Environment



Social

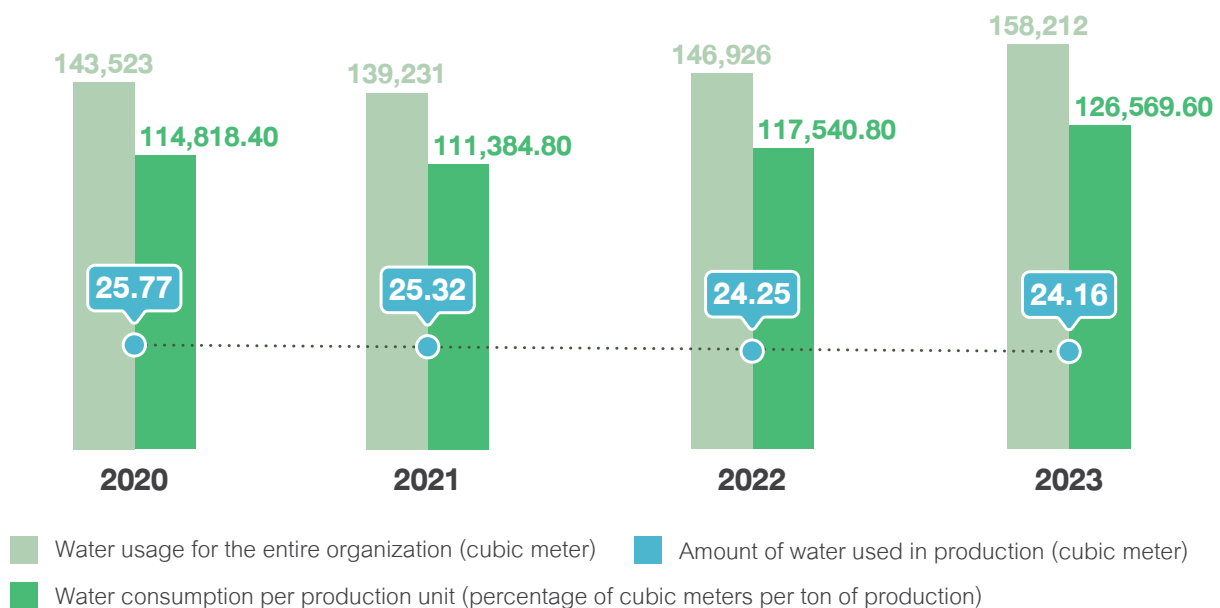


Governance and Economy

Operational approaches

1. Manage water-related risks by monitoring the availability of water at the local level to assess situations and potential impacts from changes in water quantity or quality, such as shortages of produce due to drought crises caused by abnormal precipitation, or flood. This includes addressing impacts on biodiversity resulting from water situations, such as seafood quality. S&P also promotes water risk management among our suppliers, encouraging them to have water allocation plans, such as planning for drought-resistant crops, to prevent conflicts with communities and mitigate impacts on S&P's operations.
2. Assess the quality of the clean water used in the production process by conducting an annual sensitivity analysis, including metals testing, microbiological testing, and water testing for attributes such as color, mineral content, and pH levels. This also involves evaluating the quality of ice to ensure safety and maintain production standards so that consumers receive the safest products. Additionally, conduct scenario analysis to evaluate potential future risks and opportunities arising from the organization's business activities.
3. Monitor the organization's water usage and the financial impact of changing water prices to identify water-saving measures and develop a water management plan to maximize efficiency.
4. Assess the quality of wastewater from the production process each time by controlling wastewater parameters according to legal standards to prevent environmental impacts on the community.
5. Invest in projects to improve wastewater quality by implementing a Sequencing Batch Reactor (SBR) biological treatment system that uses air to support microorganisms in breaking down organic substances in wastewater, resulting in clear water for reuse.
6. Install grease traps at all S&P shops and locations to capture grease before releasing wastewater into drainage systems. Grease or oil accumulation must be removed daily to reduce the risk of wastewater contamination.
7. Promote awareness and understanding of water conservation among employees and stakeholders through training, knowledge sharing, and campaigns to encourage water-saving practices.

Summary of operational performance in 2023



Water risk assessment

S&P is aware of the problems and risks of water shortage which is a natural resource that is important to living things and business operations.

S&P has water risk assessments covering all business areas every year through the Aqueduct Water Risk Atlas tool. The results of the risk assessment revealed that:



● **50%**

of the operating area is in medium to high risk area (40-80%).

● **50%**

of the operating area is in an extremely high risk area (>80%).



100%

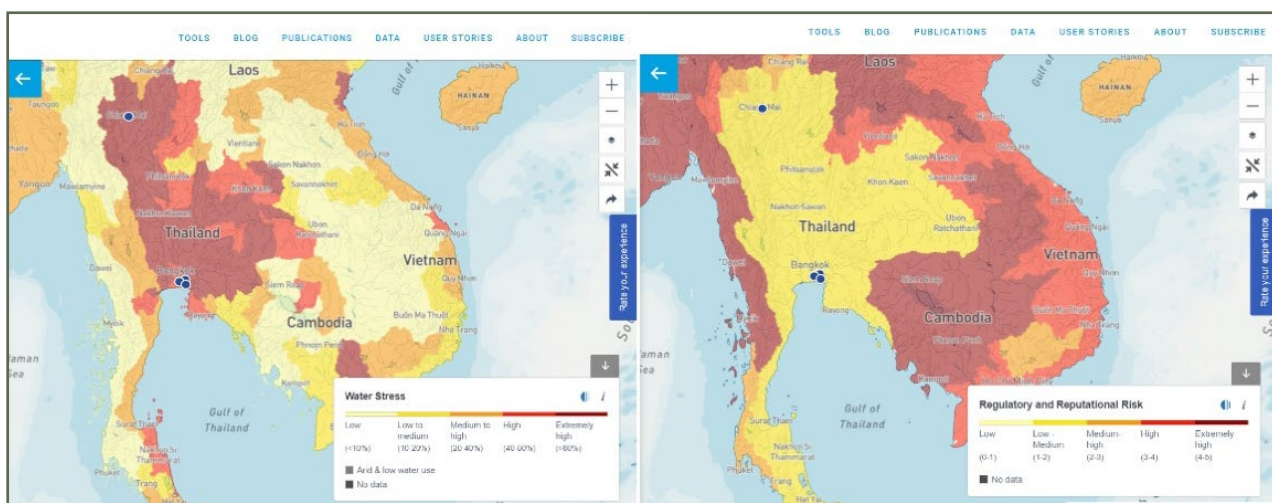
The result of risk assessments due to regulatory and reputational changes in water resource-related issues having the assessment results in the low-medium level.

The assessment also covers risk assessments due to regulatory and reputational changes in water resource-related issues having the assessment results in the low-medium level.



Water Stress Risk

Risk Assessment of water shortage areas in all 4 factories using the WRI tool.



Environment



Social



Governance and Economy

Places	Address	Assessment result of WATER STRESS	Assessment result REGULATORY AND REPUTATIONAL RISK
Latkrabang Food Factory	65/4-5 Moo 4, Latkrabang Industrial Estate, Lam Pla Thio Sub-district, Latkrabang District, Bangkok 10520, Thailand.	Extremely High (>80%)	Low-Medium (1-2)
Bangna-Trad km. 23.5 Bakery Factory	86, Moo 4, Bangna-Trad Road, Km. 23.5, Bang Sao Thong Sub-district, Bang Sao Thong District, Samut Prakan Province. 10570, Thailand.	High (40-80%)	Low-Medium (1-2)
Sukhumvit 62 Bakery Factory	2, 2/1 Soi Sukhumvit 62 (Intersection 3), Sukhumvit Road, Phra Khanong Tai, Phra Khanong, Bangkok 10260, Thailand.	High (40-80%)	Low-Medium (1-2)
Lamphun Province Bakery Factory	81, Moo 4, Ban Klang Sub-district, Mueang District, Lamphun Province 51000, Thailand.	Extremely High (>80%)	Low-Medium (1-2)

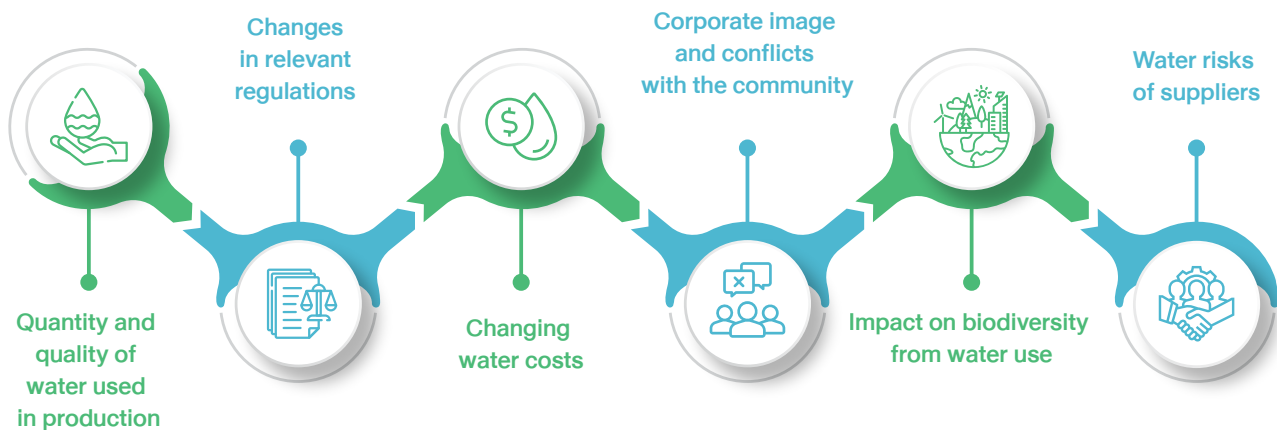
Operational performance of wastewater quality management by implementing a Sequencing Batch Reactor (SBR) biological treatment system

Standard values for controlling wastewater drainage and water benefiting	Standards for controlling wastewater drainage from factories		Standards for controlling wastewater drainage from factories located in industrial estates	
	Sukhumvit 62 Bakery factory	Bangna-Trad km. 23.5 bakery factory	Lamphun bakery factory	Latkrabang food factory
COD 120 mg/L	COD 16-80 mg/L	COD 16-32 mg/L	COD 220-440 mg/L	COD 50-150 mg/L
BOD 20 mg/L	BOD 5-17 mg/L	COD 3-14 mg/L	BOD 110-230 mg/L	BOD 15-35 mg/L
Water benefiting	60% reserved in the water reservoir for floor washing and plant watering.	100% reserved in the water reservoir for floor washing, plant watering, and filling the pond in front of the factory.	100% released into the wastewater treatment system of the Northern Industrial Estate, Lamphun Province.	100% released into the wastewater treatment system of the Industrial Estate Authority of Thailand (Latkrabang).

Remarks:

- COD value is Chemical Oxygen Demand (the amount of O₂ that chemicals use to react with organic substances).
- BOD value is Biochemical Oxygen Demand (the amount of O₂ that microorganisms use to dissolve organic substances in water).

S&P has a risk plan that covers key issues as follows:



S&P efficiently manages water resources throughout the value chain by distributing the bakery production facilities across three locations: Bangkok, Samut Prakan, and Lamphun. This strategy ensures continuous business operations without interruption, based on maintaining a balance in water usage that aligns with water demand and minimizes impacts on communities and the environment. This approach does not only enhance S&P's image by reducing concerns or conflicts but also fosters good relationships with local stakeholders. Additionally, it mitigates negative effects on ecosystems and biodiversity through effective water risk management.

Furthermore, S&P collaborates with suppliers to address water-related risks appropriately, efficiently, and in compliance with the law, as outlined in the ESG supplier assessment, particularly in the area of setting targets and projects for water resource usage. In 2023, 82% of suppliers were assessed for **environmental criteria**, including water risk evaluation. S&P also works with suppliers, such as relevant agencies and communities, to develop water risk reduction plans and initiatives for water reuse.

Although S&P's business operations do not primarily rely on water as a key resource for product manufacturing, we are committed to maximizing the efficient use of water resources. S&P aims to find ways to reduce water usage by managing water consumption rates that align with production capacities. Additionally, S&P also undertakes projects to maximize resource utilization, including recycling wastewater for purposes such as watering plants and cleaning operational areas.



Highlight projects in 2023

S&P recognizes the problems and risks associated with water scarcity, which is a vital resource for living beings and business operations. Therefore, S&P is committed to efficient water resource management throughout the value chain through the following projects:

Project to use treated wastewater to water plants

The Bangna-Trad km. 23.5 bakery factory use water in various production processes, including as an ingredient in food products and for cleaning purposes. S&P aims to maximize water efficiency by treating wastewater generated from factory activities and recycling it. The treated wastewater is reused for refilling the pond in front of the factory and watering plants.



The treated wastewater is reused for refilling the pond in front of the factory.



The treated wastewater is reused for watering plants in the factory.

Results and Benefits

