

Environmental Stewardship



Targets

Performance in 2023

Biodiversity and Ecosystems

- Biodiversity conservation area certified by FSC™ standards at least 10% of agroforestry area.
- No gross deforestation

13.7% coverage, **4,660** rais

100%

Air Quality Management

- Reduce the intensity emission of air pollution per ton of production by 5% by 2025 compared with the base year of 2020.
- No official odor complaint.

Particulate matter **24.2%**
 Sulfur oxides (SOx) **-11.9%**
 Nitrogen oxides (NOx) **-5.4%**

Air pollution emission pass the legal standard **0** cases

Water Management

- Reduce water withdrawal by 35% by 2025 compared with business as usual (BAU) at the base year of 2014.

28.6%

Biodiversity and Ecosystems

SCGP is committed to the continuous conservation of forests and biodiversity. The FSC™ Management Committee oversees and monitors sustainable forest management according to Forest Stewardship Council™ (FSC™) standards and has increased the forest area to comply with Thailand's T-VER standards, aiming for a "Net Positive Impact: NPI".

Biodiversity Risk Assessment can be read in more detail at: <https://sustainability.scgpackaging.com/en/environmental/forestry-and-biodiversity>



Strategies

- Manage biodiversity sustainably with universal indicators and serve as a model for biodiversity conservation to be expanded in other areas.
- Engage with communities and stakeholders to enhance understanding and knowledge of biodiversity conservation.
- Manage the utilization of community forest areas through participatory community forestry principles.

The 10-Year Project for Reviving Neglected Land

The project to restore 447 rais of degraded forest in Pak Tho District, Ratchaburi Province, began with a focus on planting local species in canopy gaps and native pioneer trees to increase species diversity and restore forest structure. This project is planned for a total duration of 10 years, from 2023 to 2033.

Restoration and Expansion of Forest Areas

- Siam Forestry Company Limited, a subsidiary within the SCGP group, has accelerated the restoration of biodiversity in conservation areas. This is achieved by cultivating native tree species and implementing appropriate reforestation practices, covering an area of 447 rais.
- SCGP leased of neglected forest land with private land deeds to maintain biodiversity and ecosystems. In 2023, an increased conservation areas 896 rais, totaling 4,660 rais, which accounts for 13.7% of the agroforestry forest area. Plans are underway to expand this conservation model to other areas in the future.
- Eucalyptus trees were planted in operational areas outside the boundaries and not adjacent to biodiversity conservation areas, with no impact on the land use of the community, covering a total of 92,099 rais.

Insect Species Survey

SCGP has enhanced data collection on insect species as part of monitoring biodiversity in areas post-restoration. Due to the short life cycle of insects and their rapid response to ecological changes, this data is vital for developing long-term ecological management and restoration plans. Surveys have identified 144 insect species in the conservation area.

Management According to FSC™ Standards

- **The proportion of SCGP's wood products certified by FSC™ standards:**

- FSC™-CW/COC: FSC-C133879, 100% of the total amount of wood used.
- FSC™-FW/COC: FSC-C012207, 100% of the wood volume from SCGP's timber plantations entering the production process.
- FSC™-FM (SLIMF): FSC-C105470, covering an area of 12,863 rais with 83 farmer members.

- **The Small or Low-Intensity Managed Forest (FSC™-SLIMF)** project promotes the management of small forests, not exceeding 625 rais. It regularly provides training and guidance for sustainable forest cultivation according to FSC™ standards to communities. Currently, 83 farmers have participated as members.



Air Quality Management

SCGP is committed to developing production process management to reduce atmospheric pollution, recognizing the potential impacts on the health of employees, communities, and the surrounding environment and adhering to increasingly stringent legal requirements.

Strategies

- Set air pollution emission targets in line with global standards of similar business groups and ensure compliance with legal limits.
- Employ the best available technology for air pollution management, including source and emission control, and continuously monitor air quality.
- Regularly engage with the community and stakeholders in air pollution management.

Expansion of the CEMs Installation

Following SCGP's completion of the Continuous Emissions Monitoring Systems (CEMs) installation across 100% of its packaging paper manufacturing plants in Thailand, in 2023, the pulp and paper production plants began installing equipment to measure Total Reduced Sulfur (TRS). This is to monitor and mitigate the impact of sulfur-containing pollutants as per legal requirements. Completion is planned for 2024, with an expansion of CEMs installation to the packaging paper manufacturing plants in Indonesia and the Philippines.



Water Management

SCGP assesses water-related risks using global tools such as WRI AQUEDUCT and satellite imagery. SCGP has collaborated with all relevant stakeholders to monitor situations and utilized Early Warning Systems (EWS). It also enhances water usage efficiency through wastewater treatment for reuse and natural ecosystem restoration, aiming to achieve a water neutrality balance.

Strategies

- Reduce water-related risks and improve water usage efficiency through integrated water management. Develop the capabilities of personnel involved in water management to ensure maximum efficiency in both knowledge and operational aspects.
- Treat wastewater to meet established quality standards. Monitor the volume and quality, report incidents, investigate causes, and reduce wastewater discharge.
- Restore ecosystems related to water sources and support water supply for communities and agricultural use.



Development of the DOM System

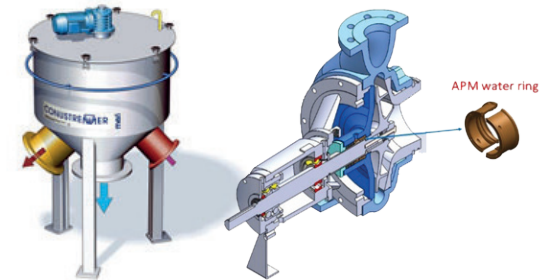
Since 2022, SCGP has developed and installed a comprehensive Detect Odor Monitoring (DOM) across 100% of its pulp and paper manufacturing plants. In 2023, the DOM was further enhanced to identify the sources of odors in the production process and provide real-time alerts via the website to monitor impacts on the community promptly.

Next Targets

- Survey and monitor the diversity of the Kamphaeng Phet conservation forest every two years and assess new areas for High Conservation Value (HCV).
- Monitor the reforestation project in the degraded forests of Ratchaburi province.
- Reduce air pollution emissions per product by 10% by 2030, compared to the base year of 2020, in both Thailand and aboard.

2.2 Million Cubic Meters per Year

SCGP reuses treated wastewater in internal seal systems of equipment such as water pumps and propellers, saving 1.4 million cubic meters of water annually. The installation of filtration systems for reused water in the production process saves an additional 0.8 million cubic meters per year. SCGP also continuously expands the use of the APM Water Ring innovation to prevent coolant water leakage around the shaft seals of pumps in SCGP plants.



Early Warning System (EWS)

SCGP has established an Early Warning System to prepare businesses, stakeholders, and community members for imminent hazards. This comprehensive and timely alert system aims to limit impacts within an acceptable range and monitor risks that could escalate into disasters. The system includes impact analysis and performance measurement to develop better prevention systems.