

SCGP Sustainable Taxonomies 2022

SCGP voluntarily maps our sustainable activities aligned with Thailand Taxonomy (phase I) and we assumed Taxonomy-Eligible and Taxonomy-Aligned have the same figure.

Sustainable Activities Mapping (Million Thai Baht)

Aggregate	Revenue	Capital Expenditure	Operational Expenditure
Total figure for the company	146,068.00	14,603.00	16,039.00
Taxonomy-Eligible	71,135.65	1,458.55	1,986.00
Taxonomy-Aligned	71,135.65	1,458.55	1,986.00
Percentage (%)	48.70%	9.99%	12.38%
Activity-Level breakdown			
Energy Saving	209.00	1,046.00	630.00
Environment	70,926.65	413.00	1,356.00

Remark: Operational Expenditure or OPEX for Energy saving (Million 630 THB) is the same amount as provided in CDP Climate - C3.5b

Cause of Impact

Business Value Chain

Operations	Products/Services	Supply Chain
<ul style="list-style-type: none">• Increase the share of biomass, biogas and clean energy to replace fossil fuel.• Improve and modify processes and equipment for higher energy efficiency.• Develop technology and R&D to achieve Net Zero by 2050	<ul style="list-style-type: none">• Develop low carbon products, services and solutions across the value chain.• Promote products to received Green label and environmental friendly label.• Communicate and raise awareness of the market on low carbon products, services and solutions.	<ul style="list-style-type: none">• Promote and audit suppliers for registration in the Green Procurement List.• Purchase products and services according to the Green Procurement List 100%• Collaborate with other organizations to promote low carbon products across supply chain

The coverage of the business activity that has been considered in the assessment :

Cover 100% of subsidiary companies over which SCGP has controlling in Thailand and abroad, as listed in page 92-93, of SCGP Sustainability Report 2022 for the period of 1 January to 31 December 2022.

Business Case

Climate Resilience



Target	Performance 2022
Net Zero by 2050	4.36 million ton CO2e emission
At least 20% reduction by 2030 from base year 2020	12.7%
13% less energy use by 2025 from BAU 2007	6.8%

Highlight 2022

- Strategy toward Net Zero Roadmap
- Production Process Improvement for Energy Efficiency
- Internal Carbon Pricing as Incentive
- Carbon Credit Registration for Sequestration Activities
- Build partnerships with communities to purchase agricultural waste materials, such as sugarcane leaves conversion into biomass fuel.
- Renewable usage projects

Please see more detail in SCGP sustainability Report 2022, page 32-35

Current Efforts for Energy Conservation and Transition

Energy Conservation and Transition



Co-Generation Plant : Using CFB Technology (replace Stoker Boiler) with Automatic Biomass Storage



Reduce Coal Use > 10,000 Ton/Y

Can reduce GHG emissions up to 117,965 tonCO₂/y Saving 180 MB



Biogas from waste water treatment : For steam and electricity generation



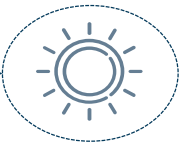
Wastewater



Effluent

Biogas (Alternative Fuel)

Can reduce GHG emissions up to 63,000 tonCO₂/y Saving 120 MB



Solar Power : Continual expansion with rooftop, floating and solar farm formats



Solar power generation capacity 22.3 MWp

Can reduce GHG emissions up to 10,000 tonCO₂/y Saving 83 MB

Project COD capacity 5.19 MWp Saving 14 MB

Can reduce GHG emission 6349 tonCO₂/y

Digital technology to improvement energy efficiency

In year 2022, SCGP implemented measures to increase water discharge efficiency from boilers in its paper production processes at 5 plants both domestically and abroad with automated systems, saving 78,732 GJ of energy per year and reducing the emission of 7,978 tons of carbon dioxide equivalent per year.



Use Case	SKIC Co-Generation Plant # 18 @ Wang Sala Complex
BU	SCGP
Technology Used	CFB Boiler Technology

Project Impact	This Project	Scale Up Case
GHG Impact (T.CO2 Reduction)	117,965	96,340

Key Lever (Conservation/Transition/Other)

Energy Conservation

Type of Energy

- Demand Energy = Thermal
- Supply Fuel = Coal 80%, Biomass 20%

Objective/Target

- To Replace Obsolete Stoker Boilers (PB9&PB10) with Higher Technology
- Reduce Coal Use > 10,000 Ton/Y
- Boiler with Capacity 260 T/Hr with Automatic Biomass Storage

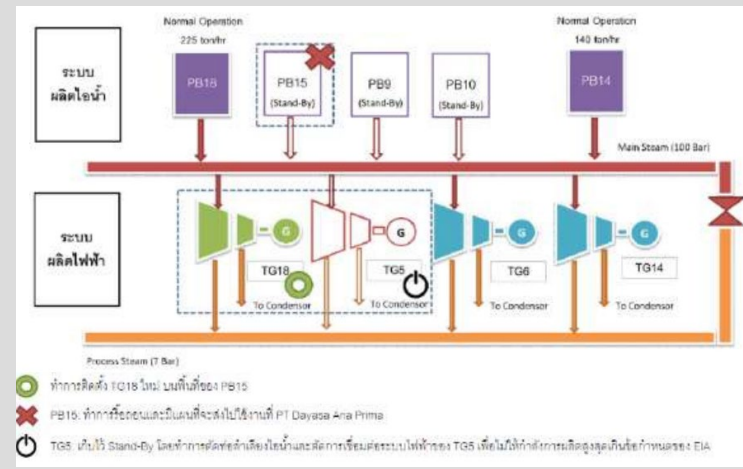
Plan for Scaling Up

Scale up by maximizing biomass usage in other boilers. (now a maximum of 20-25% of biomass)

Project Status

- Done

Project Detail (Initiative/Key Execution & Technology)



Automatic Biomass Storage & Conveying System

General Info	Use Case	New Production Line Paper # 16 @ Ban Pong complex
	BU	SCGP
	Technology Used	Valmet Paper Forming Technology

Project Impact	This Project	Scale Up Case
GHG Impact (T.CO2 Reduction)	124,000	

Key Lever (Conservation/Transition/Other)

Energy Conservation

Type of Energy

- Demand Energy = Thermal (Steam)
- Supply Fuel = Coal & Biomass

Objective/Target

- To Expand New Production with Higher Efficiency & Low Energy Consumption
- Applying World Class Production Line (1st Top Quartile)
- Energy consumption/Ton Product ≤ 5 GJ/Ton

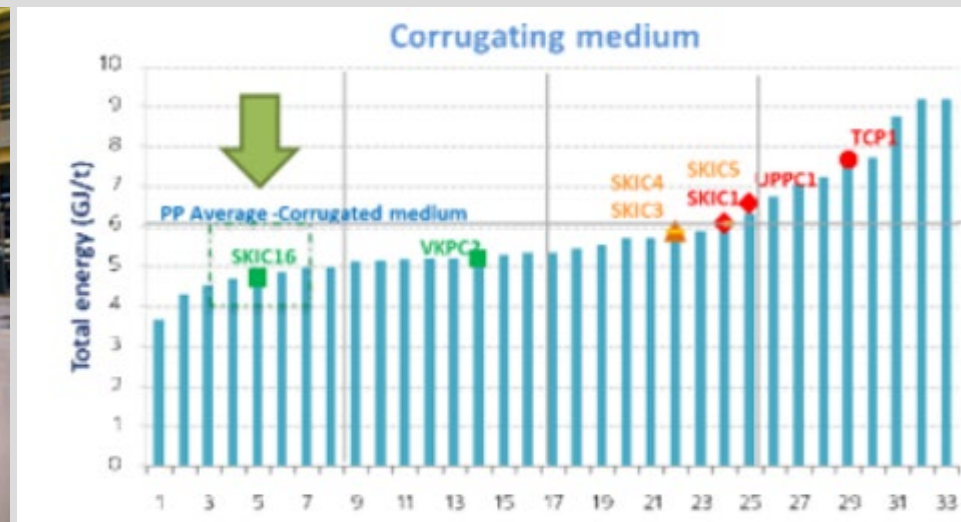
Plan for Scaling Up

- Scale up at Paper production machines i.e. PM1, and PM3 such as changing Spray Sizer and Turbo Vacuum Pump.

Project Status

- Done

Project Detail (Initiative/Key Execution & Technology)



- Need to increase production capacity to support business growth, therefore, investing in the expansion of the Production Line by requiring a paper production process that uses modern technology. High efficiency and energy saving Energy consumption/Ton Product must be low and in the 1st Quartile of the world.

Bioenergy Fuel

SCGP is working to build partnerships with communities to purchase agricultural waste materials, such as sugarcane leaves conversion into biomass fuel. In the year 2022, SCGP has been studying and testing the use of wood pallets as a fuel source. They have found that wood pallets have a higher calorific value than wood bark and have properties similar to coal, allowing them to be used as a substitute.

In the overall use of biofuel, in the year 2022 SCGP was able to increase the use of bioenergy to replace the use of coal in steam boilers from 6.2% (344,526 tons per year) to 8.4% (496,878 tons per year), reducing the emission of greenhouse gases by 287,210 tons of carbon dioxide equivalent per year to 404,478 tons of carbon dioxide equivalent per year.



Emphasis on the Development of Sustainable Consumer Packaging

Target: 100% recyclable, reusable or compostable

OUR SUSTAINABLE CONSUMER PRODUCTS



Increase Recycled Contents

Increase usage of **recycled resin** and **recycled PET (rPET)**



compostable and biodegradable products

Edenware Sustainable products

Innovative Recyclable Products

multi-layer **mono material** for **easy-to-recycle**



Fest

brown paper food packaging

Clean & Safe, Fully Recyclable Packaging



Engage Net Zero emission across the value chain



Supplier Engagement Program



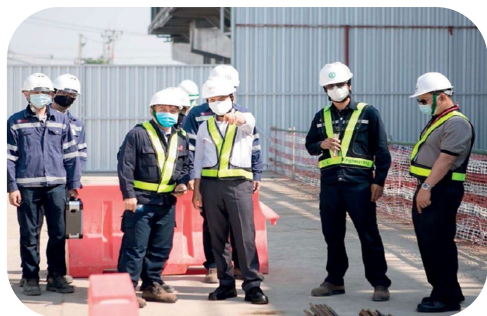
Training Program and Collecting Data



Develop System & Infrastructure



Reduction Program



Audit Program

SCGP



Increase Renewable energy



Improve Energy Efficiency



Low carbon product



R1 and R1+ Lightweight Polymer Containers



"PackBack collects packaging for a sustainable future." Project



Asia Pacific Supplier Awards 2022