



3.3 Management of Environmental Sustainability

3.3.1 Environmental Policy and Guidelines

The Company’s operational procedures and impacts on environment are as shown:

PROCESS FLOW CHART

INPUT	PROCESS	OUTPUT
Fuel truck, crane, mother coil	Receiving ↓	Fuel dripping from truck. Wheel dust, truck exhaust fumes, noise
Crane, mother coil, electricity	Casing ↓	Scrap, paper/plastic scrap, steel strap
Electricity, mother coil, machinery, anti-rust oil	Cutting/Slitting ↓	Engine oil sludge, scrap, steel products, noise, oil mist, machine wiping cloth
Electricity, packing paper, wooden/steel pallet, anti-rust oil, steel/plastic strap,	Packing ↓	Wood scrap, oil mist, paper scrap, paper spool
Crane, forklift products, fuel	Storage ↓	Falling steel, fuel usage, oil dripping, wheel dust, exhaust fumes
Truck, fuel	Delivery	Exhaust fumes, wheel dust, oil dripping/leaking

Environmental Management

“SSSC for environmental conservation and rehabilitation” innovation known as SSSC as follows:

- S. Stop Global Warming
- S. Save Green Save Earth
- S. Save Green World
- C. Corporate Social Responsibilities

Environmental Management Policy

As part of the society and community, and to give back to society and community, the Company is fully committed to continuously improve Environmental Management System (ISO 14001:2015). The Company cooperates with environmental concerned organizations running campaign to reduce global warming, raise forest conservation awareness, save the world, create green world, improve quality of life and environment. These have been operated according to the environmental policy which was reviewed and revised on 8 April 2022.

1. Performs in appropriation with context, goal, characteristic, size, and impact on environment stemming from products and services of the Company
2. Commits to protect environment, prevent and control pollution resulted from the Company operation.
3. Commits to comply with obligation and terms concerning environmental management.
4. Strives to promote employee participation in pollution reduction, to cultivate awareness of conservation of resources and environment.
5. Develops and improves production recognizing impact on environment at every procedure.
6. Continuously conducts environmental evaluation and review against the set objectives and targets.

The Company has applied, to its business operation, the Sufficiency Economy for Industrial Sector Guidelines (TIS 9999 volume 1-2556 B.E.) for the balance, stability, sustainability and happiness. In 2023, the Company performed environmental maintenance following the Sufficiency Economy for Industrial Sector Guidelines as follows:

1. Maximizing resources from acquiring to using of raw materials, waste management, and impacts on next generations.
2. Being aware of and identifying the impacts stemming from corporate operation on environment while seeking alternatives to best eliminate and reduce the impacts.
3. Gearing toward development of environmentally friendly products and production process, avoiding any production without pollution management or protection.
4. Using energy and renewable energy for corporate operation effectively and efficiently.
5. Instituting guidelines for systematic water management covering management, storage, control, treatment, and drainage without damaging natural water source while maintaining the benefits of the community and society where the Company operates.
6. Participating in the conservation, development and rehabilitation of soil, water and forest regarded as foundation of life of the community and society.

Through regular communication and training, the Company instills knowledge and understanding in employees concerning the essence of environmental conservation and rehabilitation both in the workplace and household. In connection to this, policy guidelines have been drawn for continuous and effective implementation in alignment with ISO14001. Accordingly, the Company has been certified ISO14001 since 2004. Particularly, in 2016, the Company was certified the new version of ISO14001:2015.

Energy Conservation

The Company attaches an importance on efficient energy usage in production process, the Company, therefore, promotes continuous participation among employees on sustainable energy management. The key objective is to promote employees' awareness of effective and efficient use of energy as well as to constantly and sustainably lower energy costs. The Company improves its energy management system by:

- Appointing the energy management working group comprising representatives from various units within the organization;
- Preliminary review of energy management;
- Defining energy conservation policy;
- Potential assessment on energy conservation;
- Setting targets and action plan for energy conservation, training plan and activities to promote energy conservation;
- Implementing energy conservation plan, reviewing and analyzing operation against the set targets and plan;
- Monitoring and assessing energy management;
- Reviewing, analyzing and revising energy management plan and targets.

In 2023, the Company strived for international standard under the program on Development of the Thai Energy Management toward International Energy Management Standards ISO50001. Accordingly, the Company has been certified ISO50001 resulted from the Energy Conservation Policy implementation which was reviewed and revised and effective on 29 August 2023.

1. The Company shall determine energy conservation as part of its operation through development for suitable energy management system in line with related laws and regulations.
2. The annual energy conservation plan and targets shall be formulated and made known to every employee for common understanding and actions.
3. The Company shall support the purchase of energy saving products and services designed for energy capacity improvement.
4. The Company shall continuously improve technology and energy consumption for effective and proper use in the business.
5. The Company shall regard energy conservation as duty and obligation of executives and employees to cooperate and comply with the stipulated measures.
6. The Company shall promote and provide resources as needed including personnel, budget, work hours, training, awareness instillation, idea sharing of employees for efficient development of energy related work.
7. The energy conservation plan and targets are revised every year by executives and the Working Group.

Sustainable Use of Resources

Apart from implementing Industrial Standard Following Sufficiency Economy in Industrial Sector TIS 9999, the Company adopts the “3Rs” Principles consisting of R1- Reduce, R2 - Reuse, R3 - Recycle. The adopted 3Rs is implemented to continuously develop and improve productivity focusing on effective use of raw material by reducing or reusing waste to remain at the least amount. The produced waste is properly managed in accordance with the provision of law including waste storage, reuse, and treatment.

The Company has introduced the “Knock Down Steel Pallet to Replace Wood Pallet” since 2016 by supporting and welcoming customers to go for steel pallet. The project aims at reducing wood resources. In 2022, there were 50% or 119 users of total pallet users cooperated in the project whereas 44% in 2023. However, the project aims at achieving 70% steel pallet users out of total pallet users.

Indicator, measure, record, and report of electrical energy, gasoline, and other resources consumption are defined for the preparation of environmental quality report to be presented to the committee members and working groups concerned for further environmental planning.

Summary of 2023 Sustainable Use of Resources Applying 3Rs



3.3.2 Environmental Performances

The Company stipulates that there shall be an indication, measurement, record, and report of electricity consumption, fuel, and other significant resources. Accordingly, the environmental quality measurement report is prepared and submitted to the committee and working group in charge of environmental issues for planning.

1. Water Management

Effective Water Usage

Measures to increase effectiveness of water and wastewater management

The Company regulates the control of electricity and water uses as well as water-saving campaign as follows:

- (1) Prompt fixing of broken faucets;
- (2) Modifying water-saving devices
- (3) Water-saving campaign
- (4) Reusing treated water

Requirement 1

Prepares water inventory illustrating amount of water used as well as amount of wastewater, water balance.

Performance

Water inventory has been prepared illustrating water activities and amount used as well as wastewater, water balance, even through Company's plant does not use water in the production process. As such, water use only in toilet and kitchen.

Requirement 2

Defines objectives and targets, formulates action plan, implements and enhances water and wastewater measures.

Performance

Performance reaches target by 100% as shown

Out put	2021 M ³ /day	2022 M ³ /day	2023 M ³ /day
% of water reuse	40 (100 %)	40 (100%)	40 (100%)

Requirement 3

Effective water and wastewater management according to measures provided.

Performance

Assessment results of water use intensity and wastewater intensity has shown the continuous improvement as water consumption/person/year reduced by 1% yearly during the past 3 years.

Year	Water use intensity (L ³ /person/year)	Increase (Decrease) By %
2021	8,725	(0.08)
2022	10,313	18.20
2023	9,719	(5.76)

2. Energy Management

Implementation of effective use of resources measures to reduce energy consumption and consumption of other resources by determining indicators of good practice against other sources as results shown:

Year	Quantity (kilowatt - hr.)	Cost (baht)	Amount to KgCO ₂ e
2021	2,103,000	8,398,511	1,179,780
2022	2,036,000	9,246,098	1,142,200
2023	1,563,000	8,196,901	781,340

Environmental protection and rehabilitation

The Company is well aware of the global warming and climate change impacts. The Company's commitment has been extended to integrating environment friendly into its operational plan for employees to be aware of management concerning environment, occupational health and safety, effective use of energy. Work process is continuously improved for pollution prevention, reduce impact on environment as well as conservation of natural resources.

Reduction of greenhouse gas emission

In 2023, the Company conducted Carbon Footprint for Organization assessment for the preparation of management directives concerning effective reduction of greenhouse gas emission. Accordingly, the Company's policy on greenhouse gas emission reduction has been stipulated as follows:

- Formulates the greenhouse gas emission reduction plan and measures and made known to all employees for cooperation and compliance;
- It is an obligation of all executives and employees to take the greenhouse gas emission reduction as their responsibilities and compliancy with the specified measures. They shall also monitor and report to the greenhouse gas emission reduction committee;
- Promotes and supports as necessary and appropriate, the human resources, training budget, employee participation concerning idea for development of greenhouse gas emission reduction;
- Extends environmentally friendly idea to suppliers, defines operational guidelines for non-renewable energy consumption reduction in the supply chain;
- Reviews and evaluates yearly by executives and the greenhouse gas emission reduction committee; the greenhouse gas emission reduction policy, plan, and targets.

Environmental protection and rehabilitation practices

- On a yearly basis, operates reforestation caravan to fight against drug, and reduce global warming.
- Conducts training on energy conservation for community and school for them to be able to apply in their actual situations.
- Continuously takes care of employee good health and work safety from which the Company had been awarded the National Occupational Health and Safety for 12 consecutive years (2006-2017), and being certified ISO14001 and ISO45001.

3. Waste and Pollution Management**Protection and reduction of pollution**

- Checking and recording of important environmental issues, reporting results of reduction of pollution and waste to Environment Committee.
- Installing wastewater treatment and control system whereby wastewater is treated before discharged even though the Company's factory does not use water in the manufacturing process.
- Installing precipitator for air pollution control and release, providing tire and wheel cleaning pit for vehicle before entering the factory.
- Facilitating request for permission to discharge waste or used materials from the factory as required by law.
- Developing and promoting the use of environmentally friendly products and services. Subcontractor's transports and equipment are required regular checking before operation at least once a day using the form as specified by the Company. On a regular basis and before driving, random sampling for body checkup of the drivers including drug and alcohol test.

Impact on Environment

The Company manages waste from production process to avoid any impact on internal and external work environment.

Requirement 1

Prepares waste inventory, waste profile, and waste flow diagram

Performance

Factory waste profile is in place, transportation waste flow diagram sent to the Department of Industrial Works.

Requirement 2

Sets objectives and targets, formulates action plan, and implement according to the waste management measures.

Performance in this regard achieves 60% of the set target.

Performance

Implemented the 3Rs e.g., recycle used wooden pallet which reduced the use of new wooden pallet by no less than 66.75% of total wooden pallet purchasing order.

Waste	Management
Scrape from steel cutting	Sells to licensed producers for recycling into other products
Wood scrapes from making wooden crate (crate used to transport or store steel)	Sells to licensed producers for recycling into other products
Expired engine oil and hydraulic oil	Sells to licensed producers for recycling into other products
Oil and chemical contaminated waste	Send to licensed personnel for disposal
Dust particles from making wooden crates	Uses vacuum to store for later use as oil absorber

4. Reduction of Greenhouse Gas Emission

In 2023, the Company conducted Carbon Footprint for Organization assessment for the preparation of management directives concerning effective greenhouse gas emission. The Company stipulates policy on greenhouse gas emission reduction as follows :

1. The Company shall formulate the greenhouse gas emission reduction plan and measures and made known to all employees for according cooperation;
2. It is an obligation of all executives and employees to take the greenhouse gas emission reduction as their responsibilities and compliance to the specified measures. They shall also monitor and report to the Greenhouse Gas Emission Reduction Committee;
3. The Company shall promote and support as necessary and appropriate, the human resources, training budget, employees participation concerning idea for development of greenhouse gas emission reduction;
4. The Company shall extend environmentally friendly idea to suppliers for manufacturing process application, and to define operational guidelines for non-renewable energy consumption reduction in the supply chain;
5. Executives and the Greenhouse Gas Emission Reduction Committee shall review and evaluate yearly, the greenhouse gas emission reduction policy, plan, and targets.

Performance	2021	2022	2023
1. Direct greenhouse gas emission: Scope 1 (ton CO ₂ e) combustion of fossil fuels (LPG, Diesel)	-	-	-
2. Indirect greenhouse gas emission : Scope 2 (ton CO ₂ e) electricity consumption not include solar cell	1,179.78	1,142.20	781.34

As a consequence of consistently raising awareness of its employees on environmental conservation under the “SSSC for environmental conservation and rehabilitation,” the Company has gained full participation from all employees implementing environmental friendly activities as corporate culture practice. As such, the Company was accredited Green Industry Level 4: Green Culture, from the Ministry of Industry in 2019.

Since 2020, the Company has reviewed its environmental management system and created corporate culture as specified by the Green Industry Level 4. The Company promotes environmental activities with its stakeholders in the supply chain, community, and consumer for collective development on network expansion toward Green Industry Level 5 as planned.