# **Energy Conservation**

The company places importance on energy management according to the guidelines set forth in the Ministerial Announcement on Criteria and Methods for Energy Management in Controlled Factories and Buildings B.E. 2552 (2009). The company has implemented an Energy Management System and prepares annual energy management reports to comply with government energy standards and requirements.

### Energy Management within the Organization

- Appointment of Energy Management Personnel The company has designated Senior Energy Managers for each plant who must register and complete training courses from the Department of Alternative Energy Development and Efficiency, Ministry of Energy, to have the knowledge and ability to efficiently manage and improve energy use.
- Establishment of an Energy Management Working Committee
   The Energy Working Committee is responsible for controlling, implementing, coordinating, and reporting
   on the organization's energy management, as well as monitoring and reviewing operations to comply
   with the company's Energy Conservation Policy.
- Implementation of Energy Conservation Projects
   The company is committed to developing Energy Conservation Projects to continuously increase energy
   efficiency and reduce energy consumption by applying modern technologies and measures in operations.
- 4. Audit and Certification of the Energy Management System The company conducts audits and certifications of the Energy Management System by external auditing teams licensed according to law and submits energy management reports and audit results to the De partment of Alternative Energy Development and Efficiency, Ministry of Energy annually.



In 2024, the company conducted activities and improved energy efficiency in all operational areas through the participation of personnel at all levels, significantly helping to reduce operational costs as follows:

# Ratch Pathana Energy Public Company Limited

## 1. Project Name: Steam Trap Maintenance Project in Steam Distribution System

**Project Description:** Replace abnormal Steam Trap equipment to reduce steam losses within the power plant **Project Location:** Steam Distribution Line in Sahaphat Industrial Park

Item	Target	Actual	Unit
1. Quantitative thermal energy target	2,406,456	2,406,456	MJ
2. Quantitative savings target	498,886	429,094	THB/year
3. Investment amount	356,800	269,700	THB
4. Payback period	0.72	0.63	Year

## 2.Project Name: Steam Trap Maintenance Project in Steam Supply System within Power Plant Project Description: Replace abnormal Steam Trap equipment to reduce steam losses within the power plant Project Location: Steam Distribution Line within the power plant

Item	Target	Actual	Unit
1. Quantitative thermal energy target	561,075	561,075	MJ
2. Quantitative savings target	120,594	101,404	THB/year
3. Investment amount	40,000	20,890	THB
4. Payback period	0.33	0.21	Year

# Sahacogen Green Company Limited

## 1. Project Name: HPS to LED Light Bulb Replacement Project (2024)

Project Description: Replace HPS light bulbs with 150W LED bulbs, 5 bulbs

Project Location: SahaCogen Green Biomass Power Plant

Details	Kilowatt-hours/year	Baht/year
Energy consumption level before project implementation	3,011	9,138
Energy consumption level after project implementation	2,007	6.092
Energy savings	1,003	3.046
Investment	10,575	THB
Payback period	3.47	Year

#### 2. Project Name: High-Efficiency Air Compressor Installation

**Project Description:** Install a VSD air compressor, which adjusts compressor speed according to compressed air demand, resulting in reduced energy consumption

Details	Kilowatt-hours/year	Baht/year
Energy consumption level before project implementation	285,459	1,006,380
Energy consumption level after project implementation	235,156	829,040
Energy savings	50,302	177,340
Investment	795,010	THB
Payback period	4.48	Year

#### 3. Project Name: Reduction of Heat Loss from Boiler Exhaust Stack through Air Fuel Ratio Tuning

**Project Description:** Adjust DCS program: Air Fuel Ratio tuning of the combustion chamber to reduce heat loss from exhaust stacks

Details	Megajoules/year	Baht/year
Energy consumption level before project implementation	18,155,509	2,386,223
Energy consumption level after project implementation	14,043,916	1,845,826
Energy savings	4,111,594	540,397
Investment	289,000	THB
Payback period	0.53	Year

# Sahagreen Forest Company Limited

#### 1.Project: Installation of Inverter for Cooling Fan to Control Cooling Water Temperature Project Description: Installation of an inverter to reduce electricity consumption of the cooling fan. Project Location: Cooling Tower

Energy consumption before project implementation	126,855	537,865
Energy consumption after project implementation	58,874	244,535
Energy savings	67,981	293,330
Investment cost	143,773	THB
Payback period	0.59	Year

#### 2. Project: Transition to Gravity-Based Raw Water Refilling Process

**Project Description:** Modification of the raw water intake process from using an electric motor to a gravity-fed system.

Project Location: Raw Water Intake Pond

Details	kWh/year	THB/year
Energy consumption before project implementation	43,400	184,016
Energy consumption after project implementation	0	0
Energy savings	43,400	184,016
Investment cost	0	THB