

SUSTAINABILITY REPORT 2022





CORPORATE SUSTAINABILITY

“พลังงานยั่งยืน คือนโยบายสู่สังคม”



SUSTAINABILITY REPORT 2022

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Message of Sustainability Committee



In 2022, the Board of Directors approved the resolution to transform the Corporate Social Responsibility Committee into the Sustainability Board, as well as to elevate policies and the charter of operation to align with the United Nations' Sustainable Development Goals (SDGs) in all dimensions.

The Sustainability Committee's operations in the year received support from other subcommittees and cooperation from the company's management and subsidiaries, resulting in the successful and effective continuation of their duties. The company was announced as a member of the Thailand Sustainability Investment List 2022 (THSI) in the group of resources for the fifth consecutive year and received the Sustainability Disclosure Acknowledgement for the year 2022 from Thaipat Institute for the fourth consecutive year.

In relation to the Climate Change Response, the Board of Directors announced the Management Policy to address the issue of climate change, and also established a management team to oversee the evaluation of the Carbon Footprint For Organization (CFO) in order to set targets, measures, and effectively reduce greenhouse gas emissions. The company expects to receive certification from the Thailand Greenhouse Gas Management Organization (TGO) by May 2023. In terms of campaigning to promote greenhouse gas reduction, the company has registered the products from the renewable energy production process for certification and delivered I-RECs (International Renewable Energy Certificates) to the business partners who have committed to reducing greenhouse gas emissions as a key business strategy.

The company has continuously encouraged all levels of employees by providing the Corporate Sustainability Strategy course from the Stock Exchange of Thailand, and registered personnel responsible for social responsibility at the factory in accordance with the Ministry of Industry's announcement as well as hiring experts from various fields for continuous consulting. The Sustainability Committee firmly believes that the driving force behind the implementation of policies and measures aimed at achieving the stated objectives will lead to continuous and sustainable business development.

A handwritten signature in black ink, appearing to read 'Viroj', is centered below the text.

(Mr. Viroj Theeravatvatee)
Chairman of Sustainability committee

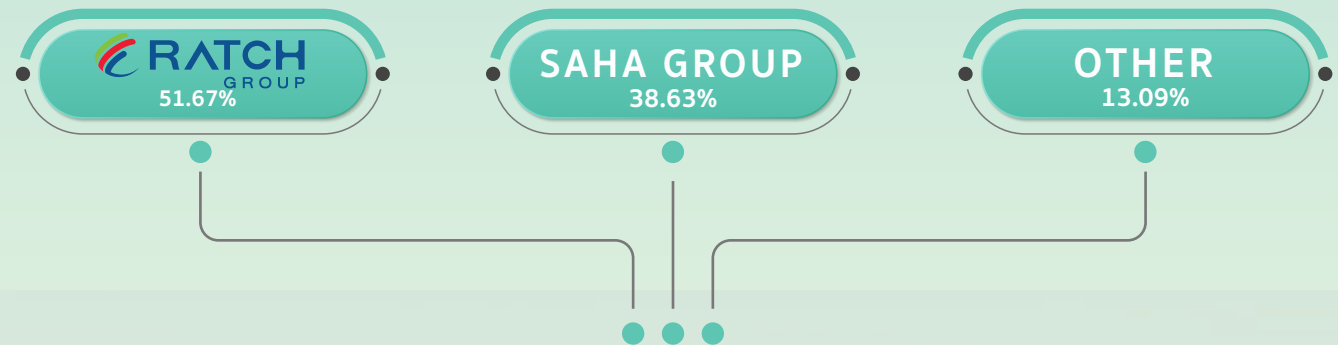
ABOUT SAHACOGEN

Sahacogen Group consists of Sahacogen (Chonburi) Public Company Limited, a Small Power Producer: SPP, producing and distributing electricity and steam. Located in Saha Group Industrial Park - Sriracha Chonburi Province Established in 1996 and registered as a public company in 2002, stock symbol "SCG" in terms of business expansion Established a subsidiary focusing on renewable energy business development along with business operations considering participation in community and social development Consists of the following.

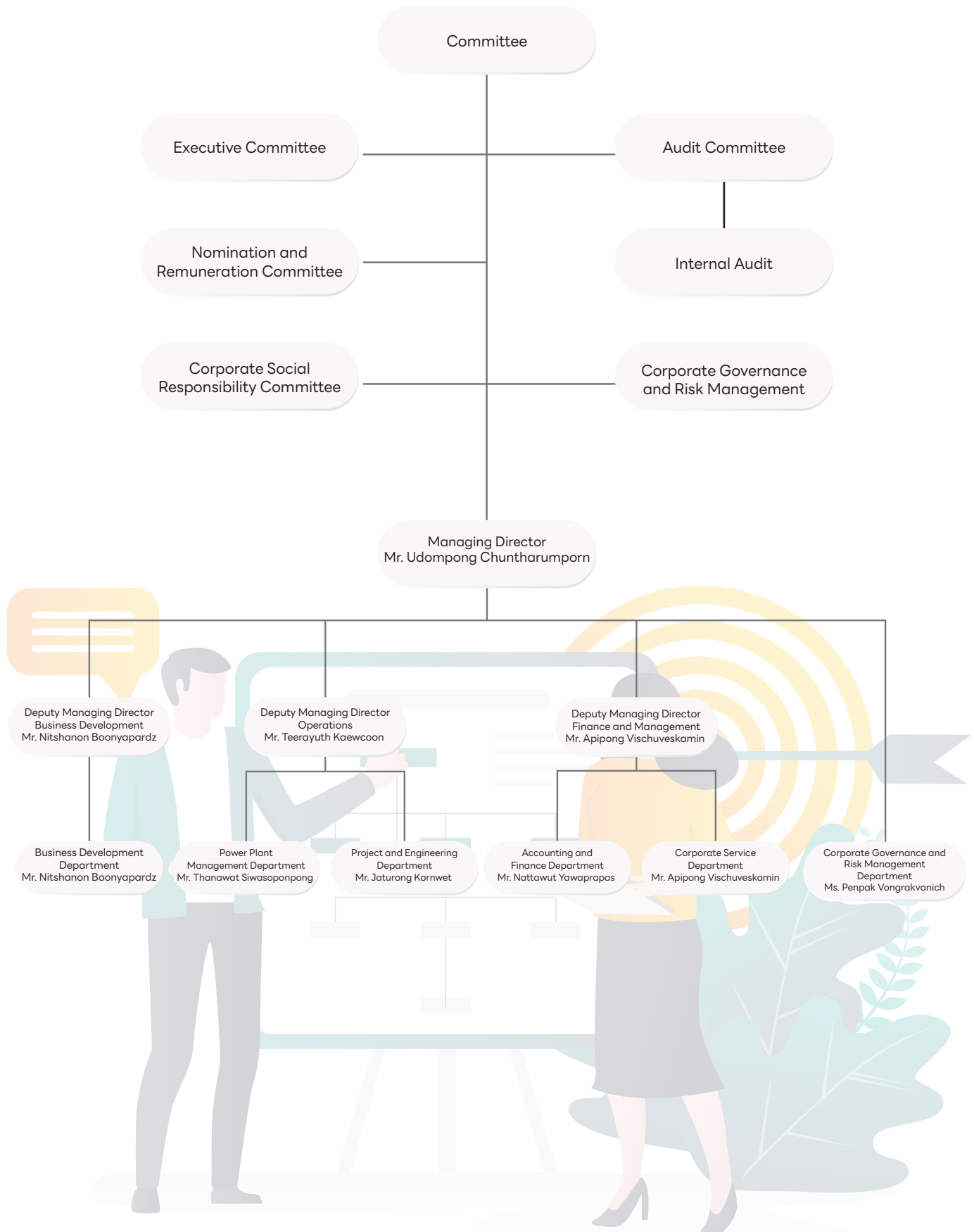
1. Sahacogen Green Company Limited operates a very small biomass power plant (Very Small Power Producer: VSPP) located in Saha Group Industrial Park, Lamphun Province.
2. Saha Green Forest Company Limited is a joint venture with the Siam Cement Group paper business group. Operates a very small biomass power plant (Very Small Power Producer: VSPP) located in Phran Kratai District, Kamphaeng Phet Province.
3. Impact Solar Company Limited operates in the business of manufacturing and supplying solar power systems on the roof (Solar Rooftop).
4. Solarist Company Limited operates a business generating electricity from solar energy.



SAHACOGEN BUSINESS STRUCTURE



THE COMPANY STRUCTURE

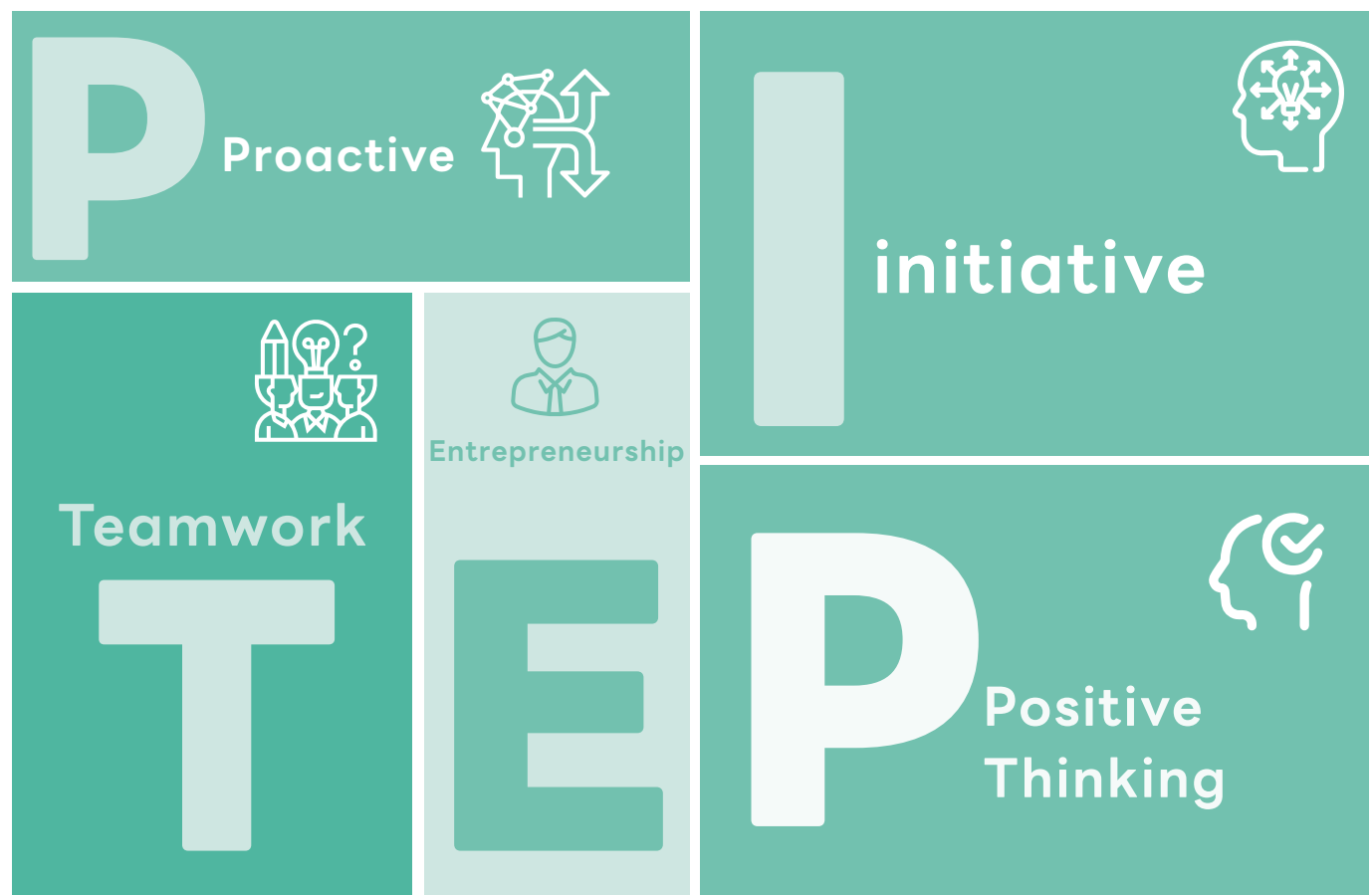


VISION

We will be a leading small power producer and relating businesses with the continuous and sustainable developments to maximize the satisfaction of stakeholders.

MISSION

1. To produce and distribute high quality and reliable energy to meet the requirements and satisfactions of customers
2. To enhance capability and competence with continuous development
3. To earnestly respond to social, partners and employees by management in compliance with the good governance
4. To operate with efficiently and awareness of safety, occupational health hazards and environment



ABOUT THIS REPORT

Scope of reporting

This sustainable development report will be annually published separately from the company annual report. The sustainable development report is made to present the company's operation in the area of social responsibility based on the policy from the Board of Directors. The Corporate Governance Code (CG Code), Risk Management and Corporate Social Responsibility activities in 2018 are also included in the report to comply with Global Reporting Initiatives Version 4 (GRI 4) standard. The content covered was the operation by Sahacogen (Chonburi) PCL and subsidiaries.

In the year 2022, the company has brought the operating results from January 1, to December 31, 2022. The scope of this report shows the operation in the areas of economy and environment issues. The report focuses the actions with stakeholders mainly in the business operation especially CSR-in-process activities. The report also covers the actions based on the policy of collaboration with government sector and local communities. The anti-corruption actions based on the policy of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC) with the clear results are also presented in report.

Identification of key points and scope

The Sahacogen Group has identified key issues based on the scope of the report. By considering the expectations of both internal and external stakeholders. And apply a process for assessing key issues in accordance with the Global Reporting Initiative (GRI) in the process of preparing the sustainability report. To prioritize each issue according to stakeholders' opinions and Sahacogen interests. And in line with the United Nations Sustainable Development Goals (SDGs) these issues will help shape the sustainable business direction of the organization. There are 4 steps to the process of selecting material issues and the extent of impact. With operation details as follows:

STEP 01 IDENTIFICATION

Working Group for Sustainable Development Report Consider selecting sustainability issues related to Sahacogen business operations. Taking into account the issues of Sahacogen's focus on the development of the organization. Which has related impacts both inside and outside the organization in the economic, social and environmental dimensions including taking into account the expectations of the stakeholders on the selected key issues.

STEP 02 PRIORITIZATION

The sustainability issues selected will be prioritized. It is based on the Materiality Test, which screened all issues through the criteria for consideration, assessment and decision-making by stakeholders (Influence on Stakeholder Assessments and Decisions) and the level of importance of the group's economic, social and environmental impacts. Sahacogen (Significance of The Organization's Economic, Social and Environmental Impacts) through participation in meetings with senior management to prioritize various issues. Related to business operations.

STEP 03 VALIDATION

Review of important issues by the central agency responsible for the preparation of the Company's report. And present important issues to the top management in consideration and approval. To ensure the identification of issues is complete and that the content disclosed in the report is consistent with the principles outlined in the report.

STEP 04 REVIEW

Interviews and solicit opinions from stakeholders directly after publication of the report. To know the level of satisfaction with the sustainability report of the company in various issues covering topics and content, sufficiency of information, reliability of information, presentation method And a copy of the report. As well as suggestions on other sustainability issues that the company should be presented in the next report. The recommendations gained from this process will be developed for the next year's report. In order to meet the needs and expectations of the stakeholders to the maximum.

Sahacogen Group defines 15 key sustainability issues in 2022, divided into three groups according to the Sahacogen Group's Organizational Development Guidelines as follows:

Environment	Corporate Governance	Social Sustainability
1. Energy management	1. Good corporate governance and risk management	1. Safety and occupational health
2. Adaptation to climate change	2. Anti-Corruption	2. Human resource development and employee welfare
3. Air pollution management	3. Supply Chain Management and Stakeholder Engagement	3. Labor practices and human rights
4. Waste management	4. Green business investment Sustainable Innovation	4. Participation in community and social development
5. Water management	5. Cyber Security	5. Protection of Personal Information

Sustainability issues evaluation results of 2022



Communication Channel

If you have any suggestions or want to ask for more information. You can contact at Corporate Social Responsibility



Sahacogen (Chonburi) Public Company Limited 636 Moo 11, Sukhaphiban 8 Road, Nong Kham Sub-district, Si Racha District, Chonburi Province 20230



Telephone number: 038-481-555



E-mail: pr-csr@sahacogen.com



www.sahacogen.com



SUSTAINABLE BUSINESS OPERATIONS

The Company is committed to raising the level of corporate sustainability development in line with the Sustainable Development Goals (SDGs) of the United Nations (Sustainable Development Goals: SDGs). Therefore, the organization's sustainability policy has been established. To be a guideline for the business operations of the Sahacogen Group to cover all dimensions, both in economic, social and environmental aspects according to the principles of good corporate governance as follows:

1. Establish a corporate sustainable development strategy that covers good corporate governance by identifying, evaluating, and responding to Business issues (Materiality) and risks that have an impact on stakeholders both in economic, social and environmental dimensions in business planning business decision and operation process to achieve the sustainable development goals of the organization.
2. Adhere to the principles of fair business (Good Governance) to stakeholders and benefit society with good corporate governance. Be ethical and virtuous According to the Code of Conduct and internal audit system, including conducting business with transparency, honesty, adhering to the correctness against corruption. (Anti-Corruption) does not support the creation of work success through immoral and illegal methods.
3. Define guidelines for conducting business for sustainability covering all dimensions as follows:

3.1. Economic dimensions

- **Responsible for customers, partners throughout the business chain** by developing an efficient production system to deliver high quality products Safe and stable for customers. returns to partners equally and fairly. Build good relationships with customers, alliances and business partners, as well as encourage stakeholders throughout the business chain to conduct business in accordance with sustainable development guidelines.
- **Innovation** and new technologies to create added value and sustainable growth of the organization as well as supporting and cooperating with the community and institutions conducting research studies on increasing productivity or the use of waste materials from the production process. To create or transform into new usable inventions including to dissemination those knowledge and innovations to society in a concrete way.

3.2. Social dimensions

- **Respect Human Rights and Labor Practices** by respecting and supporting the protection of human rights in all forms. Treat other persons and employees equally without regard to gender, age, skin color, education, race, religion and personal beliefs. And encourage employees to receive fair benefits and welfare in accordance with labor laws.
- **Capability Development and Employee Retention** by giving importance to the potential and competence of employee's development. Training and resources needed to work at full potential as well as encouraging creativity and a sense of entrepreneurship.
- **Health and Safety Environment** as well as regularly promoting knowledge and creating awareness of occupational health and safety for employees.
- **Community Involvement and Development** by promoting development within the community in terms of education, economy, quality of life and society. with Corporate Social Responsibility as well as encouraging employees to participate in public activities and to conserve good culture and traditions of the community on a regular basis.
- **Participation of Stakeholders** to create mutual benefits, find solutions and determine appropriate measures. Establish clear channels for dissemination and communication with participatory, diverse, and consistent with the way of life of all groups of stakeholders.

3.3. Environmental dimensions

- **Environmental Management** by complying with the requirements of relevant laws and regulations. Seeking ways to improve the efficiency of environmental quality management and control. including preserving the ecosystem and biodiversity by promoting and supporting all groups of stakeholders to consider the importance of benefiting society and mankind sustainably.
 - **Efficient Use of Resources** by encourage to use all types of resources for maximum benefit. Including seeking ways and methods to reduce the use of limited resources for the most efficiency.
 - **Climate Management** by managing greenhouse gases in strict compliance with relevant laws and regulations. as well as seeking measures to reduce greenhouse gas emissions and how to respond to climate change. to prevent and reduce potential impacts on business operations.
4. Disclose the corporate sustainability policy. Data and performance on sustainability in all dimensions according to the criteria and requirements of relevant agencies as well as internationally accepted standards in a sufficiently transparent and timely manner.
 5. Raise awareness and instill good conscience among directors, executives, and all employees. which has a duty to support Promote and operate in accordance with this Corporate Sustainability Policy.

SUSTAINABILITY STRATEGY

1. Environmental Strategy:

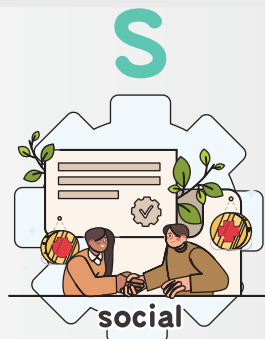
Supporting Greenhouse Gas Reduction Policy.



- Climate change response
- Resource management
- Energy management

2. Social Strategy:

Develop safety standards and culture.



- Personnel development and employee welfare
- Respect for human rights and fair labor practices
- Participation in community and social development

3. Economic strategy:

build and expand business alliances.



- Good Corporate Governance
- Business Development and Green Innovation
- Supply Chain Management
- Participation with stakeholders

In 2022, the company sent representatives of executives and employees to attend the training “Workshop S01-S04: Business Sustainability Strategies Course Set. Organized by the Stock Exchange of Thailand. It recognizes the importance of developing knowledge and developing a team to be ready to drive and elevate the sustainability development goals of the organization's business in the future.



SUSTAINABILITY COMMITTEE

The Company places great importance on sustainable business development. therefore, has approved the establishment of the Sustainability Committee to be in line with the direction and strategy of business development of the organization whose ultimate goal is corporate sustainability. by appointing company directors and executives or other persons with knowledge and experience. There are at least 3 members and must hold the position for a term of 1 year each, which is appointed by the Board of Directors' meeting every year After the Annual General Meeting of Shareholders.

Members of Sustainability Committee for the year 2022 are

1. Mr.Viraj Theeravatvatee
Chairman

2. Mr.Udompong Chuntharumporn
Committee

3. Mr.Vorayos Thongton
Committee

4. Mr. Apipong Vischuveskamin
Committee

5. Mrs.Uthoomporn Sinprajackpol
Committee

6. Mr. Jaturong Kornwet
Committee

7. Mr. Pornsak Chuamuangphan
committee and secretary

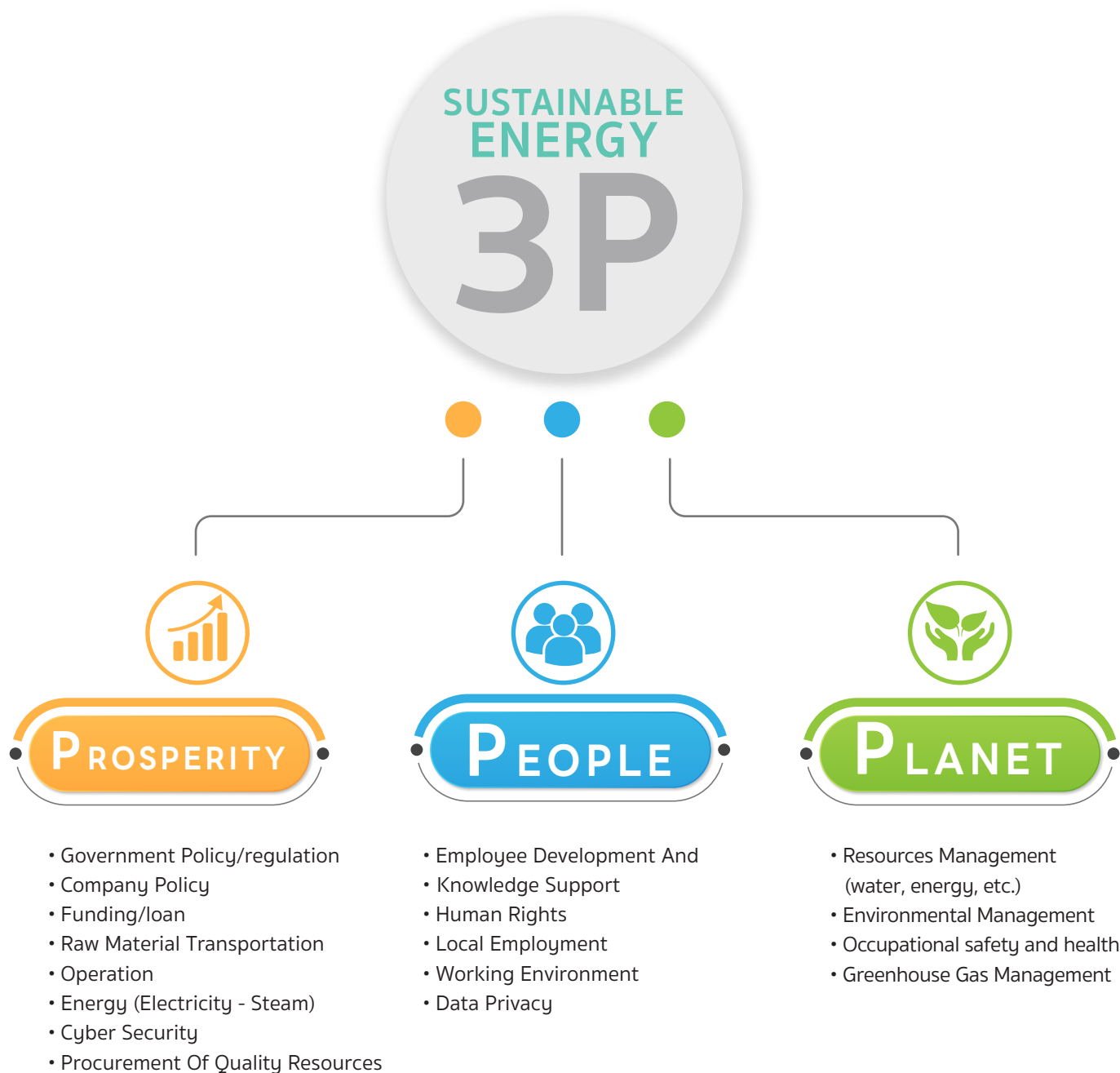
Duties and Responsibilities of the Sustainability Committee

- | | |
|--|--|
| <p>01 Set policies, strategies, goals, practices, and frameworks for the Company's sustainability operations.</p> | <p>05 Supervise to ensure compliance with policies and/or regulations related to the sustainability of the Company.</p> |
| <p>02 Consider and scrutinize plans, projects, activities, and budgets on sustainability. both in the economic dimension Society and the environment of the company to achieve the company's sustainability goals and policies.</p> | <p>06 Propose requirements on corporate governance policy and business ethics of the company. Including the company's employee ethics related to sustainability.</p> |
| <p>03 Follow up progress on sustainability operations Evaluate the success and quality of sustainability projects or activities</p> | <p>07 Review the Company's sustainability policy and/or practices as appropriate. To be consistent with laws, regulations, and practices of regulatory agencies. Including in accordance with national and international standards. and update to be current.</p> |
| <p>04 Encourage board participation of Executives and employees at all levels in the company's sustainability activities.</p> | |

Adherence to the United Nations Global Compact

	The 10 Principles	Sahacogen's Operation
Human Rights	<ol style="list-style-type: none"> 1. Business should support and respect the protection of internationally proclaimed human rights. 2. Business should make sure they are not participating in activities abusing human rights. 	<ul style="list-style-type: none"> • The code of conduct defines "human rights" according to its corporate governance policy. • Equal opportunity employer: avoids discrimination based on gender, skin color, race, religion, personal belief, age, disability, or other characteristics not relevant to the job scope. • Provides communication channels for employees who want to petition claims of inequitable treatment or infringement on human rights. All claims are processed fairly.
Labor	<ol style="list-style-type: none"> 3. Business should uphold the freedom of employees' association and their rights to claim for group negotiation. 4. Business should eliminate all forms of forced and compulsory labor. 5. Business should stop abolition of child labor. 6. Business should stop discrimination in respect of employment and occupation. 	<ul style="list-style-type: none"> • Under the legal framework, all employees will be treated with respect, dignity and all basic rights in the workplace. • All employees will be given an equal opportunity for growth and promotion through encouraged training and exchange of knowledge. • Compensation is based on an employee's knowledge, competence, position, responsibility and performance. The performance evaluation will be conducted fairly. • A Welfare Committee will be established to consider welfare benefits for employees at all levels. This includes medical treatment, provident funding, and welfare extending to family members. • All facilities will operate under a safe, hazard-free environment.
Environment	<ol style="list-style-type: none"> 7. Business should support a precautionary approach to environment challenges. 8. Undertake initiatives to promote greater environmental responsibility. 9. Encourage the development and diffusion of environmentally friendly technologies 	<ul style="list-style-type: none"> • The company defines the organization's vision as "Continuous and Sustainable Organization Development" focusing on business operation in compliance with sustainable growth, responsibility to society and environment. • Setting Company's mission to adhere to good governance with respect to society, counter parties and employees; and also respond to any concerns regarding safety, occupational health hazards and environment concerns. • The Safety Health Occupation Committee, and the Safety Committee will conduct compliance regularly. • Information will be transparent, accurate, in plain language, and will be disclosed in a timely manner. Feedback and impacts on nearby communities will be handled in a timely manner.
Anti-Corruption	<ol style="list-style-type: none"> 10. Business should work against corruption in all forms, including extortion and bribery. 	<ul style="list-style-type: none"> • Policies are required to comply with the law. Anti-corruption, giving and receiving gifts, entertainment, and support/donations must be in line with policies and disclosed to management. • Promote the organization culture to act with integrity. • Management controls and internal audits will operate efficiently and effectively. • Organization and presentation of financial reports must be accurate and transparent. • Establish communication channels for issues relating to corruption. Ensure safety, anonymity, and protection for anyone who comes forward. Audit Committee will investigate all cases in a transparent and equal manner.

SUSTAINABILITYFRAMEWORK: 3 P



“Sustainable Energy for People & Planet Prosperity”
SCG Delivers Stable Clean Energy
to improve the quality of life, create society,
and take care of the environment sustainably.

SUSTAINABLE DEVELOPMENT GOALS (SDGs)



SUSTAINABLE DEVELOPMENT GOALS

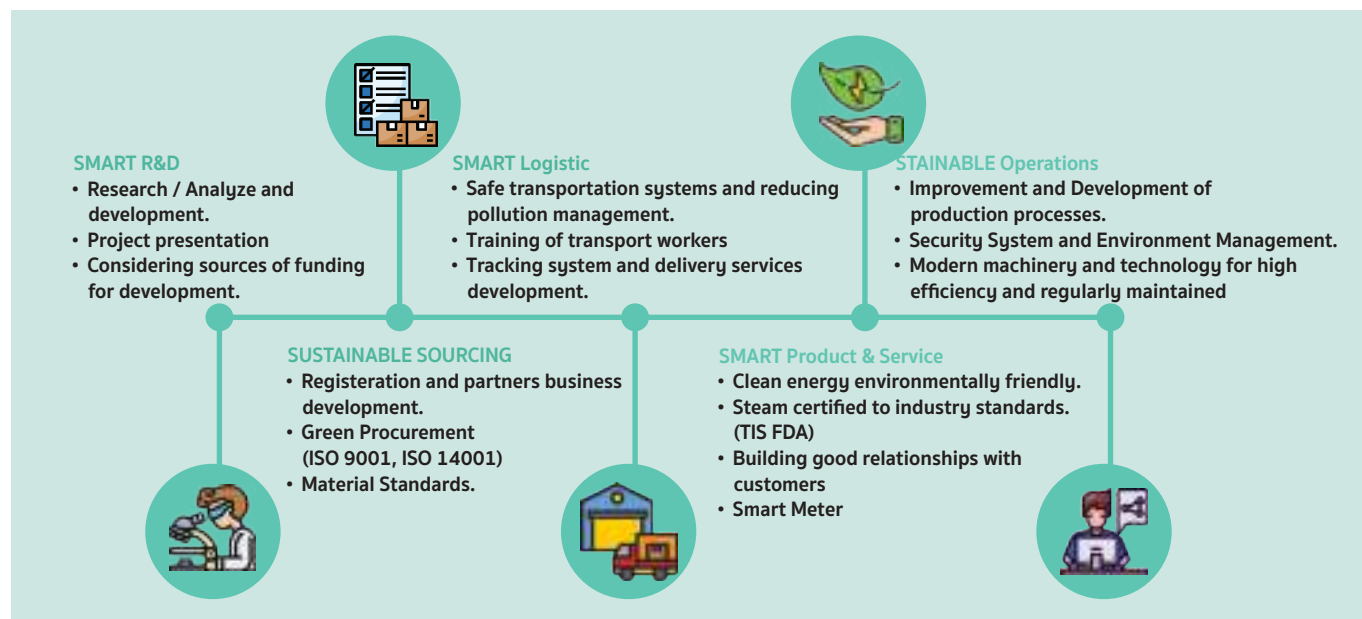
17 GOALS TO TRANSFORM OUR WORLD



SUPPLY CHAIN MANAGEMENT FOR SUSTAINABILITY

The power and steam production process considering the supply chain management according to the concept of Green Energy. With social responsibility and participation in the benefits of the community society and the environment as well as the production process by starting to set up research and development projects to produce products for customers and consumers.

Green Energy supply chain management



Supply Chain Management Policy

By establishing guidelines for dealing with trading partners that will lead to the development of product / service quality and mutual sustainable relationship management. The company believes that it can lead to the development of potential Building a competitive advantage. As well as can be able to manage the risks in the business operation of both the Company and its trading partners for a long term sustainable.

Good practices for trading partners

Business Ethics Policy and Guidelines for Sahacogen Business Partners

1. Operate procurement with transparency. Strictly comply with trade partner selection regulations and treat stakeholders equally based on fair competition, equality, and mutual respect. Correct, clear, complete, verifiable in the supply chain where the business is legal Comply with occupational safety and health standards Environment friendly.
2. Do not use confidentiality or information about trading partners for your own benefit. Or the wrong person involved.
3. Build relationships and understanding with each other. Exchange of knowledge for development the products and services for mutual growth.
4. Compliance with trade agreements and providing accurate information, in case that not possible to practice, negotiate with trade partners or work together to come up with a solution and prevent a mistake.
5. Procurement about the quality and safety of products and services which may affect the health of employees, communities, society, and environment.
6. Not seeking benefits, not asking, receiving, or agreeing to receive property or any other benefit from procurement. Which is beyond the commercial terms

Green Procurement

Sahacogen has created a green procurement guide to implement in the procurement process. This is part of the supply chain management policy aimed at minimizing the impact on the environment. Focus on the selection of environmentally friendly by we have developed good practices for business partners to help manage environmental risks, Social and corporate governance (ESG). As well as increase and develop partners' potential. Specially to support new government laws that may lack understanding until the procurement is delayed. Therefore, it is important to drive the Sahacogen business to smooth and achieve organizational objectives.

In 2022, We have developed the following standards, regulations and internal processes related to risk management in the supply chain.



Partner Selection

Partner capability, capacity, standard system, services, transportation, safety, occupational health Including business partners that are responsive to society and environment By using questionnaires for initial assessment and conducting audits to ensure that the selected partners have sufficient potential and reliable.

Management of partners

By using ethier high value procurement criteria or a significant partner that may have an impact on the manufacturing process or a trading partner with a small number of merchandise and services risk consideration and supplier risk management. Including communication and business visits of business partners in appropriate in order to formulate strategies and development of cooperation for the further.

Assessing partner risks

Purchasing risk analysis based on suppliers with high purchasing value or partners with key production factors which may affect delivery to customers. Therefore, need to assess the risk in any situation that can happen and make a plan to support to ensure that the risk can be managed in a level that does not affect customers and businesses.

Making a risk management plan by trading partners. The partners have to assess the risks of their own business operations on topics that have the opportunity to arise and lay out a guideline for response in order to avoid any impact on business operations between each other.

Supplier Evaluation

Establish the partner management measures, including audits to ensure traders comply with the equirements. According to international standards, capability of the distributor to maintaining quality of products and services such as the environmental, social, and business operations (ESG On-site Audit), Key Supplier Site Visit, for suppliers to comply with Code of Business Ethics.

Supplier Evaluation Results 2022

Assessment Topics	Suppliers who pass the assessment criteria (From 145 suppliers)			
	Partner	New Partner	Total	Percentage
1. Integrity/Transparency/Responsibility				
No history of any form of corruption.	137	8	145	100%
No history of corruption in any form.	137	8	145	100%
2. Management and environmental responsibility				
Certified environmental standards or comply with environmental requirements (ISO 14001/EIA)	1	1	2	100%
Compliance with environmental laws or regulations and procedures for managing environmental impacts.	1	1	2	100%
3. Labor and Social Responsibility				
No child labor or illegal foreign labor.	137	8	145	100%
Respecting the human rights of workers, does not violate basic human rights.	137	8	145	100%
Business operations that show social responsibility, does not affect surrounding communities.	137	8	145	100%
4. Conflicts of interest				
Executives/Directors have no positions in companies offering competitive prices.	0	0	0	0

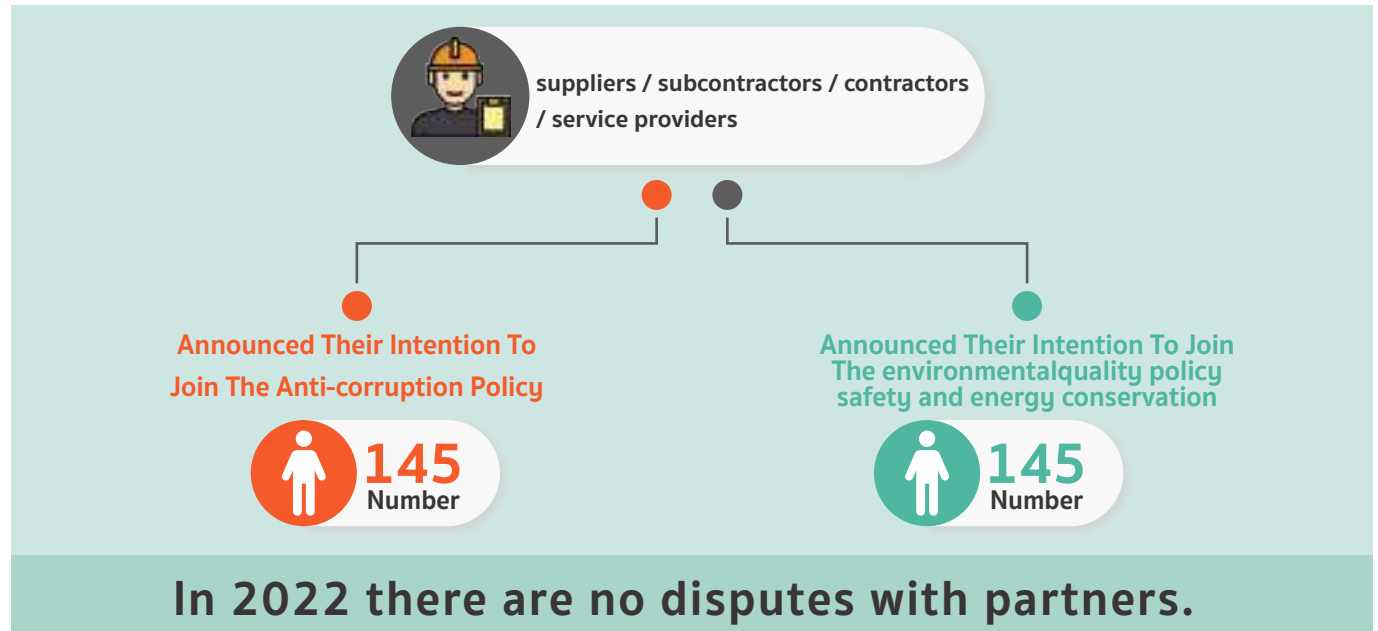
Partner Development Guidelines

- Providing customer information such as product expectations, standards, quality criteria.
- Providing knowledge on production processes and technology for joint product development
- Development of business partners to aim for (Green Procurement) that is in line with the needs of customers and consumers in the future.
- Partner development in operating in accordance with business ethics.
- Development of secondary partners for the opportunity to become more important trading partners.



Code of Conduct and Business Ethics




We committed to the code of conduct in conducting business with partners. By complying with Thai labor standards and anti corruption. In this regard, we expanded the network of partners to sign the letter for commitment in business ethics as follows



Customer Communication and Engagement 2022

Sahacogen (Chonburi) Plc.			
Methods/Forms	Customers/Stakeholders	Frequency	Key Issues/Targets
<ul style="list-style-type: none"> meeting 	<ul style="list-style-type: none"> Management level of EGAT. Management level of customers in the industr 	1-2 times a year (depending on the issues that arise each year)	Discuss issues in the power purchase agreement, ways to work together and build good relationships with customers.
<ul style="list-style-type: none"> meeting 	<ul style="list-style-type: none"> Operation level of EGAT. Operating level of customers in the industry 	Every 3 months or as EGAT makes an appointment for a meeting	Discuss contract issues, ways to work together and build good relationships with customers.
Sahacogen Green Co., Ltd.			
<ul style="list-style-type: none"> meeting Engagement activities 	<ul style="list-style-type: none"> Provincial Electricity Authority Customers in the industrial park 	3 times a year (depending on the issues that arise each year)	<ul style="list-style-type: none"> - Review product specifications and summarize past year's performance. - Follow up on performance and problem-solving actions. - Activities to build customer relations such as sporting events, Visiting activities, study visits, etc.
SahaGreen Forest Co., Ltd.			
<ul style="list-style-type: none"> meeting Engagement activities 	<ul style="list-style-type: none"> Provincial Electricity Authority 	once a quarter	<ul style="list-style-type: none"> - Review product specifications and summarize past year's performance. - Follow up on performance and problem-solving actions. - Activities to build customer relations such as sporting events, Visiting activities, study visits, etc.

2022 CUSTOMER SATISFACTION SURVEY

POWER PLANT			
Total number of industrial customers (persons)	50	2	-
Number of customers who are satisfied with the target set	50	2	6
target %	90.00%	88.00%	97.00%
average satisfaction results (%)	90.87%	95.30%	99.20%



STAKEHOLDER ENGAGEMENT

SAHACOGEN & AFFILIATES have realized on the accountability and the right of the stakeholders in various groups, both externally and internally, including government sectors, related offices throughout the responsibilities to social, community and environment. The company is also concerned about business growth, mutual benefits which lead to sustainable growth. The code of business ethics has been defined to be confident that all stakeholders will be treated equally and fairly. In case of disadvantage, the company and stakeholder parties shall find the solutions appropriately and beneficially to all parties. The company has provided communication channels for stakeholder's mutual publication and communication to receive requirements and expectations of the stakeholders and respond to them immediately, which can be described as follows.



Stakeholders	Expectations/Needs	Response an expectations	Communication Channel
 <ul style="list-style-type: none"> • Majority • Minority 	<ul style="list-style-type: none"> • Return on Investment • Sustainable Growth • Financial Stability • Transparent Management • Shareholders equally treatment 	<ul style="list-style-type: none"> • The ownership rights of shareholders are equitably and fairly respected. • Operations are undertaken in accordance with the principles of good corporate governance, which will foster the trust and confidence of shareholders and eventually lead to sustainable growth. • The Company's businesses are continually developed to ensure proper returns to shareholders. • The significant information which effected, or potentially affected shareholders' interests shall be reported, including any information pursuant to the accounting period or situation reports in compliance with the relevant laws and notifications. However, no action shall be taken to restrict shareholders' access to the Company's information. • A report of the Board of Directors' responsibility for the financial statements in the Annual Report shall be prepared. • Minority shareholders shall be given an opportunity to propose matter for inclusion in the meeting agenda and/or to nominate persons for election as the Directors in the Annual General Meeting of Shareholders. • Shareholders are given an opportunity to submit questions relevant to the meeting prior to the shareholders' meeting. • Shareholders' meeting notices in both Thai and English are published on the Company's website at least 30 days prior to the shareholders' meeting day as information for shareholders to preview information prior to meetings. • Shareholders' meeting shall be facilitated. The date, time, venue, and procedures must not pose an obstacle to the shareholders' attendance of the meeting. Shareholders who are not able to attend in person must have the opportunity to grant a proxy to other persons to attend the meeting and vote on their behalves. 	<ul style="list-style-type: none"> • Annual Report Form 56-1 One Report • Sustainability Report • Shareholders' Meeting • Company Visit • Opportunity Day • Saha Group meet Analyst and Investor • Telephone/ • Facsimile
 <ul style="list-style-type: none"> • Other Power Producers • Other biomass producers 	<ul style="list-style-type: none"> • Fair and legitimate competition 	<ul style="list-style-type: none"> • Conflict of interest must be dealt with prudently, rationally, and information must be fully disclosed. • The Company's interests and assets shall be safeguarded as a reasonable person would safeguard his/her property. Wrongful interests, whether obtained by direct or indirect means, shall be eliminated. • The Company shall conduct its businesses within the rules of fair competition regard to business ethics and trade competition laws of various countries in which the Company operates. • The Company will not damage the reputation of its trade competitors. 	<ul style="list-style-type: none"> • Activities with other power producers • Telephone • Web Site/E-mail
 <ul style="list-style-type: none"> • Financial Institutions 	<ul style="list-style-type: none"> • Adhere with terms and conditions of loan agreements 	<ul style="list-style-type: none"> • All creditor groups shall be treated equitably and fairly. • Contracts and terms will be strictly adhered to. • Operations will be administered to ensure the confidence of creditors in the Company's financial status and payment ability. • Financial statements shall be accurately and timely disclosed. • In the event of an inability to comply with a particular term, the creditor will be forthwith notified in advance in order to enable a joint solution for remedy and loss prevention 	<ul style="list-style-type: none"> • Annual Report Form 56-1 One Report • Sustainability Report • Saha Group meet Analyst and Investor • Relevant Meetings • Seminars • Telephone/ • Facsimile • Web Site/E-mail

Stakeholders	Expectations/Needs	Response an expectations	Communication Channel
 Customers <ul style="list-style-type: none"> Distributors End users 	<ul style="list-style-type: none"> Continuously supply reliable and high quality products Adhere to terms and conditions of the trade agreement Punctual service and fast response Pay attention to customer complains Create value-added products 	<ul style="list-style-type: none"> The Company operates the businesses of distributing electricity and steam which are safe for consumers and environmentally friendly. The Company has operated with commitment to develop and expand its business to value creation on the biomass and agricultural residues, innovate continually to meet the demands of customers along with the disclosure of necessary information for decision-making without concealment or distortion of facts. 	<ul style="list-style-type: none"> Annual Report Sustainability Report Green Energy Magazine Customer Satisfaction Survey Customer Seminars Customer Relations Satisfaction Survey Meeting with Customers/ services provide Telephone/Facsimile Web Site/E-mail
 Business Partners <ul style="list-style-type: none"> Supplier Contractors Joint venture partners 	<ul style="list-style-type: none"> Transparent purchasing procedures and fair competition Trade negotiations based on mutual benefit Adhering to terms and conditions of the trade agreement Punctual payment 	<ul style="list-style-type: none"> The Company provides communication channels to en-able customers to file complaints to the Company The Company has operated with earnest, honest, fairness, and no action is taken that would violate the rights of customers. The confidentiality of customer is maintained and not exploited for one's or others' benefit illegally The Company does not demand, receive or consent to the direct or indirect receipt of properties or other dishonest benefits from customers The Company adheres to trade agreements. In the case where adherence is not possible, the customer would be notified in advance to jointly remedy and prevent any loss. The Company has a system for screening business partners in the value chain who operate businesses in compliance with the law, safety and occupational hygiene standards, and friendliness to the environment. 	<ul style="list-style-type: none"> Annual Report Sustainability Report Green Energy Magazine Seminars Meetings Telephone/Facsimile Website/E-mail
 Community and Society <ul style="list-style-type: none"> Nearbycommunity/ Society Remote community/ Society 	<ul style="list-style-type: none"> Safety and a healthy environment Participating and being responsible for societies and communities Supporting community activities Creating income and enriching the economy of the communities 	<ul style="list-style-type: none"> A business which could lead to a deterioration of society shall not be undertaken and the rights of others in the community and society shall not be violated. Consciousness of responsibilities towards the community and society as a whole shall be instilled continuously for the benefit of the Company and all levels of employees. The guidelines shall be provided for the prevention and remedy of impact on the community and society as a consequence of the Company's operations. The preservation of local culture and traditions shall be promoted. Cooperation shall be entered into with various agencies for the development of communities. Public benefit activities shall be sponsored Incomes shall be generated and the community economy shall be promoted through employment of community members and the use of community products. Good relations shall be fostered between the Company and the community and society on the basis of propriety, transparency and fairness 	<ul style="list-style-type: none"> Green Energy magazines Participating in traditional community activities Open-house activities Community Relation activities and projects Billboards indicating air quality Telephone/Facsimile Website/E-mail Communication channel for complaints

Stakeholders	Expectations/Needs	Response an expectations	Communication Channel
 Employees	<ul style="list-style-type: none"> • Treating contractors with respect in human rights and adhering to labor laws • Appropriate • Appropriate Compensation and Welfare • Career stability and happy workplace • Career path and • Career path and potential development • Fairness and equality • Safety and Hygiene 	<ul style="list-style-type: none"> • Business partners are treated based on fair competition, equality and mutual respect. • The confidentiality or communications of business partners are maintained and not exploited for wrongful gains of oneself or of others. • Relationships and good understandings are fostered. Knowledge is exchanged. Developments and value adding to goods and services are jointly. • Undertaken to promote mutual growth. • The Company adheres to trade agreements and makes proper data. In the event that an agreement cannot be complied with, the Company will expeditiously engage in early negotiations with business partners in order to reach a mutual remedy and loss prevention solution. • The Company does not demand, receive or con-sent to the receipt of properties or any other benefits outside trade agreements. • Human dignity and fundamental rights of employees are respected at work. Employee data or confidential information is not disclosed or transmitted to third parties or unrelated persons. • Employees are treated in accordance with the provisions of law, regulations and articles governing the Company's operations. • Employment equality is promoted. There is no discrimination on the grounds of gender, skin color, race, religion, age, disability, or other status that is not directly related to the works. • Training and knowledge exchange are sponsored and promoted to encourage learning and skill development throughout, strengthen career security and offer opportunities for advancements pursuant to each person's competence. • Employee participation in the determination of the Company's direction and development are promoted. • Fair compensation is given as suitable for the knowledge, skill, duties, responsibilities, and performance. • Appropriate welfare and benefits are given to employees, e.g., medical expenses, provident fund, etc. • The communication channels are provided for employees to communicate suggestions and complaints pertaining to work. These suggestions are considered, and remedies will be determined in the interest of all parties and in view of the creation of good working relations. • Facilitate necessary for work operations are provided and working conditions are maintained with due regard to safety and occupational health as a means of promoting and raising the quality of lives of employees. • Employees of all levels are encouraged to participate in social responsibility activities. • An organizational culture and consciousness of employees at all levels shall be promoted to encourage cooperation and responsibility for the efficient and sustainable management of the environment and utilization of resources. • Knowledge promotion and environmental training shall be extended to employees. • Environmental management system shall be promoted, from the economical use of resources to the sustainable treatment and rehabilitation, replacement, monitoring and prevention of impact on natural resources. 	<ul style="list-style-type: none"> • Sahacogen Newsletter • Welfare Committee • Employee Survey • Family Day • Annual Seminar • Health Activities • Religious Activities • Orientations • Telephone/ • Facsimile • Intranet/E-mail • Communication channel for complaints • Suggestion box
 Government and relevant regulatory agencies. <ul style="list-style-type: none"> • Ministries, Departments and Office • Government provincial/ District Offices • Local Administration Office 	<ul style="list-style-type: none"> • Compliance with the law and regulations • Effective Environmental Management • Community and Social Responsibility • Collaborate to provide Information and support the sectors' activities • Legitimate and timely tax payment 	<ul style="list-style-type: none"> • Knowledge and understanding of the laws governing operations are acquired and no activities are undertaken which would be inconsistent with the law. • Proper action shall be taken when conducting transactions with an official or agency of the State. • Good relations are fostered between the Company and the government sectors within suitable bounds. • Relevant laws and business traditions are observed in each country or locality. 	<ul style="list-style-type: none"> • Annual Report Form 56-1 One Report • Sustainability Report • Environmental • Monitoring Report • Green Energy Magazine • Open-house Activity • Company visits • Report information related to regulations • Relevant meetings • Telephone/Facsimile • Web Site/E-mail

GOOD CORPORATE GOVERNANCE



Sahacogen Group emphasizes the importance of Good Corporate Governance system, runs business with transparency, honesty, responsibility as assigned, capacity of competition and fairness with related parties in order to enhance prosperity, economical values and opulence towards shareholders in accordance with the Good Corporate Governance Principles of the Stock Exchange of Thailand and subject to the basis of sufficiency economy, that is; sufficiency, reasonability and good immunity which requires knowledge, carefulness and discretion for planning and operating. In the same time, the company enhance all executives and employees' the awareness of morality, honest, diligence, impatience, sharing and intelligence to work as well as readiness to the changing economical, political, cultural and social situations for the benefits in a balance and sustainable way.

The Board of Directors approved the good corporate governance principles on February 19, 2003. Moreover, they have been reviewed properly and revised appropriately to the current situation in accordance with the "Principles of Good Corporate Governance for Listed Companies 2012". This harmonizes with the ASEAN Corporate Governance Scorecard (ASEAN CG Scorecard) measuring instruments of indices of the level of corporate governance of ASEAN listed Company. The details are as follows.

1. The Good Corporate Governance Policy
2. The 8 Good Corporate Governance Principles
3. The Business Ethics
4. The Code of Conduct for Directors, Executive Officers, and Employees

Moreover, handbooks have been created and communicated to directors, management, and employees. by focusing on equitable of stakeholders. Consider rights, equality, including instilling awareness of morality, ethics, honesty, and social responsibility. as well as disclosed in the annual registration statement (Form 56-1), and on the Company's website at www.sahacogen.com.

The company realizes and focuses on the importance of developing Good Corporate Governance consistently. In order to become a valuable organization towards society under the balance between performance and responsibility towards stakeholders including society and environment for sustainable growth in a long term.

Moreover, the Executive Committee has set up several sub-committees to have employees jointly organize the internal management appropriately, efficiently, and effectively to the Company. Each committee has at least one Executive Director to be a consultant. The established committees at present are as follows:

1. The Committee of Safety, Occupational Health, and Working Environment
2. The Committee of Welfare
3. The Committee of Environment, Safety and Energy Conservation
4. The Committee of Managerial Policy
5. The Committee of Business Risk Management
6. The Committee of Anti-Corruption
7. The Committee of Energy Management
8. The Committee of Environment Management
9. The Committee of Information Technology Security
10. The Committee of Business Continuity Management
11. The Committee of Personal Data Protection Act (PDPA)
12. The Committee of Greenhouse Gas Management

1.1.1 Significant changes and developments in relation to policies, guidelines, and corporate governance systems in the past year

In the past year Sub-committees have reviewed and improved the corporate governance system and important developments to be up to date. And in line with the company's business policy. Approved by the Board of Directors as follows:

- Review vision, mission, goals, strategies
- Review and improve the Board of Directors Charter subcommittee
- Review and improve Policies and Guidelines for Anti-Fraud and Corruption Policy
- Prepare the human rights policy
- Prepare a policy to prevent the use of insider information of the company
- Prepare the nomination and remuneration policy for the Board of Directors
- Prepare regulations for supervision of subsidiaries and associated companies
- Prepare monetary policy
- Review and improve the personal data protection policy (Data Protection Policy).
- Review the information technology security policy
- Prepare management policies to support climate change.

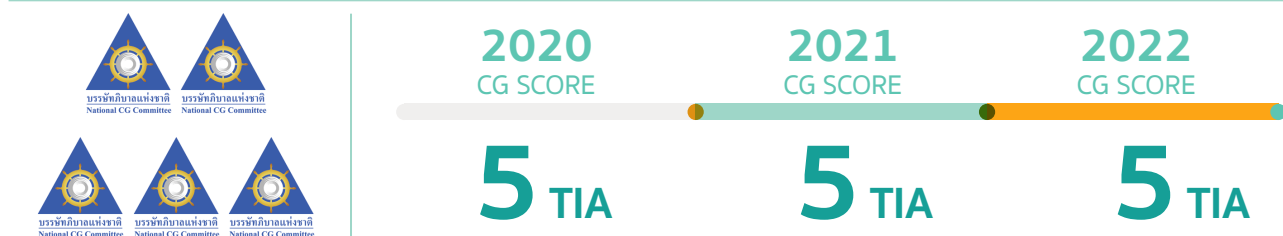
The company has been evaluated according to 2022 Annual General Meeting of Shareholders Assessment Program of listed companies on the Stock Exchange of Thailand (AGM CHECKLIST) from the Thai Investors Association. At the full score of 100 or in the 5th TIA level for the 14th consecutive year, it shows that the Company places importance on good corporate governance also operates with transparency and equal treatment of stakeholders.



Assessment results according to the corporate governance project of listed companies for the year 2020 -2022


Group	2020 (%)	2021 (%)	2022 (%)
1. Rights of Shareholders	92	92	92
2. Equitable Treatment of Shareholders	99	99	99
3. Role of Stakeholders	94	94	94
4. Disclosure and Transparency	97	95	95
5. Board Responsibilities	84	83	84
Average SCG Score	91	90	91

SCGScore





The results of the assessment according to the AGM CHECKLIST project In 2020-2022 are classified as "excellent" (5 TIA).

Yearly	Number of companies			
	Number of companies	Full Score	Average Score	
2022	751	100	95.55	100
2021	668	100	95.46	100
2020	712	100	93.10	100

Communication of information good corporate governance principles towards sustainable development



Corporate Governance Policy



8 Principles of Practice for the good Corporate Governance



Channels for reporting clues and complaints



พลังงานยั่งยืน
ดินประโงชน์สู่สังคม



RISK MANAGEMENT

Risk Management Policy and Guidelines

The Board of Directors of Sahacongen (Chonburi) Public Company Limited realizes the importance of various risk factors which affect the company's business operation. Consequently, the Board assigned the Corporate Governance and Risk Management Committee to be responsible for the supervisory tasks in terms of the organization's Corporate Governance and risk management practices in a systematic manner. The Risk Management Policy is described as below

1. To keep the balance of risk and reward from business operation in order to ensure that the operational goals and stake-holders' expectation are achieved under risk levels accepted by the executives
2. To set strategy in line with risk levels which the Board of Directors considers as acceptable
3. To support the risk management to become a part of organizational cultures, which is necessary to operate it effectively and efficiently by all executives and employee
4. To handle risks impacting on the company's objectives and strategy immediately and continually
5. To set guidelines for risk management according to the Company's anti-corruption policy.

The Good Governance and Risk Management Committee is aware of the ever-changing domestic and international economic environment. Therefore, preparation must be made from risk considerations to formulating strategies for driving businesses that focus on sustainable energy development. Establish a business continuity management plan to support various factors with changes that may affect the operation of the Company by appointing a risk management working group for each business. To jointly assess and analyze risk factors that affect the organization. Including subsidiaries and various projects from both internal and external factors. And consider a risk management plan that exceeds the medium level, which is defined as an acceptable risk (Risk Appetite), prepares a Business Continuity Management Plan (BCP), as well as continuously monitors management results and reporting progress to the Executive Committee and the Board of Directors periodically acknowledged.


Creating a risk management culture in that organization. Senior executives and the Good Governance and Risk Management Committee proceeded through the Operating Meeting. By involving the risk management system is a part of every employee's performance appraisal. And set it as a topic in the annual performance evaluation (Key Performance Indicator: KPI) of department heads and managers of all relevant departments.




ECONOMIC, SOCIAL, ENVIRONMENTAL AND GOVERNANCE (ESG RISKS) MANAGEMENT



The Corporate Governance and Risk Management Committee sees the recognition of the fast changing economic, social and environment situations all the times, Therefore, the risk management team was appointed to be responsible for each business operation in order to evaluate and analyze risks possibly affecting the organization as well as subsidiaries and other projects in both internal and external risk factors, to set priorities for the risk management plan and engage in regular follow-up on the implementation of such plans. At the same time, the Committee presented regular updates to the Board of Directors on the progress and developments regarding said plans continually. The company manages risk factors which are likely to have impacts on the company's operations as follows.

	Risk	Risk Management
Economic and governance risks		
	<ul style="list-style-type: none"> • Economic Risk Global-scale volatility of oil price has a direct effect on selling electricity and steam, the amount of energy demand, main raw material prices, and exchange rate, as well as the impact of Government policy changes on business development. • data security or computer system and cyber attacks IT systems are the part that can support business operations for convenient, fast, competitive, and can create business differences. The evolution of cyber threats is becoming more sophisticated and intense. It is therefore a channel for cyber attacks on the company's collective database. Loss of sensitive or financial information Affecting the confidence and performance of the company. Therefore, a challenge to reduce the impact. 	<ul style="list-style-type: none"> - Set business strategies and investment plan in alignment with economic conditions - Identify and analyze risks affecting business goals - Prepare proactive plans for uncertain and unstable economic / Business environment - Continuous monitoring of performance - Setting security and information technology policies, setting up working groups in each area to prepare along with training to educate policy and the Cyber Security Act 2019, with communication to publicize legal knowledge and advice on the use of information technology through the screen when used Computer work or Intranet for all employees to acknowledge and realize the importance of the Cyber Security Act. - Prepare a personal data protection policy (Data Protection Policy) to secure personal data, there is a program for requesting consent both through forms and verbal in accordance with the Personal Data Protection Act B.E. 2019 - It is scheduled to replace IT equipment every 3-5 years. The replacement model must have better performance, including a security system, intrusion prevention system and backup. - Install advanced systems and programs to protect data security from cyber threats such as Deep Discovery Inspector, WAF, Hyper Converged Infrastructure (HCI), Dell VXRail Server, Data Leak Prevention (DLP), Cyber Command Intelligent Threat Detection and Response (as disclosed in the Annual Registration Statement (Form 56-1 One Report) Topic "Risk Management")

	Risk	Risk Management
Social Risk		
	<p>• Human Rights Impact</p> <p>The company has assessed human rights risks to prevent and reduce the impact from the risks in the company's operations. From the risk assessment results, there are labor and human rights practices. Sahacogen Group has a system for selecting employees who are standard and fair, both written test and interview test to consider competency. Including suitability for each individual job position by adhering to the principle of fairness and equality in terms of human rights according to human rights policy and human rights practices on December 16, 2022. There is no discrimination in gender, religion, political rights, or any matter. knowledge and competency suitable to fill the vacant position first If there are no qualified candidates, recruitment from outsiders will be conducted.</p>	<ol style="list-style-type: none"> 1. Comply with human rights policies and practices as follows: <ul style="list-style-type: none"> - Do not take any action or do not support activities that violate human rights. - No restrictions on independence or differences of opinion, gender, race, religion, politics, or any other matter. However, the opinions that may cause conflicts or divisions should be avoided. - Provide a communication channel for employees who have been treated unfairly to complain and complaints should be taken care of and treated fairly. - The company's employees and contractors are required to be at least 20 years old. There is no child labor or forced labor. including no gender discrimination 2. Training for all new employees before entering work and training for contractors before starting work to understand safety, environment and energy, policies, rules, and regulations of the company. 3. Establish a welfare committee in the workplace to allow employees to participate in determining the criteria for benefits and welfare of employees beyond the law, showing the importance of employees caring. 4. Follow up on information, news and assess the situation regularly.
	<p>• image and reputation damage</p> <p>The energy business, especially electricity generation, is of interest to society, so there is a risk of being rejected or not being accepted in the business. If there is an impact on safety, occupational health, environment to the community and society acceptance and trust from the community and society. It is an important factor that affects long-term business development.</p>	<ul style="list-style-type: none"> - Set guidelines and plans to prevent and reduce impacts on safety, occupational health, and the environment, including the quality of life of employees and nearby communities. - Establish a unit responsible for promoting the image of the organization. by following the Company's sustainability policy and follow up on performance as well as conducting community relations in the area, to communicate and create understanding with the community continuously. - Build community engagement. Listening to opinions from the community, Prepare a manual for communication and handling complaints from the community.

	Risk	Risk Management
Environmental Risk		
	<ul style="list-style-type: none"> • Occupational safety, health and working environment. <p>Sahacogen and its Affiliates give precedence to compliance with laws and regulations relating to effects on the environment and safety standards. We have a certain unit that keeps track to any change in laws, rules, and regulations so that the company will have a prompt response with such changes and reduce environmental risk.</p>	<ul style="list-style-type: none"> - Using environment management system (ISO 14001) and occupational health and safety management system (OHSAS 18001 & TIS 18001) to manage health, environment, and society operations. - Comply with the environment, safety, and energy conservation policy. - Comply with the group's manual regarding environment, safety and health as a working guideline and to monitor the process of implementation. In addition, providing training sessions, practices, creating emergency plans, testing tools and warning system, and strictly complying with the operating manual. - Report the results of the mitigation measures and environmental quality monitoring to the Office of Natural Resources and Environmental Policy and Planning. Energy Regulatory Agency Department of Industrial Works industrial office local government organization and related agencies.
	<ul style="list-style-type: none"> • Climate change <p>Climate change and natural disasters are more severe, resulting in various risks, both directly such as natural disasters and droughts, and indirectly such as setting new rules and standards, changing consumer behavior, and changes in technology, etc. Sahacogen Group sees the importance of solving such problems, therefore pushing for a concrete reduction in greenhouse gas emissions in line with all countries, accelerating the global warming crisis as an urgent agenda, and Planning. Energy Regulatory Agency Department of Industrial Works industrial office local government organization and related agencies.</p>	<ul style="list-style-type: none"> - Set a management policy to support climate change. And appointing the working group on greenhouse gas management - Set goals and report performance on greenhouse gas management to the Sustainability Committee. - Follow information, news and assess the situation regularly. has a policy that focuses on development and Invest in renewable energy business.

Emerging Risk Management

Emerging Risk is something new and unprecedented have high uncertainty Both the likelihood and impact are difficult to clearly assess. Because it is something that may happen in the future and may affect the business of the company in the next 3-5 years, giving importance to and considering the impact of rapid changes in economic conditions, environment, society, culture, technology, and consumer behavior. It is inevitable that the company must act. And it is also an opportunity for business development, such as the trend of using renewable energy. Government policy on the development of Thailand's smart grid network system, and the liberalization of energy (Power Pool), including changes in energy storage technology (Energy Storage).

Therefore, the risk management is as follows

- Joint investment with alliance companies, including energy storage systems and solar power business in the form of Solar Rooftop.
- Installing the smart meter system for customers in Saha Group Industrial Park - Sriracha. to support the development of the smart grid network system in the future Including working with partners to study the management system of the microsmart grid system.
- Extending biomass knowledge to other businesses. By promoting bamboo planting to create products from bamboo under the trade name LambooChar.
- Build a new power plant. and improve the efficiency of existing power plants.
- Submission of electricity sales. According to the Announcement for purchasing electricity from renewable energy in the form of Feed-in Tariff (FiT) 2022-2030 for the group of power plants without fuel cost, ground-mounted solar energy type of the Energy Regulatory Commission.
- Restructured the organization to have a Business Development section responsible for supporting project implementation according to the goals and strategies set.
- Follow up on information, news and assess the situation.

Business Continuity Plan

The Company places importance on the development and management of business continuity. So that the business can continue to operate without interruption If the business has to encounter unusual situations. Whether it is an external or internal threat, such as the spread of emerging diseases, Cyber threats, natural disasters, riots, protests, etc. Each occurrence of a threat may cause damage to life and property. Including being an obstacle to business operations. Systematic and efficient business continuity management (BCM) will enable organizations to recover their business operations quickly. Good Governance and Risk Management Committee. Therefore, guidelines for preparing for crisis situations have been established. To create readiness for the management system of Sahacogen Group. Able to continuously respond to problems and resolve operational inefficiencies. By preparing a business continuity plan (BCP), it can be implemented effectively.

Business continuity management policy

1. Focus on developing a business continuity management system according to standards and best practices.
2. Set up a working group to manage business continuity plans (Business continuity plan, BCP) responsible for overseeing and managing the overall business continuity of the organization.
3. Promote and support all departments, including personnel at all levels are aware. Having knowledge and understanding in business continuity management as well as preparing measures to support business continuity can lead to effective implementation. Including focusing on continually reviewing and improving plans and rehearsals until becoming an organizational culture.
4. All executives and employees must be involved in the practice for the organization to achieve the objectives of business continuity management.

4 steps of Management in crisis/emergency/disaster situations are as follows.

1. Prevention and mitigation
2. Preparedness for disasters
3. Emergency Management
4. Post Disaster Management

The continuity management approach consists of 6 main components. It is a continuity management cycle (BCM Life Cycle) as follows.

1. BCM Program Management is considered a key component. and the first step of continuity management by providing a framework for operations as specified in Business Continuity Management Policy.
2. Understanding of Organization to understand the condition and operations of organizations and departments. To accept impacts or risks through analysis and risk assessment methods. and various threats that will affect resources in 5 areas, as follows.
 - 1.) Main buildings/workplaces
 - 2.) Important equipment and delivery of important equipment
 - 3.) Important information of Technology
 - 4.) Key personnel
 - 5.) Important trade partners/service providers

This is to identify the urgency of activities and the required level of competence. To be used as information in prioritizing the work process. Guidelines and strategy formulation in the next step.

3. Determining a strategy for continuity BCM (BCM Strategy) is a way to respond to the disruption of the organization's operations, including the recovery strategy and the management strategy.
4. Emergency Incident Response and Preparedness to deal with crises and emergencies that occur and to manage the ongoing mission. It aims to implement emergency response procedures and use key resources appropriately. along with preparing a plan to support the situation that affects or a mission recovery plan after a disaster has passed.
5. Exercising Monitoring and Reviewing is an important step. To ensure that the business continuity plan (BCP) that is prepared can be used. Including preparing as well as checking the competence of personnel and the effectiveness of plans in response to crises. The test format may range from easy to hard as follows:
 - Call tree is an emergency notification drill for members. The relevant team according to the telephone list chart.
 - Tabletop testing is a meeting to exchange opinions with all relevant agencies. by simulating the situation and trying to bring a business continuity plan (BCP) to consider whether it can meet the needs of each step or not.
 - Simulation is a test by simulating a virtual situation. and try to apply a business continuity plan (BCP).
 - Full BCP Exercise is a full test and is as close to the real situation as possible.
6. Embedding Business Continuity Management as part of corporate culture. Personnel at all levels understand the importance of Business Continuity Management (BCM) as well as the roles and responsibilities that everyone must perform in order to continue business operations in times of crisis.

ANTI CORRUPTION

Sahacogen Group has the intent to combat all forms of corruption. Consequently, the Anti-Corruption Policy has been established. Awareness of the good corporate governance principles is to be enhanced among directors, executives, and employees. The anti-corruption policy is also a part of the risk management plan for risk assessment in every unit. In this regard, the internal audits act as an assessor.

The Company also provides it to new employees, has communication channel for publizing the code of conduct and anti-corruption policy. Guidelines and practices for the operation of Anti-Corruption in the organization as shown below.



Anti-Corruption Policy

01

Raise awareness, values, and attitudes

among employees in performing their duties according to laws and regulations with honesty and integrity.

02

Provide an efficient internal audit control system.

To prevent employees from being corrupt or being involved in corruption.

03

Company Directors, Executives and Employees

are prohibited from requesting or accepting assets or benefits that improperly or may cause the Company to lose legitimate benefits.

04

Company directors, executives and employees are prohibited from offering to give assets

or benefits to third parties to induce that person to commit or refrain from any illegal act or wrongfully against their position.

05

Provide a mechanism for reporting

financial status that is transparent and accurate.

06

Consistently reviewing compliance with the Anti-Corruption Policy.

As well as reviewing the practice guidelines and terms of operation to be in line with changes in business, relevant laws, and regulations.

07

Provide communication channels

So that employees and those involved can report clues with confidence that they will be protected. And must examine every clue that has been notified.

From the Anti-Corruption Policy, the company has proceeded as follows.

The Board of Directors has established an anti-corruption policy and anti-corruption manual as a guideline for the company directors, executives, and all employees by focusing on prevention and anti-corruption in all forms both directly and indirectly. and not participating in bribery to public and private agencies to gain competitive advantages. and establish guidelines for conducting activities that may lead to corruption risks. To be a clear guideline for doing business and reducing the risk of corruption, all 3 issues are as follows.

1. Donations
2. Support
3. Gifts and Entertainment

The guidelines for all 3 anti-corruption policies have been compiled and disseminated to directors, executives and employees for their acknowledgment and compliance.

Anti-Corruption Actions

The Company has expressed its intention to join the Private Sector Collective Action Coalition of Thailand (CAC) against corruption on February 18th, 2014, and renewed for the 3rd time on September 30, 2022. And encouraged the subsidiaries, Sahacogen Green Company Limited and Saha Green Forest Company Limited, to sign the declaration of intent and become a member in 2018. with the Corporate Governance and the Risk Management Committee who monitoring for oversight. Business risk management and the CAC project implementation. And provide training and communication for company directors, executives, employees and published on the company's website www.sahacogen.com for acknowledgment and encourage everyone including stakeholders to understand and be able to implement in a more concrete way.

Board of Directors Realizing the importance of anti-corruption operations and for directors, executives, and employees to aim in the same direction and be part of the corporate culture. Therefore, the policy has been reviewed. Compliance with the Anti-Corruption Policy every year to be appropriate and consistent with the current situation.

Anti-Corruption Guidelines for Stakeholders

1. Persuade and share good practices with customers / partners to aim to become a coalition against corruption.
2. Raise awareness of employees in the organization through regular review of business ethics.
3. Campaign for performance and appreciation of employees who behave in accordance with morality and ethics.
4. Collaborate to educate communities and schools, including creating anti-corruption campaign materials.
5. Establish measures and internal audit systems to create transparency in business operations.



Anti-Corruption Campaign in 2022

- 01** The Company communicates about the Anti-Corruption Policy to customers/partners through electronic communication channels such as E-mail, Intranet system, Company website. and a letter to refrain from accepting/giving gifts.
- 02** The Company provides communication channels to suggestions, complaints, and report problems between employees with the commander. Through the listening box or the company's intranet system of welfare committee. To present for the executive committee. The various suggestions have been considered and corrective action has been taken. To maintain good relations with each other. The Company listens to opinions and suggestions from employees at all levels equally and equitably. and operate using a mechanism that does not cause any impact on the whistleblowers which has been kept as a secret of the company.
- 03** Sahacogen Group participated in activities on the Anti-Corruption Day 2022 on September 6, 2022 by joining the anti-corruption march with various organizations, both government and private sectors under the concept of "Leadership with the suppression of corruption." at Bang Sue Grand Station Organized by Anti-Corruption Organization (Thailand)
- 04** Provide training and knowledge sharing for directors, executives, and employees on Good Corporate Governance Principles and Anti-Corruption. and CAC Activities to encourage the employees to be aware of anti-corruption. And encourage employees to create common values continually and sustainably. As well as testing knowledge of CAC and principles of good corporate governance. Via online system Annually and use the test results for further development. In the past year, 100% of the company's employees have been trained.
- 05** Orientation Policies and guidelines for anti-corruption to all new employees to create awareness from the beginning
- 06** Organize an audit of the compliance with the internal control system according to the risk of corruption of the Sahacogen Group by Dharmniti Internal Audit Co., Ltd., and the Anti-Corruption Project Working Group.
- 07** Communicate the "No Gift Policy" during festivals and any other occasions to subsidiaries, employees, partners, and external parties to show the commitment of the company in creating good standards of conducting business to related parties with honesty and fairness.




Sahacogen Group intent to against corruption

The Company joined as a member of the Thai Private Sector Collective Action Against Corruption (CAC) by being certified as a member. The first time was on October 14, 2016, and the third certification was renewed on September 30, 2022.

Moreover, The Company also encourages the subsidiaries, Sahacogen Green Company Limited and Saha Green Forest Company Limited, to join as CAC members, having been certified for the first time on February 12, 2018, and has been renewed. 2nd certification on December 31, 2020.


Targets for Anti-Corruption Operations

1. Executives and employees of Sahacogen Group Acknowledge the Anti-Corruption Policy and use it as a framework for operational guidelines.




Anti-corruption performance (Disclose 205-2)


1. Acceptance of the policy of executives and employees of the Sahacogen Group 100%
2. Learning the policy from the knowledge test




Test to measure knowledge
100 %



Assessment result
100 %



Summary of complaints about corruption (Disclose 205-3)




Year	2019	2020	2021	2022
Complaints	0	0	0	0

Whistleblowing Policy

The Board of Directors provides the channels for employees and stakeholders to report clues or complaints when they find anything that may be illegal or corruption of company employees. As well as behaviors that may cause problems and damage to the Company. Including cases where employees and stakeholders have been violated or have not been treated fairly through the company's channels, with fair protection measures for complainants.

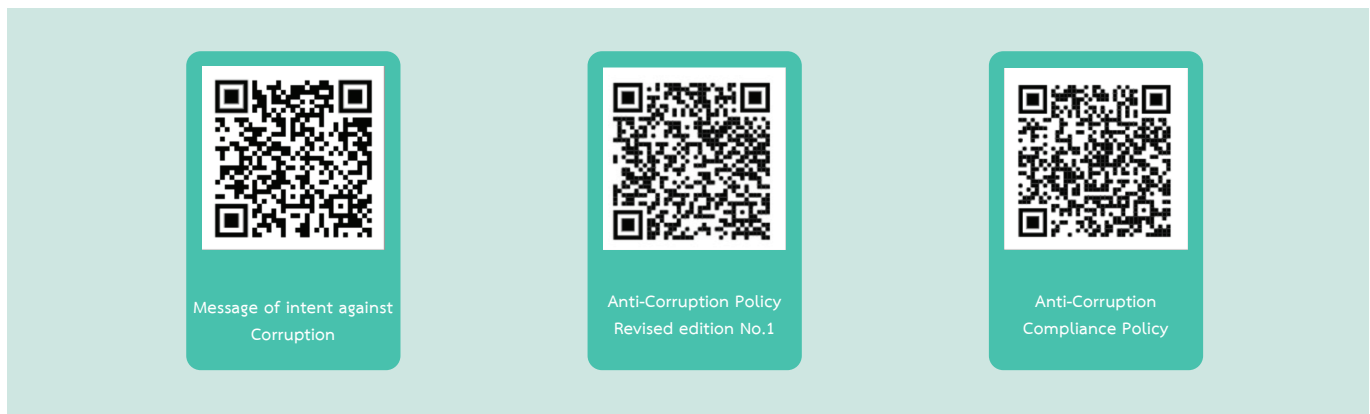
Whistle Blowing and Complaints

In case employees and stakeholders have any concern or suspicion regarding frauds, corruptions, illegal practices, these shall be reported as follows.

<p>01</p>  <p>Verbal complaints or letter submitted to the complaint receiver.</p>	<p>02</p>  <p>Suggestion box.</p>	<p>03</p>  <p>Notify by email or phone. (as will be shown below.)</p>	<p>04</p>  <p>Website www.sahacogen.com or online channels.</p>	<p>05</p>  <p>By postal mail to Sahacogen (Chonburi) Public Company Limited: 636 Moo 11, Sukhaphiban 8 Road, Nongkharm, Chonburi 20230</p>
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Contacts	Telephone	E-mail Address
Chairman of the Board of Director	038-481555 Ext. 202	directors@sahacogen.com
Chairman of the Audit Committee	038-481555 Ext. 203	auditcommittee@sahacogen.com
Chairman of Corporate Governance and the Risk Management Committee	038-481555 Ext. 212	riskcommittee@sahacogen.com
Chairman of the Sustainability Committee	038-481555 Ext. 290	pr-csr@sahacogen.com
Managing Director	038-481555 Ext. 200	udompong.ch@sahacogen.com
The Company Secretary	038-481555 Ext. 200, 282	csecretary@sahacogen.com
Investor Relations	038-481555 Ext. 200, 282	investorrelation@sahacogen.com
Human Resource	038-481555 Ext. 242, 243	hadmin@sahacogen.com

Communication a of Anti-Corruption Information



ECONOMIC PERFORMANCE



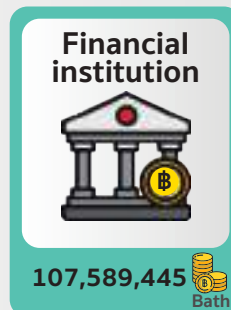
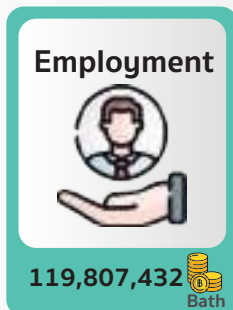
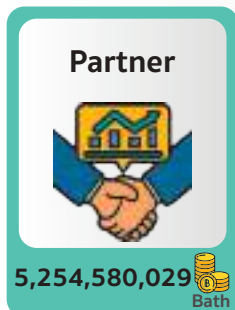
Economic Performance

The economic performance of the Sahacogen Group during 2020-2022, which focuses on key results and income distribution to stakeholders as follows:

Performance Summary and Financial Highlights

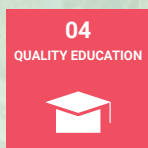
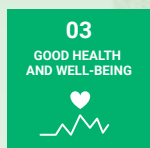
Operating Performance	(Unit:Baht)		
รายการ	2020	2021	2022
Sales	3,971,035,445	4,220,490,197	5,744,064,977
Other Revenues	7,536,002	133,922,514	29,769,511
Other Revenues	3,978,571,447	4,354,412,711	5,773,834,488
Gross Revenues	3,603,699,302	3,961,298,141	5,803,471,947
Other expenses	257,665,918	286,231,047	199,536,972
Cost of Sales and Expense	3,861,365,220	4,247,529,188	6,003,008,919
Profit (Loss)	117,206,227	106,883,523	-229,174,431

Distribution to Stakeholders





CORPORATE SOCIAL RESPONSIBILITY



Policy and social Practices

The Company adheres to good corporate governance. by promoting the cooperation of all stakeholders in community and social development as well as respecting human rights and fair labor practices Everyone is committed to promoting health and safety in a good working environment. Including capability development and employee retention and promoting and supporting directors, executives, and employees to realize responsibility and fairness to all stakeholders in accordance with the law. Including the principles of good corporate governance. Therefore, business ethics have been established. and code of conduct for company directors, executives and employees for their acknowledgment and compliance in the same direction.

Human Rights and Labor Practices

The Company recognizes the importance of respecting human rights as a fundamental basis for business operations. To be committed to upholding, support and promote respect and protection of fundamental rights and human dignity of all involved in the Company's operations. in accordance with domestic law international human rights principles and good practice Covering the Universal Declaration of Human Rights (UDHR), United Nations Guiding Principles on Business and Human Rights (UNGPs), Principles of the United Nations Global Compact (UNGC) International Labor Organization Declaration.

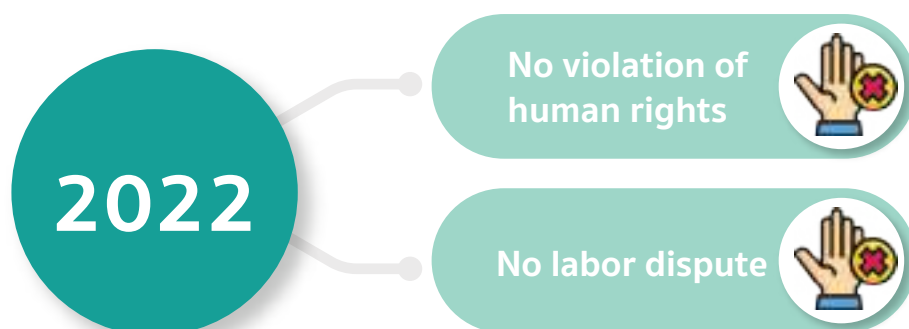
In addition, the company also encourages partners and business alliances. As well as stakeholders acknowledge the human rights policy. For a principle of practice in the same direction as follows

1. Comprehensive Human Rights Due Diligence impact assessment (HRDD) from business operations or areas where the Company may be involved or supported.
2. Communicate to all involved in business operations along the value chain of the Company, its subsidiaries, and businesses that the Sahacogen Group has the power to manage. as well as business partners by continuously pushing and supporting the implementation of such policies.
3. Provide channels for receiving complaints or reporting human rights violations related to the Company. By providing fairness and protection to persons who make complaints or report violations of human rights relating to the Company in accordance with the protection measures specified in the principles of good corporate governance.
4. Directors, executives and employees of the company who fail to comply with this policy are considered a disciplinary action that must be punished according to the company's regulations. And if that action is considered a legal offense, it may be punished according to the relevant laws.

Human Rights Measures and fair labor treatment Guidelines

- Respect human rights principles without discrimination on the basis of race, color, sex, gender, language, religion, education, customs, culture, social status, property or residence status, disability, patient or disease. including respecting and accepting differences of opinion such as political opinions or any other matters according to laws or contractual obligations that bind everyone. And will comply with human rights principles that are consistent with the Company's human rights policy.
- Comply with legal requirements to equalize and recruit knowledgeable workers. Ability to work by respecting the equality of individuals in the employment process. Opportunity for job applicants indiscriminately due to differences in sex, gender, age, race, ethnicity, skin color, religion, creed social status family origin political opinion. Including supporting the employment of talented disabled workers to work with the company. Hiring foreign workers will be treated equally with the labor of that country and as required by law.
- Do not use child labor under the legal age to work. according to the laws of each country and international labor standards.
- Promote human dignity of employees and workers. Treat workers with respect and do not commit in harassment that is physical, mental, verbal, sexual harassment. Punishment that causes physical and mental stress or any other acts that force labor involuntarily.
- Protect women workers from performing work in ways that could endanger their health and safety. In the case of an employee who is pregnant, she must be provided with protection and benefits as required by law.
- Comply with labor laws regarding compensation. Welfare and benefits to workers and/or comparable to the labor standards of the same type of industry which can meet the basic needs of workers and families.

- Comply with labor laws regarding employee working hours. and/or comparable to industry good labor practices covering working time Overtime work, holidays, and leave days of workers according to their legal rights. Overtime work and work on holidays must be voluntary and with the consent of workers.
- Comply with labor laws related to termination. Including complying with the rules for compensation and other compensation related to termination of employment at the rate specified by law.
- Support for safety operations occupational health and good working environment, So that employees can perform at their full potential and no impact on health and mental health by establishing a welfare committee in the workplace and the Safety, Occupational Health and Working Environment Committee. Responsible for management Including compliance with relevant labor laws and regulations.
- Promote respect and acceptance of diversity within the company. Respect the right to freedom of expression. participation in negotiations. Joining associations and being open to complaints or reports of human rights violations relating to the company. Including advice from employees through various channels of the company.



Employment

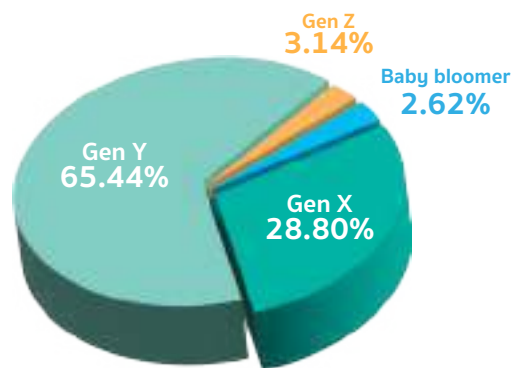
Sahacogen group has a standardized and fair employee selection system. The application process includes a written exam and an interview to evaluate the candidates' competencies and organizational fit. Candidates are also required to take a health examination before starting work. The employee classifications according to company affiliates are as follow.

Number of employees in 2022			
Company	Male	Female	Total
Sahacogen (Chonburi) PCL	29	27	56
Sahacogen Green Co., Ltd.	64	25	89
Sahagreen Forest Co., Ltd.	38	8	46
Total	130	60	191

Employment Rate in 2022					
Company	Number of Employee	Resign	%	New hire	%
Sahacogen (Chonburi) PCL	56	2	3.57	5	8.93
Sahacogen Green Co., Ltd.	89	4	4.49	5	5.62
Sahagreen Forest Co., Ltd.	46	0	0	0	0
Total	191	6	3.15%	10	5.24%

Number of employees separated by age.

Company	Number of Employees by Age				Total
	Baby boomer ≥ 58 ปี	Gen X 42-57	Gen Y 26-41	Gen Z < 25 ปี	
SCG	5	24	24	3	56
SGN	0	21	67	1	89
SGF	0	10	34	2	46
Total	5	55	125	6	191



● Baby boomer ● Gen X ● Gen Y ● Gen Z
Sahacogen Group's average age of employees.

Managing Salaries, Wages, and Benefit

Sahacogen provides salaries and compensation to employees based on principles of justice, corresponding to their job responsibilities and competencies. The opportunity is equivalent for all genders. The compensation is also competitively adjusted in the industry to attract talented individuals to join the firm while motivating current employees to continuously improve their performances. The company also has clear KPIs for evaluating employee performance, creating mutual understanding between supervisors and employees while leading to improvement of work and human resources.

Employee compensation (million baht) in 2020-2022

2020				2021				2022			
SCG	SGN	SGF	SCU	SCG	SGN	SGF	SCU	SCG	SGN	SGF	SCU
57.85	30.7	17.85	106.4	59.27	31.46	18.16	108.89	58.84	34.69	20.18	113.71




Company	Joining as a member of a provident fund		
	Total	Number of employees participating in the fund	Percentage
SCG	56	50	89.29%
SGN	89	83	93.26%
SGF	46	46	100.00%
All	191	179	93.72%

Employee benefits

The company pays attention to “employee benefits” to ensure employees work happily, create bonds and loyalty to the organization. The company believes happy employees can deliver higher efficiency that will reflect the company’s performance in long term.

In addition, the company established a welfare committee in the workplace. By selecting from every employee's election to be a representative in the consultation regulation and offer opinions on various welfare. Being as a voice for employees to receive benefits and welfare equally and fairly.

The summary of welfare and support allowance provided to employees in 2022

Welfare & Support Allowance							Total
	Number of Employees	Amount (Baht)	Number of Employees	Amount (Baht)	Number of Employees	Amount (Baht)	
Funeral	0	0	4	41,500	1	10,000	51,500
Marriage	2	10,000	1	5,000	4	20,000	35,000
Maternity	0	0	7	35,000	6	30,000	65,000
Ordination	0	0	0	0	1	5,000	5,000
Tooth care	13	34,790	9	9,750	4	2,700	47,240
glasses	20	73,865	41	154,280	11	43,140	271,285
Illness	11	15,435	22	19,989	24	25,691	61,115
Vaccine Covid-19	2	3,300	3	4,950	13	36,300	44,550
Total	48	137,390	87	270,469	64	172,831	580,690



EMPLOYEE CARE AND WELFARE (SAHACOGEN HAPPY WORKPLACE)

Sahacogen Group recognizes that the potential of employees is very important to the performance of the organization. If employees are happy and comfortable and have strong health, will show full potential to work. Therefore, The Company provides welfare and various activities. To create happiness in the workplace to build good relationships between the company and employees. And helps to promote good relations between colleagues, supervisors, and executives. The Company has guidelines for looking after employees according to the 6 principles of happiness, promote health for all employees to be healthy and use free time for maximum benefit. Happy Work Place with 6 ways of happiness as follows:

01 Happy Health

- The Best Healthy project encourages employees to exercise regularly for all good health.
- Sports competition projects such as football, badminton, petanque, as well as various hilarious and fun sports to promote exercise. and build good relationships among employees and business partners.
- Provide annual health check-ups and provide health welfare for employees and families.



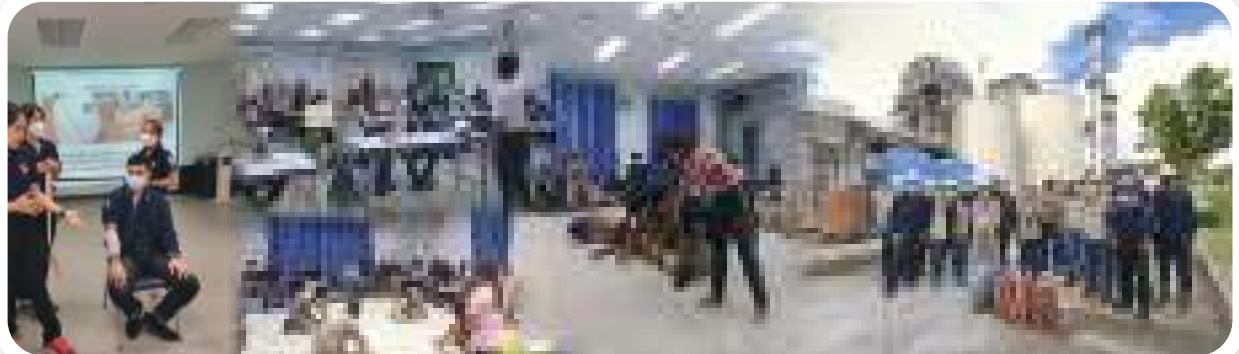
02 Happy Heart

- Arranging welfare for visiting sick employees and recovering at home or hospital.
- Provide welfare and assistance when there is an epidemic situation or natural disaster for employees such as the situation of COVID-19, floods, storms, fires to alleviate suffering, etc.
- Sahacogen Sharing Happiness Project to share items with the underprivileged outside the organization, such as blood donation, donate old desk calendars as learning materials to the visually impaired, etc.



03 Happy Brain

- Provide continuous personnel development throughout the year. Both development from internal training (In-house Training) and external training (Public Training).
- Encourage employees to continue their studies at higher levels.



04 Happy Soul

- Songkran Festival Activity to preserve and inherit Thai culture.
- Encourage employees to make merit on important religious days. to preserve Buddhism and traditions.
- Organize activities within religious places on important religious days such as cleaning the temple area, offering candles Plant trees in temples, etc., To encourage employees to be kind, to sacrifice and to know how to give.



05 Happy Family

- Hire - purchase welfare program with low interest rates in conjunction with the Government Housing Bank To encourage employees of the company to have a place to live and build a warm family.
- Provide a provident fund and a social security fund for employees as required by law. In addition, the budget is set to help employees and their families in other areas such as marriage, ordination, childbirth, etc.
- Happy Birthday project because employees are part of the growth of the organization. Giving small happiness, such as giving a colleague a blessing in the month of birth It is one thing that makes employees feel warm. Feel like a family with the organization.



06 Happy Society

- Sahacogen Against drugs project to make employees aware the dangers of drugs. The company participated in the project for the prevention and solution of drug problems.
- The Sahacogen Volunteer project to promote corporate culture in cultivating employees to be good people with volunteer spirit for the public. by allowing employees to accumulate volunteer hours for the year and awards to employees who have the highest volunteer hours and are exemplary in volunteering for society to colleagues.



Sahacogen cares of Covid-19 situation



In 2022, the epidemic of the Coronavirus Disease 2019 (COVID-19) continued. The company has prepared various measures. to support the situation, Increase safety and build confidence for employees and operators of the company as follows.

- The company pays attention to the hygiene and safety of employees by distributing personal protective equipment such as face masks, alcohol gels, etc. to employees and family members thoroughly and sufficiently for use. And cleaning the area.
- Assign some employees to work from home, some to switch teams to work. To support in the event of an emergency. The management has sent messages of concern to the employees. With the desire that all employees pay attention to self-care and healthy and ready to return to work when the situation returns to normal.
- Provide personal protective equipment such as Hygienic masks, alcohol gel distributed to employees thoroughly and sufficient for use. Cleaning the area with disinfectant spray Allocate employees' work areas to have a distance between people (Social distancing). Body temperature checks for everyone before entering the area. established a service point for hand sanitizer gel suspension of power plant visits. To prevent the spread of germs Preparation of the BCP (Business Continuity Plan) and has a dedicated working group closely monitor the situation.
- Follow up on employee health inquiries. By assessing opportunities and risks of COVID-19 infection continuously if abnormalities are found, employees are closely monitored. Prepare messagin expressing concern from executives to employees on the health of personnel, Ready to prepare a weekly report for senior executives to consider.
- Use digital technology to support work efficiently, such as video conferencing with VPN, Microsoft Team, and Zoom Conference. Where employees can always work outside the workplace. and the system has maximum security.



Developing employee engagement and retentionship

- The Company provides appropriate welfare for employees and their families beyond the law required. And in line with changes in social, economic conditions and business needs, such as life insurance for employees, medical expenses for employees and their families, dental expenses, eyeglass cutting expenses, shift work expenses, accommodation expenses, travel expenses, and expenses for working in other provinces. Giving certificates and gifts to employees on their 10th and 20th anniversary, etc. To build morale and encouragement in the work as well as creating a relationship with the organization.



- The establishment of a welfare committee in the workplace. By recruiting from the election of all employees. To be a representative in consultation, taking care of and offering opinions on various welfare matters. By acting as a spokesperson for employees to receive benefits and welfare equally and fairly.



- In 2022, the Company take the importance of work styles to be in line with modern work in the future. Therefore, a hybrid working model has been tested for Sahacogen (Chonburi) Public Company Limited between July 2022 to December 2022 to attract and retain new generation employees with modern ideas. Support the concept of Green and Energy Saving to reduce the use of resources. to reduce the congestion of parking spaces (Sriracha operating area) from the operation of the Sahacogen Combined Cycle Power Plant Project (Extension Phase 4). To reduce the likelihood of the spread of Coronavirus Disease 2019 (COVID-19). 91% above the threshold 16%

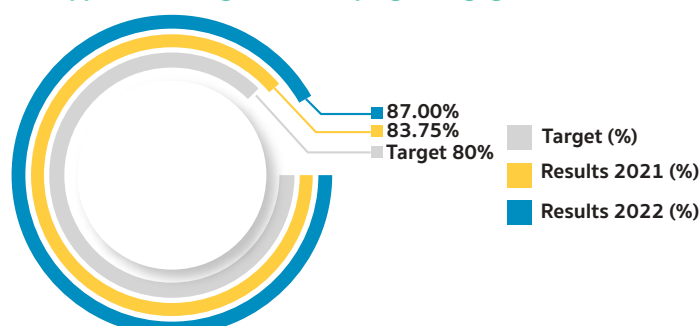


Employees' engagement



Sahacogen group has conducted a survey on Employee engagement in order to create employees' satisfaction, determination, and pride toward the organization, Informations obtained were used to improve quality in all aspects of work including working benefit to meet the requirement of the employee. Examples are Salary survey starting rate and comparing market rates for improving working environment etc.

Happiness survey results Employee Engagement Year 2022



Communicating with employees

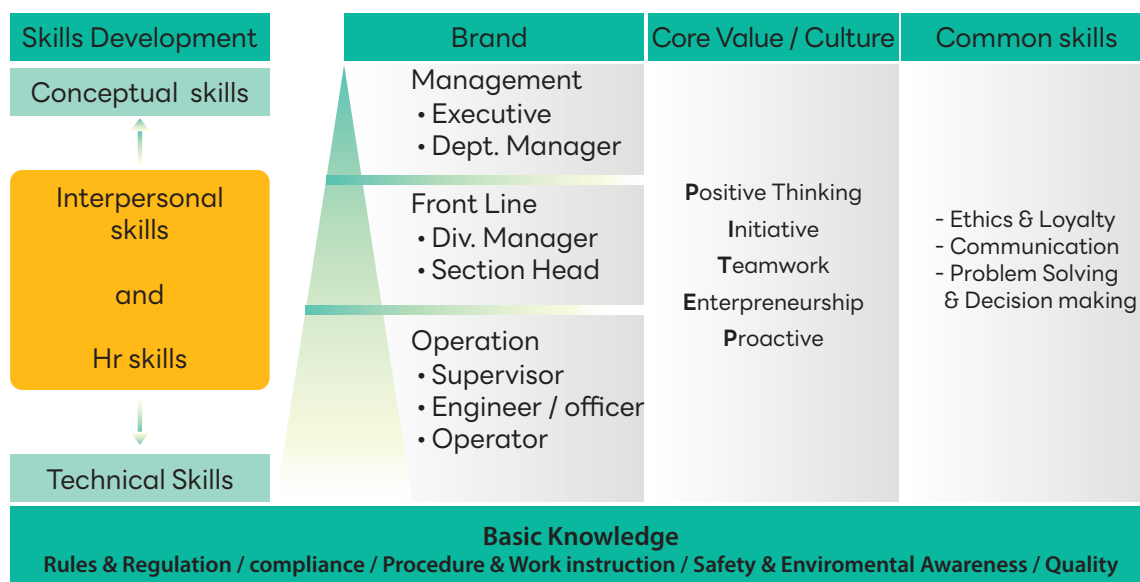


- The Company organizes a Town hall event to serve as a forum for friendly meetings between executives and employees. for executives to clarify policies and The direction of the company's growth for employees to be informed. and provide opportunities for employees to ask for information, discuss and exchange opinions on various matters to bring suggestions to develop and improve management even better. As well as creating good relationships between executives and employees at all levels.
- Labor Clinic for answering questions related to human resource management and development Including listening and giving advice, problems in the workplace, Other personal issues to employees. To help find solutions for employees to be happy both at work and in their personal lives.
- Listen for employees, Sahacogen Group gives employees the opportunity to express their opinions, feedback, complaint, and problems through internal communication channels such as opinion boxes, e-mail, intranet, monthly meetings, etc., information will be presented to the executive committee for corrective action. And communicate back to employees without disclosing the information of the whistleblower.
- Free communication culture, There is clear transparency, able to discuss all matters. The company provides opportunities for all employees to express their opinions within the organization. Help create a good working environment and relationship. Monthly meetings were organized as a communication platform between executives and employees at all levels.
- Bring technology for the better communication, The Company has chosen to adopt modern and useful technology in the communication to facilitate the speed. Save cost and able to communicate thoroughly by taking into account the suitability and in accordance with the situation such as Video Conference VPN, Line, Microsoft Team and Zoom Conference etc.



Human Resource Development

Sahacogen put the emphasis on human resource as the key driver to success. Staff skills development is the key to develop based on the organization's goals, direction and policy.



Sahacogen group focuses on enhancing employees' capabilities at all levels. The development plan can be divided into 4 main groups.

01 BASIC KNOWLEDGE TRAINING

is courses that focus on providing basic information that is useful for the new employees. The examples are rules, workflow and procedure, quality management, safety standard, occupational health, and environment.

02 COMMON SKILLS TRAINING

is useful for employees in every function. The training topics will cover ethics, morality, honesty, ability to work as a team, communication skill, and decision making skills.

03 CORE VALUE ENHANCEMENT COURSES

are aiming to create corporate culture and set the guideline for code of conduct among employees. The examples of the topic covered in this group are positive thinking, innovative ideas, working as a team, entrepreneurship, and proactive work style.

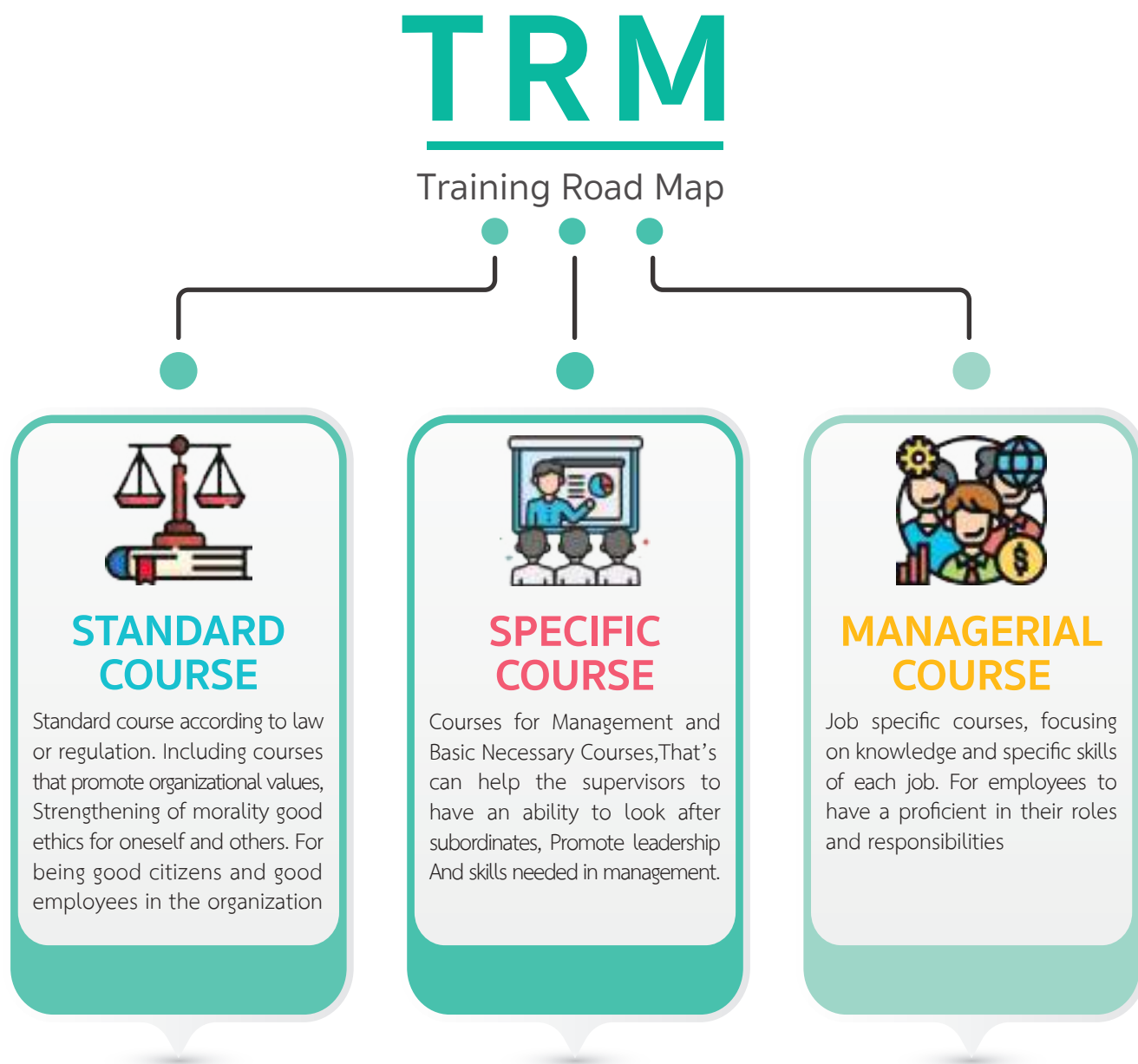
04 THE KNOWLEDGE AN SKILLS DEVELOPMENT

based on job position are focus on developing knowledge Capabilities in accordance with the roles and responsibilities of each position which is divided into 3 groups as follows

- Management : To focus on enhancing the vision, planning view And strategic thinking in conducting business in accordance with the changing situations
- Front Line: To develop knowledge administrative skills and resources to achieve goals in accordance with the organization policy and create a good atmosphere for working as a team.
- Operation : To enhance knowledge Professional expertise and awareness of customer needs, By promoting personnel development in many ways, such as internal and external training, On-site job training by job position Assignment Coaching by supervisor.
- To enable all employees to be developed under the above policy. Human resource management and development has determined the direction and clarity of continuous employee development and various processes. As follows.

Training

Each year, Sahacogen Group will formulate training and development plans for personnel. Classified by area and characteristics of different business groups. By applying the principles of Competency Management and survey the need for training (Training Road Map: TRM) which comes from analyzing and determining knowledge and competency as needed for the executives of each department.



In 2022, Sahacogen Group has established a plan for organizing training within and outside the organization. has adjusted the training plan and format to be in line with the situation and measures to prevent the spread of the Coronavirus 2019 infection by emphasizing training and seminars via online channels The annual training plan consisted of 162 courses, set the training target for 80% of the plan and conducted 135 training courses, representing 83.33% as follows:

Personnel development goals for the year 2022

Target (%)	Result (%)			
	SCG	SGN	SGF	Total
70	93.88	95.50	100	96.46

Training Summary of Sahacogen Personnel 2022				
Topic	SAHACOGEN CHONBURI PUBLIC COMPANY LIMITED	SAHACOGEN GREEN CO., LTD.	SAHAGREEN FOREST CO., LTD.	Total
Training course type				
△ Standard Training Course	10	12	15	37
△ Managerial Training Course	5	3	4	12
△ Specific Training Course	25	34	27	86
Total	40	49	46	135
Number of participants				
△ Manager level	15	4	1	20
△ department head level	15	10	7	32
△ Supervisor / Engineer level	3	6	6	15
△ Officer / staff level	15	65	32	112
Total	48	85	46	179
Hours in training				
△ Manager level (per person/per year)	47.07	20.45	43.6	37.04
△ department head level (per person/per year)	80.35	38.23	60.17	59.58
△ Supervisor / Engineer level (per person/per year)	69.33	32.57	36.67	46.19
△ Officer / staff level (per person/per year)	63.53	25.99	37.68	42.40
Average hour (per person/per year)	65.07	29.31	41.23	46.30
Training and development expenses (Baht)	401,814.10	227,025.00	231,198.00	860,037.10

Employees who received development training



All employees who attended the training

179

Course

135

Average hours : person : year

46.30

In-house Training 2022

1. Standard course according to laws or requirements

- 1.1 Safety, occupational health and environment courses to educate employees on how to use the equipment tools have the skills to perform various tasks to ensure safety in operation, as follow;
 - Basic First Aid Course
 - Basic firefighting course
 - Safety course in working with chemicals
 - Electrical work safety course for employees who work on electricity
 - Boiler Operator Course
 - Boiler Safety and Good Practice Courses according to legal requirements (review of work on radiators)
 - Curriculum Review courses related to cranes.
 - Measures to prevent and reduce environmental impacts
- 1.2 Courses, Laws and related Acts to provide employees with knowledge and understanding and realize the importance including complying with the law
 - IT Awareness Course
 - ISO Requirements Course (ISO 9001) / Internal auditor ISO 9001
 - Enterprise Risk Management (ERM)
 - Person responsible for energy
 - Internal audit of management system standards for safety, occupational health and working environment (T-OSH Standard Internal Audit)

2. Courses that are necessary for the fundamentals of work to educate employees about properly work and reduce errors in work achieve the highest working efficiency.

- ERP System Course
- Practical planning and problem-solving course

3. Specific Courses

- 3.1 Courses for the main departments within the organization for the operations and maintenance personnel to review their knowledge and understanding of how to use the equipment tools which are important in the operation.
 - Oil fire Boiler operation and PM inspection course
 - Basic Course STEAM TURBINE & GENERATOR
 - Industrial lubricants course
 - OEE FOR INDUSTRY 4.0 & AUTONOMOUS MAINTENANCE COURSE Optimizing production with OEE and self-maintenance.
 - Belt installation and maintenance course
 - PMII program usage course for repairers
- 3.2 Courses for internal support to provide knowledge and understanding of the content relevant to the operation support of the company.
 - Smart Secretary & Super Admin Course
 - Basic level cyber security course
 - Marketing in-depth course Analysis of customers in the new era 2022 Digital 4.0
 - Transfer pricing course - Power Automate for Business Automation course
 - Construction work safety course
 - Senior CSR Management Specialized Personnel Program

Public Training

Most of the outsourced training (Public) is the course that develops knowledge and skills necessary for a specific career field. Focus on individual development. The company has encouraged employees who have undergone development training to transfer knowledge gained for relevant employees. In order to assess the knowledge and understanding of employees and can extend knowledge within the organization. During the epidemic of the Coronavirus Disease 2019 (COVID-19), the Company continues developing the employees by focusing on knowledge development through online channels such as ZOOM Application, Microsoft Teams, or Facebook, etc., as the company realizes the importance of safety in the health of employees.

01 Encourage all employees to sharing knowledge within the organization.

The personnel in each department have different knowledge. Expertise in their fields and roles is beneficial to the organization. Therefore, employees are encouraged to be internal speakers and organize training or transfer knowledge within the company. Including sharing and exchange knowledge within the department on a regular basis.

02 Knowledge Management

Long-term personnel development, The Company not just looking at the giving one way by the organization. But the important thing is encouraging employees to learn by themselves. And extending to the employees to see the importance of self-development, so the Company has brought the information technology system to increase the efficiency in searching and accessing information on knowledge management within the organization by creating a Knowledge Management Sharing for employees in every position.

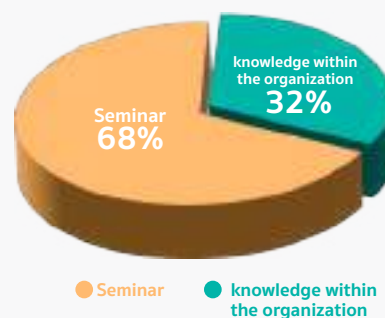


03 Develop management capabilities and leadership

Management level and supervisors are the most important mechanism of Policy Implementation Process. Both care and being a role model for employees. Therefore, Sahacogen Group aims to develop supervisors to be aware of have expertise in human resource management within their own departments. Including assignment, coaching, management, performance evaluation, and training road map to be able to support all types of challenging missions in the future.

In 2022, The Company has distributed information through the knowledge management system within the organization. For encourage employees to improve themselves and bringing knowledge information into the System as follows.

Topic	SAHACOGEN CHONBURI PUBLIC COMPANY LIMITED	SAHACOGEN GREEN CO., LTD.	SAHAGREEN FOREST CO., LTD.	Total
Knowledge Management Sharing				
△ Seminar	20	45	15	80
△ knowledge within the organization	3	34	1	38
Total	23	79	16	118



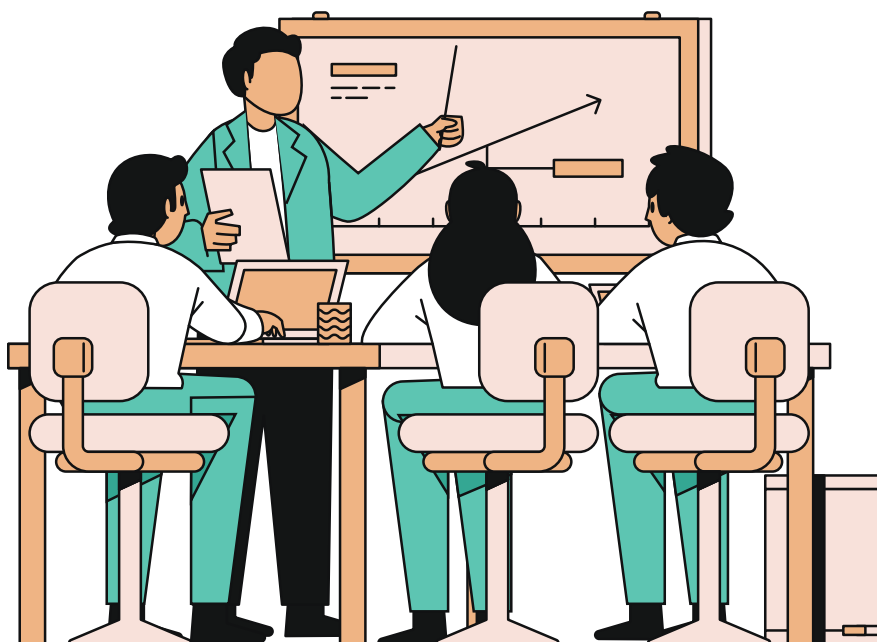
04 Create personnel ready to accept change

The world economic changes in the current situation are both an opportunity and an obstacle to the company's sustainable growth. Sahacogen Group emphasizes that employees are ready to adapt with the changes. Flexible and ready to work in all areas and situations. Dare to express the correct opinions, create respect for professionalism. Including strict compliance with the Sahacogen Business Code of Conduct. To be a good employee and good citizen of the community, society, country, and the world.



05 Create motivation and inspiration for employees.

The Company focuses on creating motivation or inspiration. To create better work results for employees. Not only aside from the self-motivation of the employees, the motivation that comes from the leadership of senior executives is also a good example. It is another inspiration to create work for employees. The company has executives who have worked with the company for over ten years or more. They are key people to creating growth and success for the company. By Stimulation, Inspire and be a mentor for staff of the lower level Including being a role model in creating work standards for future generations of employees.



To ensure that the various human resource development processes described above are truly effective and effective. Therefore, the company has established a model for measurement and evaluation. Including assigning supervisors to participate in the promotion and monitoring of the potential in personnel under supervision. Divided into 3 main parts as follows.



01 KNOWLEDGE

is a measure of learning in the classroom. To compare before and after the training. This section is run by the HR department to ensure that staff are knowledgeable and understanding of the topics that can be utilized. By evaluating from

- Pre-test / Post-test
- Question-answering and interviewing staff



02 SKILL

is a measure of performance. To ensure that employees have sufficient skills and can perform duties under their responsibilities. This part is run by the supervisor. By evaluating from

- Monitoring closely by the instructor or supervisor
- testing by assigning for practice



03 BEHAVIOR

is a measure of expression behavior. In which the company has specified competency as well as writing definitions to explain the expected behavior and set to be the grade Measured by direct evaluation from supervisors.

Moreover, the company also concern about environmental and safety including welfare to promote quality of life for all employees such as New Year activity, Thai New Year activity, Happy Birthday, Sport activity etc. Which will create a good relationship sharing of employees of all units. And Promoting morality and ethics in conducting business in accordance with Sahacogen's business ethics. By having employees show intention that they will maintain and do not violate Sahacogen Code of Business Conduct, help to look after if any actions are observed that violates, they will report to the human resource management or development department immediately.

Succession Planning Policy

It's a proactive plan and preparation for the recruitment and selection process. To replace the position "position important work" immediately, with predictions and estimates in advance caused by retirement or the uncontrolled situation. The personnel selected to prepare to be "Successors" will focus on the search for "Talented and good people" within the organization (Build) with knowledge, ability and appropriate qualifications before recruiting from outside. The company has established the process of creating a succession plan as follows:

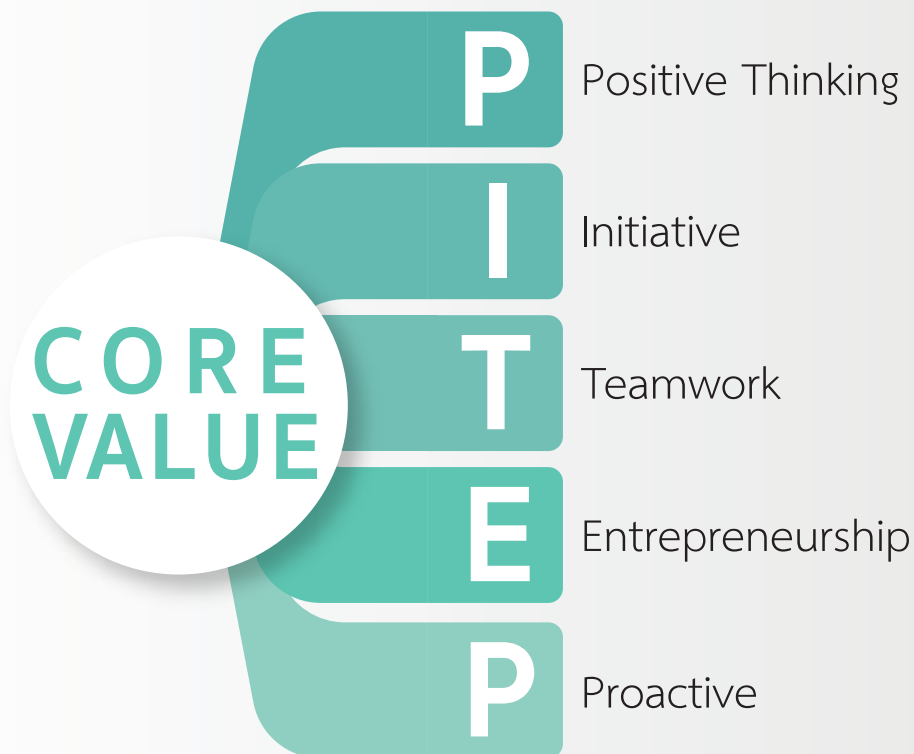


Moreover, the management team realized the importance of creating executives in order to inherit the highest management position with the following principles.

- 1 Set up the descriptions of Chief Executive Relevance and organization strategy including specifying qualifications, knowledge, skills required.
- 2 Select secondary level executives with potential and ability.
- 3 Analyze qualifications individually to find strengths for further development.
- 4 Set up individualized development plans to promote the development and capabilities.
- 5 Providing secondary level executives have a chance to be close, working with senior executives - department level, both at the line level and skipping work.
- 6 Define potential secondary level executives as successors.
- 7 Prepare high-level executives to be ready to accept work in other fields if necessary.
- 8 Prepare personnel with specific talents to have more comprehensive management capabilities. To receive senior management jobs.
- 9 Provide middle level management with more opportunities to manage work, both at work level and skipping work.
- 10 Organize training for high and middle level executives to have a sense of responsibility and loyalty to the organization to get more vision.
- 11 Arrange training for executives in each department to have more potential Practice planning in advance and promote systematic thinking for secondary level executives.
- 12 Provide systematic writing plan for secondary level executives.
- 13 Provide a replacement for executives at some level to increase the efficiency of business management.

Core Value

Sahacogen Group has defined the core value by using the definition of "PITEP" as a guideline. Which is considered as the key to creating a corporate culture and indicate the uniqueness and identity of Sahacogen employees.



In promoting and developing personnel under the common values "PITEP" The Company has a clear idea for employees to set working goals. Bringing the principles of teamwork to achievement of the goals. And able to measure results both at the team and individual.

In 2022, the company has encouraged employees to recognize and understand behaviors based on the common values "PITEP" through the Core Value Man 2022 activity, allowing employees to participate in activities. Express opinions that reflect their own Core Value and have a vote for Core Value Man from fellow employees. and a rating from a panel of representatives of the company. In which the results of Core Value Man 2022 will be announced for each area in the New Year's activities of each company.



SAHACOGEN

SAFETY COMMITMENT

Quality, Safety, Hygiene, and the Environment



Sahacogen sees the importance of safety, hygiene, and the working environment. The company is therefore dedicated to creating a safe working environment for staff, employees, and other personnel while preserving the natural environment and being responsible for the safety of surrounding communities. The company's security and hygiene management strictly adheres to the law and regulations, organizing a safe environment for work while encouraging employees to see the importance of safety. Communicate, foster, and support employees to enhance their skills with the awareness of quality, safety, harmless actions to the environment, as well as energy conservation. Protect stakeholders from danger, injuries, or illness from work. Reduce risks from the moderate level onwards that may negatively affect stakeholders and corporate assets.

Safety and Hygiene Practices: 2022

- ✓ Sahacogen Green Co, Ltd. has been certified with the highest level of safety, occupational health, and work environment management standards (Platinum)

from the Institute for the Promotion of Occupational Safety, Health, and Work Environment. (Public Organization) or NESDB. The project was established to encourage business establishments to manage safety, occupational health and working environment in a systematic and sustainable manner.

- ✓ The Safety, Health, and Environment working team has been appointed to be the representative of the employees.

The working team can suggest practices to promote working safety environment. The team shall monitor and evaluate the implementation of safety practice within the workplace. The committee is composed of the chosen employees with a term of 2 years.

- ✓ The company has regularly publicized information on safety, hygiene and the environment to employees and workers via a monthly magazine, intranet system, noticeboards, email and sound public address system.



✓ **Safety Talk** is an activity where employees share knowledge and inform about safety in various fields, both at work and in daily life in 2022, has conducted online activities through communication channels Microsoft Team to provide employees with access to information thoroughly.

✓ **Safety Day & Safety Week** An annual activity for safety and environmental preservation, equipping employees with knowledge and encouraging organizational participation for fostering safety.

✓ **Big Cleaning Day** and 5s Action Plan is stipulated to carry out once a week in order to instill the eco-conscious and safety mindset and behaviors in the workplace among employees themselves



✓ **Organize safety training** sessions such as First Aid & CPR, crane operations, and education on occupational hazard by medical personnel, Basic Fire Fighting Training, Safety in working with Chemicals, Emergency Response, Safety for working in the confined space, etc.

✓ **The company held activities to promote** safety awareness among employees and contractors. The examples are picture contest of risky work spots, promoting the engagement and contribution in setting a safety working guideline, alcohol check, training session before allowing the contractors to access the working site.

✓ **Providing health** checkups for employees based on their level of risk exposure, both before commencing work and during the annual checkup.

✓ **Organizing emergency drills such as fire drills** twice a year.

✓ **Chemical leak-age drills and waste leak** once a year

✓ **The company has installed receptors to monitor the environment quality** within the workplace and nearby communities. The results were sent to the related unit twice a year.



Safety Regulations

1. Orientation for operators and contractors

All operators and contractors must be informed of the Safety Orientation such as Work safety regulations, Operational risk, Risk control measures for each job, Security standards and choosing the right PPE equipment for work.

2. Safety preparation and safety action plans

All operators and contractors must be informed of the action plan. Risk control measures must be strictly including areas preparation to be safe and ready for operation.

3. Requesting permission to work

The work process begins with a request to work. Risk analysis, defining preventive control measures, Identification of the type of license (Work Permit), Inspection of the implementation of specified measures with a work permit include General work permit, Welding work permit and the work that produces sparks, Work permit in confined spaces, Work permit for high altitude or scaffolding, Work permit in relation to chemicals etc.

4. Inspecting work areas after work

Operators and shift supervisors must inspect the work area every day. If it is not in normal condition, it must be improved to be ready for use and safe for operators.




5. Accident Report

If an accident occurs or encounter unsafe conditions. Supervisors must stop working orders. Then report to senior management to make an investigation by the investigation committee.

6. Safety Performance Report

Meeting and monitoring of the operational area by the Safety Committee.

2022 Emergency Rehearsal Plan

Rehearsal Plan			
Fire and Explosion Level 1	2	0	0
Fire and Explosion Level 2	2	6	2
Fire and Explosion Level 3	0	0	0
Gas leak	2	0	0
Oil spill	2	3	0
Chemical spill	2	1	1
Radiation leak	0	0	0
Waste/Sewage Transport	2	1	1
Cauldron explodes	0	1	0
Transformer explosion	0	3	0
total (times)	12	15	4

Safety Occupational health and environment project

1. Zero Accident

The company sets Zero Accident Program to prevent accidents in the workplace and to reduce and minimize the statistics of accidents to zero by systematically planning and managing the quality, security, hygiene and environment practices.

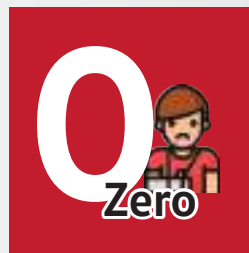
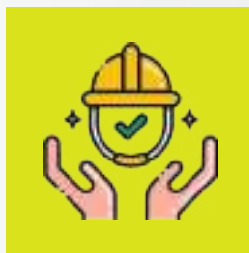
Lost Time Injury Frequency Reat (LTIFR) = 0

1 Fatal Injuries

2 Lost Time Accident

0 Time

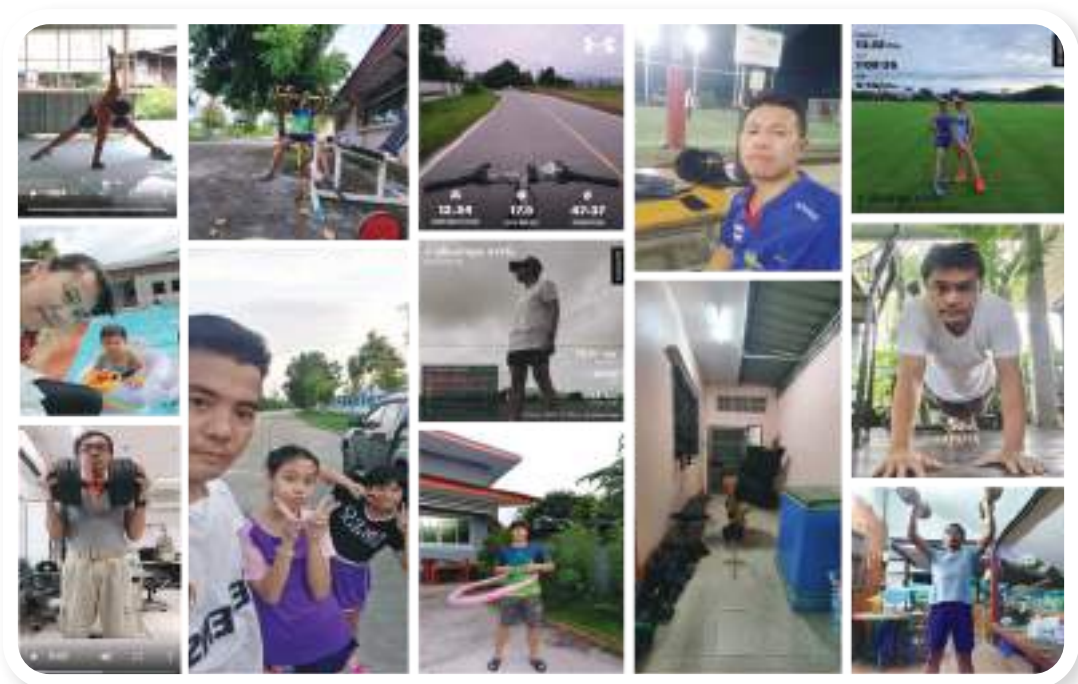
0 Time



Data of worker health promotion projects.

The Best Healthy Sahacogen project, far away from COVID-19, and good shape.

1.	Source/Reason for organizing the project	Organize employee health promotion activities to keep employees healthy and reduce the rate of illnesses related to exercise.		
2.	Objectives/goals	To keep employees healthy and reduce the rate of illnesses related to exercise.		
3.	Method of operation/activity	Due to the past COVID-19 outbreak situation, therefore organizing exercise activities in the form of virtual activities under the project "SGN Away from COVID and good shape", employees can choose their favorite sports such as running, walking, cycling, gym, weight training, etc., and submit exercise pictures. by recording exercise results by exercising 1 time, employees will receive 3 health points (Health Points) accumulated for exchanging essential items, gifts such as activity shirts, exercise equipment. healthy food to motivate employees to participate in the project along with promoting good health throughout the duration of the event.		
4.	Performance	descriptive	75.86% of employees participated in activities.	
		Numerical	Indicator :	More than 70% of employees participated in activities.
			yearly goals :	2022
			result :	75.86%
5.	Operation plan in 2023	Organize employee health promotion activities in the same way to continuously encourage employee participation in activities. To keep employees healthy and reduce the rate of illnesses related to exercise.		



Data of worker health promotion projects.

Project to promote the notification of dangerous spots in the work area.

1. Source/Reason for organizing the project	Safety committee occupational health and working environment has prepared a project Promote the notification of dangerous spots in the work area. in order to prevent and eliminate the point Dangerous in the work area as well as to encourage employees to be aware of Safe Improve the work area to be safe. Reduce the likelihood of accidents and the incidence and severity of accidents from work.		
2. Objectives/goals	2.1 To find the risk point or methods of work that may cause accidents, Occupational illness including social risk factors Covering and reaching all areas of work. or every operational activity. 2.2 for improvement opportunities in terms of safety, occupational health, environment, and energy conservation. 2.3 To promote participation and create awareness of safety, environment, and energy conservation.		
3. Method of operation/activity	for all employees and contractors to participate in finding risk points from unsafe conditions or improper operations or give suggestions on environmental performance and energy conservation.		
4. Performance	descriptive	staff send feedback for improvement.	
	Numerical	indicator :	Improve and fix 10 work area vulnerabilities.
		yearly goals : 10 Topics	2022
		result :	3
5. Operation plan in 2023	Continue		



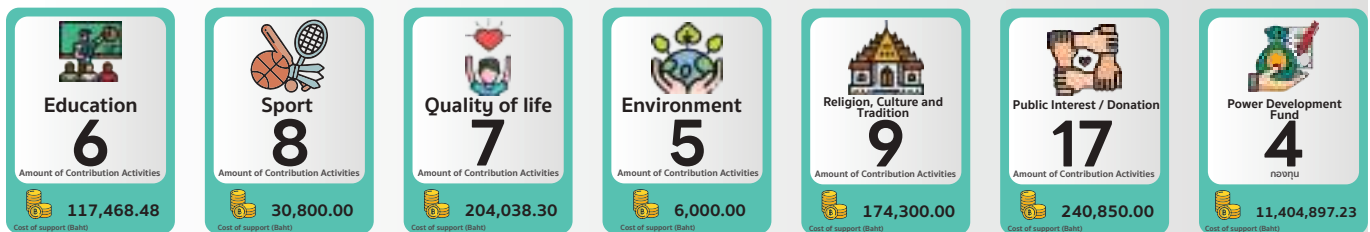
Safety training for workers in 2022

No.	Issues/Topic	Operator	Number of Participants
1	Orientation for new employees (safety, occupational health and working environment)	Sahacogen (Chonburi) Plc.	10
2	Basic first aid	Sahacogen Green Co., Ltd.	65
3	Primary fire extinguishing	Sahacogen (Chonburi) Plc., Sahacogen Green Co., Ltd.	63
4	Safety in working with chemicals	Saha Green Forest Co., Ltd.	30
5	Review of working in confined spaces	Sahacogen (Chonburi) Plc.	4
6	Review of crane work	Sahacogen Green Co., Ltd.	19
7	Electrical work safety for employees who work on electricity	Sahacogen Green Co., Ltd.	40
8	Security Administration	Sahacogen Green Co., Ltd.	2
9	Security Guard Supervisor	Saha Green Forest Co., Ltd.	4
10	Construction work safety	Sahacogen (Chonburi) Plc.	2
11	Safety when working at heights	Sahacogen Green Co., Ltd.	5
12	Safety when working at heights	Saha Green Forest Co., Ltd.	5
13	Vehicle driving safety	Sahacogen (Chonburi) Plc.	30
14	Log out Tag Out	Sahacogen Green Co., Ltd.	1
15	Safety Risk assessment #14	Sahacogen Green Co., Ltd.	1
16	Review boiler safety and best practices according to legal requirements	Sahacogen Green Co., Ltd.	7
17	Safety in driving a forklift safely and correctly	Saha Green Forest Co., Ltd.	18
18	Update the law on the analysis of hazardous chemicals, heat, light and noise	Saha Green Forest Co., Ltd.	1
19	Radiator Supervisor (36 hrs.)	Saha Green Forest Co., Ltd.	1
20	Safety regulations and practices	Saha Green Forest Co., Ltd.	28
21	Air Pollution Operator	Saha Green Forest Co., Ltd.	1
22	Measures to prevent and reduce environmental impacts	Saha Green Forest Co., Ltd.	28
23	Requirements for safety management system standards and risk management	Saha Green Forest Co., Ltd.	7
24	Radiator Safety and Good Practices in Annual Radiator Inspections	Saha Green Forest Co., Ltd.	3

PARTICIPATION AND SUSTAINABLE DEVELOPMENT

Sahacogen focuses on community and social development. With an emphasis on participation aiming to improve the quality of life of the people in the community under the traditional way of life Ready to operate a business based on responsibility and contributing to social sustainability.

The results of sharing benefits to the community 2022



Total 56
Amount of Contribution Activities

12,178,354.01
Cost of support (Baht)

Education



Education is the foundation for development. Sahacogen has been supporting kids in communities by spending budgets on many projects. Such as Drawing&Painting competition, Children Day, Sahacogen Scholarship Project, Calendar donation for the blinds Project, etc.

In 2022, Sahacogen supported 6 educational projects or community activities, with a total budget worth more than **117,468.48 Baht**.



Sahacogen donated an old desk calendar as a learning material for the visually impaired.

Sahacogen (Chonburi) PCL, donates 220 old desk calendars gathered by Sahacogen employees. as learning material for the visually impaired. At The Pattaya Redemptorist School for the Blind. Na Kluea, Bang Lamung, Chonburi to be used as a braille media for the visually impaired. This activity has been carried out continuously for the 10th year.

Sport



To foster a positive relationship between Sahacogen group and the community, government offices, local authorities, customers, and partners while supporting the effective use of time, Sahacogen organized sports activities every month such as Charity Walk Project, Support for organizing community sports and government agencies and donate sports equipment to schools and support anti-drug sport competitions for communities around the power plant continuously from 2012-Present.

In 2022, Sahacogen supported 3 sport activities, which many agencies had participated in. The total contributions were more than **30,800 Baht**.



Enhancing Quality of Life



It has been 12 years, Sahacogen and Affiliates supports the health care activities with collaboration from the Provincial Public Health Offices. We offer free of charge health check-up services on the mobile buses to the villages. as well as allocating budgets to support the quality-of-life Projects and activities such as Project "Sahacogen Help" Donate drinking water to help communities around the power plant in the Covid situation and flood, Youth Potential Development Project Village Public Health Volunteers, Occupational skills training project for the community, School Lunch Project, etc.

In 2022, Sahacogen supports 7 quality of life development projects totaling **204,038.30 baht**.



Youth Potential Development Project Village Public Health Volunteers

Organized with the objective to promote learning about community health. and instilling awareness among youths in health care and volunteering to help society in Sahacogen Power Plant (Chonburi). Training volunteer youth members to help in the community about 50 people a year. Currently, there are 12 batches of project members totaling 300 people.



Power Development Fund



The Power Development Fund has been established by the resolution of the Energy Regulatory Commission Committee, Ministry of Energy. This fund is to develop the quality of life and localities around power plants. Sahacogen & Affiliates gives contribution to the Power Development Fund based on the power capacity and type of power generation. In addition, Sahacogen Green has set up a development fund for communities around the biomass procurement center in Lamphun, which is the source of fuel generating power for the biomass power plant. This will help develop communities and quality of life.

In 2022, Sahacogen and affiliates donate money for local communities amounting to **11,464,897.23 Baht**. As follows:

Power Development Fund	total
Chonburi Power Development Fund 1	10,067,405.07
Power Development Fund, Saha Green Forest Company Limited	575,091.45
Power Development Fund, Sahacogen Green Company Limited	662,400.71
Biomass Buying and Processing Center Development Fund (Lamphun), Sahacogen Green Company Limited	160,000.00
Total	11,464,897.23

The example of projects community shop, Donation of medical equipment for hospitals to promote health in the community, Voice improvement project along the village line Projects. Project to support exercise equipment in the community, etc. The Sahacogen employees also participate in meetings to suggest ideas in running projects.

Environmental



In 2022, Sahacogen supported 2 Environmental activities, for increase engagement with communities and local government agencies. The total contributions were more than 6,000 Baht. Such as Planting trees back to the world, Youth Tree Planting

The total contributions were more than **6,000 Baht**



Religion, Culture, and Local Traditions



Religion, culture, and local traditions heritage fundamentally helps in strengthening the relationship among people in communities. To preserve and maintain various specific cultures as a traditional heritage for the next generation, Sahacogen & Affiliates promotes activities in communities nearby the power plants in collaboration with all sectors. Throughout the year 2022, such as the local festival, Songkran Festival, Tradition of harvesting rice in Chonburi province area. Tradition of pouring water on Phra That Poi Luang Festival, Phi Khun Nam Worship Tradition Lamphun Province area. Religious ceremony, Nop Phra Song Tradition Kamphaeng Phet Province area., etc.

In 2022, Sahacogen Group supports 9 religious, cultural, and local activities, totaling **174,300** baht.



Social Benefit and Charitable Activities



In 2022, Sahacogen charity to create participation and help to support and related agencies . Through various activities such as Community Development Volunteer Projects, Electricity project for community water supply, Sahacogen improves roads, water supply and lighting systems, community development community drinking water project , etc.

In 2022, supports 17 l activities, totaling **2240,850** baht.



Community drinking water project.

Sahacogen provides clean drinking water to government agencies and communities in the surrounding area. To create participation and support activities of the organization and community. And helps families, flood victims, the needy, or agencies lacking funds to provide drinking water. In 2022, the company has delivered drinking water through the community drinking water project of 13,000 bottles.

CSR IN PROCESS

Business Operations of Sahacogen Group Focus on creating participation and social development especially the communities in the area around the power plant in addition to operating a business that is environmentally friendly. The company also places importance on creating value and developing communities to grow together with building energy security by considering the reduction of negative impacts and benefiting communities in every step of business operations. Therefore, social responsibility projects have been developed that are consistent and relevant throughout the chain of business processes. To develop the potential of the community and solve social problems sustainably in all dimensions as follows:

Biomass ash value-added project turns waste into useful items.

“Biomass Ashes” arise from the power generating process of biomass power plant. Biomass ashes are alkaline conditions and contain essential nutrients for plants, suitable for agriculture as soil improvement materials. This interests many people in using biomass ashes to increase their own production output such as groups of bamboo-growing, rice-farming, longan-planting, and planting-soil development. Moreover, these ashes are suitable for constructing material components such as light-weight bricks. In association with educational institutes in local areas, the company develops the biomass ashes usage, creates employment to produce those bricks, which has been conducting since 2013 to the present.

Potential Utilisation of Biomass Ashes

The company bring the research to develop the knowledge about utilization of biomass ash. For farmers and interested parties in the form of community enterprise to site visit and training such as Production of brick blocks from biomass ash, Soil development and improvement from biomass ash, The public-private coalition project teaching how to plant home-grown vegetables etc.

Operating Result of Biomass Ashes Utilisation in 2020-2022

Year	Numbers	Volume (Tons)	Value (Baht)
2020	24	6,481	630,032
2021	30	7,722	986,296
2022	19	6,131	613,129

Performance of the project to increase the value of biomass ash, turning waste into use for the year 2022.

01 Agricultural utilization

The company supports biomass ash to farmers and those who are interested. Used in group activities to improve agricultural land and as a mixture of soil amendments. through community enterprise groups and agricultural agencies such as Ban Sakayom Organic Fertilizer Group, Lamphun Province, Khok Nong Na Learning Center, Ban Nong Sai New Theory Agriculture, Lamphun Province, Organic Fertilizer Group , Lamphun Province, etc.

<p>Create careers and increase income for more than</p> <p>50 households</p> <p>in the group, 19 farmers</p> <p>5 community enterprise groups.</p>	<p>Reduce the amount of waste and increase the value of biomass ash, totaling more than</p> <p>6,000 tons</p>
<p>Reduce the cost of buying chemical fertilizers. representing a total value more than</p> <p>100,000 baht.</p>	<p>Create added value and increase income for farmers totaling more than</p> <p>600,000 bath</p>

02 Utilization of research studies

The company supports biomass ash to educational institutions and various agencies. for use in research and dissemination of knowledge on the use of biomass ash to develop and create innovations. And disseminate knowledge to society, such as Chiang Mai University Mae Jo University Naresuan University Rajamangala University of Technology Lanna, Lampang, etc.

Research of the Institute of Biomass Ash Utilization (2013 -2022)



Value-Added Biomass Project Reduce burning, reduce smog problems.

Sahacogen & Affiliates have intent to develop integrated alternative energy business using biomass for power generation. This fosters the participation and benefits to society with income distribution towards communities by purchasing agro residues from them. With the awareness of social responsibility and sustainability, this also helps to reduce air pollution problem occurring from crop residue burning without control and greenhouse gas emissions.

The procurement and processing biomass center has been established in 2010 to purchase biomass and agro residues to add biomass value and achieve the distributive policy for community benefits.

Reduce environmental problems increase economic value Promote the quality of life of the community.



“Reduce burning, reduce smog problems.”



The value-added biomass project is generating financial, social, and environmental impact. The project promotes revenue distribution to local communities, creating occupation, decrease the burning activities, reducing smog and CO₂ emission.

In 2022, the company bought the residual parts of the agricultural products 1,470,693 tons in total. With a total value of 313,727,426.31 Thb. From over 2,000 small-scale farmers.

Biomass type	Weight (ton)	Value (Baht)
Chopped wood	762,974	114,551,934.40
Wood scraps /Bark	426,454	46,992,382.54
Chaff	21,428	30,273,956.30
Corn cobs	209,142	13,884,587.00
Other biomass	50,695	108,024,566.07
Total	1,470,693	313,727,426.31

The amount of the purchase of biomass can help reduce the burning of agricultural waste without control in the radius of the biomass's purchase around the power plant at the equivalent rate, which is consistent with the government's policy on a campaign to stop burning agricultural land. The company encourages farmers to sell agricultural waste to the power plant to use as biomass fuel instead of burning without control.

In 2022 reduce the burning of corn cob about 73,608rai and the equivalent to

reduce the burning of Sugarcane leaf, about 15,382 rai.

	2020		2021		2022	
Biomass types	Quantity (ton)	Reduced Burning Area (Rai)	Quantity (ton)	Reduced Burning Area (Rai)	Quantity (ton)	Reduced Burning Area (Rai)
Corn cob	31,138	88,966	25,763	73,608	209,142	597,548
Cane leaves	16,943	8,471.58	30,764	15,382	50,695	25,347

Note: Statistics on the utilization of alternative biomass, Sahacogen

1. Corn planting area 1 rai can get corncobs and Corn husks about 350 kg or 0.35 tons per rai
2. Sugarcane planting area 1 rai yields about 2 tons/rai of sugarcane leaves.

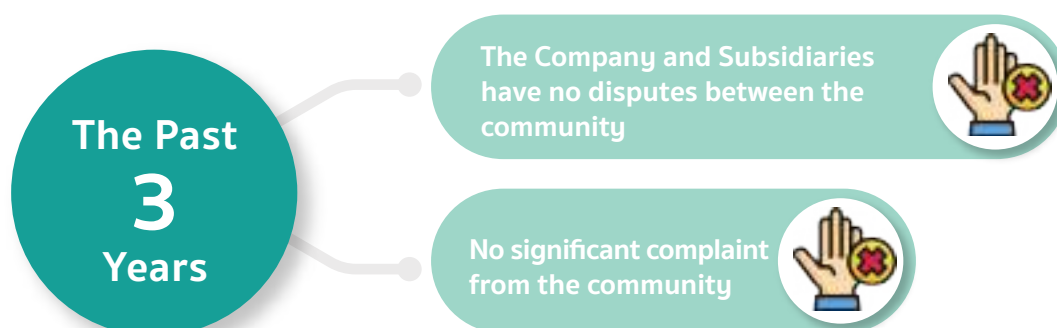


Community and social responsibility

The company places importance on social responsibility. around the project area therefore hired the company Eastern Thai Consulting 1992 Co., Ltd. is authorized by the Department of Industrial Works. Registered as a private analytical laboratory. Conducted a public opinion survey around the project area, the satisfaction survey results were in “good” criteria.

This year, the development of the Sahacogen combined cycle power plant project. The 4th expansion phase (SPP Replacement) has studied the basic technical details together with the study of economic, social conditions, customs and way of life of the community. To create a community engagement roadmap and key information for project communications. Organizing activities to promote understanding and public hearings on various matters under the relevant regulations. There is communication to understand and educate about operations and company policy. Also listen to suggestions to develop and improve various activities until the project is completed.

In addition, the Company conducted a satisfaction survey of surrounding communities with regard to the Company's CSR activities. and its subsidiaries. The results of the satisfaction survey were in the “good” criterion.



Poll results of people's opinions around the power plant area

• Factory social responsibility personnel

According to the summary of the Cabinet resolution on April 28, 2015, the Ministry of Industry has a policy to support and create awareness for factory operators to have social responsibility and to enable the factory operation to co-exist with the community sustainably. And to prepare personnel specialized in social responsibility to have knowledge and skills, which will raise the standard for factory operators. To be recognized in the international market competition and to be a leader in the ASEAN community.

The Company recognizes and places importance on the development of social responsibility personnel according to the said

Registration of personnel on social responsibility	Number of registered personnel
Specialized Personnel in Community Participation and Development (Type 1)	4
Specialized Personnel in Corporate Social Responsibility Management (Type 2)	3
Senior Specialized Personnel in Social Responsibility Management (Type 3)	1



ENVIRONMENTAL MANAGEMENT

Environmental Management

Sahacogen & Affiliates have defined environmental objectives committed to continually develop the environmental management system to ensure the effectiveness and meet the international standard, as well as running business with environmental and social responsibility.

Safety Commitment

Quality, Safety, Hygiene, and the Environment (QSHEE)

Sahacogen sees the importance of safety, hygiene, and the working environment. The company is therefore dedicated to creating a safe working environment for staff, employees, and other personnel while preserving the natural environment and being responsible for the safety of surrounding communities. The company's security and hygiene management strictly adhere to the law and regulations, organizing a safe environment for work while encouraging employees to see the importance of safety.

Quality, Safety, Hygiene, and the Environment Policy

1. Communicate, foster, and support employees to enhance their skills with the awareness of quality, safety, harmless actions to the environment, as well as energy conservation.
2. Monitor and oversee the QSHEE practices, energy conservation and Greenhouse Gas Reduction Management in compliance with laws and related regulations.
3. Support appropriate and sufficient resources to meet the operational objectives of QSHEE policy, as well as promote the reasonably effective energy and resource consumption on a regular basis.
4. Protect stakeholders from danger, injuries, or illness from work. Reduce risks from the moderate level onwards that may negatively affect stakeholders and corporate assets.
5. Improve and develop the QSHEE system consistently.

Adhering to Environmental Regulations and Laws

Sahacogen ensures that its business practices adhere to all related laws and regulations. Especially, Sahacogen operates its power plants in compliance with the environmental measures as specified in the Environmental Impact Assessment (EIA) for the power plant of Sahacogen (Chonburi) PCL. and the Initial Environment Examination (IEE) for the biomass power plants of Sahacogen Green and Sahagreen Forest. This requires the environmental quality measurements and reports in every six months. Sahacogen and affiliates have set its business operation policy adhering to environmental-friendly business practices (Green Business Practices), as well as related laws and regulations.

Environmental Management Related to the Power Generation Process

Water Management

Sahacogen places the importance of the effective water management throughout all production processes, from the source of water for production input until the preservation of the environment after production process. The company therefore strictly adheres to regulations of water management and considers the impacts of water consumption to the nearby communities. On the other hand, Sahacogen also plans to prevent the risk of water shortage which may interrupt the power plant operations. The water management practices of Sahacogen are as follows:

The power plant of Sahacogen (Chonburi) PCL. and the biomass power plant of Sahacogen Green Co., Ltd.

are in the industrial area, using raw water from sources designated for industrial use without affecting the water supply of the nearby communities. Wastewater from the production process is sent to the neutralization basis for quality improvement before recycling to water the green area of power plant. While the remaining water is discharged to the wastewater treatment facilities of Saha Group Industrial Park under the controlled quality which the discharged temperature is not greater than 40 Degree Celsius according to the regulations.

Moreover, Sahacogen also implemented the RO Rejected Water Recycle Project to recycle the rejected water for reusing in production process. This helps to save water supply and reduce the wastewater's expenses.




RO Rejected Water Recycle in 2020-2022

Key Performance	2020	2021	2022
The reduction of water consumption in production process (m ³ /year)	123,819.0	113,151.3	113,556.8




The biomass power plant of Sahagreen Forest Co., Ltd.

created a reservoir on a 40 Rai plot of land, capable of holding approximately 370,000 m³ of water. This volume is sufficient for the entire-year consumption for electricity generation. The reservoir consists of an incoming pond for sediment and a main pond for use. This ensures that the water has low levels of suspension and a stable quality, reducing the chemicals usage and the volume of wastewater from the production process. Sahagreen Forest also planted trees around the reservoir as a green belt for protecting the wind, lowering the amount of water loss and supporting the use of wastewater without affecting the water used for agricultural and consumption purposes of the surrounding communities. Wastewater from production is released into the sewage water holding pond for keeping temperature and quality according to the regulations before recycling to water the green area of power plant without discharging to external area or “Zero Discharge”.

The company also assesses the water quality and temperature strictly according to the regulations. This ensures that the water quality meets the standards, protecting and minimizing environmental impacts. Saha green also consistently examines the ecosystem around its power plant.

Company Name	Water Management	Water used for Production Year (m ³)		
		2020	2021	2022
	<ul style="list-style-type: none"> Waste water treatment facilities of the industrial park Green Area RO Rejected Water Recycle 	1,797,901	1,641,225	1,791,226
	<ul style="list-style-type: none"> Waste water treatment facilities of the industrial park Green Area 	328,503	407,212	311,987
	<ul style="list-style-type: none"> Zero Discharge Green Area 	342,444	337,557	400,671

Water consumption of Sahacogen Group in 2022

Company	water consumption (m ³)	raw water content	amount of effluent	Percentage of effluent volume compared to raw water volume	Amount of reused water (m ³)
 SAHACOGEN CHONBURI PUBLIC COMPANY LIMITED	3,014.00	1,824,400.36	853,382.03	0.47	113,556.80
 SAHACOGEN GREEN CO., LTD.	65.00	311,616.00	54,813.00	0.18	38,044.00
 SAHAGREEN FOREST CO., LTD.	1,363.00	400,671.00	78,419.00	0.20	15,763.00



Air Emission Management

Strictly implement air pollution management measures as follows:

- The emission monitoring system is installed at the stacks of the power plant for measuring the amount of TSP, SO₂, and NO₂ emitted to the atmosphere. The results indicated that the amounts of those pollutants are within the legal limits.
- Installed the emission monitoring system in the communities' area nearby the power plant, composing environmental monitoring reports in every 6 months for the related sectors and public to ensure that the air qualities are according to the standards and regulations.
- The Electrostatic Precipitators (ESP) with 99.5% of particulate-collecting efficiency was installed at the biomass power plant of Sahacogen Green and Sahagreen Forest to prevent the dust pollutions. This makes the quality of the air emitted from the power plant's stacks be according to the standards and regulations, as well as safety and environmental friendly.

Air Quality Measuring at Power Plants of Sahacogen and Affiliates in 2020-2022



Power Plants	Average Results (Min-Max)			Legal Standards
	2020	2021	2022	
				
 Total Suspended Particulate (TSP)	1.38 - 5.60	1.67 - 8.3	1.58 - 6.05	≤ 60
 Sulfur Dioxide (SO ₂)	0.2 - 0.97	0.26 - 1.6	0.13 - 0.87	≤ 18
 Nitrogen Oxide (NO ₂)	18.84 - 79.72	13.17 - 86.3	18.75 - 97.74	≤ 110
โรงไฟฟ้าชีวมวล				
				
 Total Suspended Particulate (TSP)	41.5 - 89.8	9.8 - 18	2.5 - 13.6	≤ 120
 Sulfur Dioxide (SO ₂)	<1.3	<1.3	<1.3	≤ 60
 Nitrogen Oxide (NO ₂)	116.5 - 139.6	63.5 - 92.5	63.8 - 123.3	≤ 200
Particulate matter (PM 2.5) • Nong Pla Kho Temple • San Luang Temple			9.6 - 19.6 9.5 - 19.7	50 mg/m3 50 mg/m3
				
 Total Suspended Particulate (TSP)	7.2 - 7.6	2.3 - 3.7	3.3 - 8.7	≤ 120
 Sulfur Dioxide (SO ₂)	<1.3	<1.3	<1.3	≤ 60
 Nitrogen Oxide (NO ₂)	23.4 - 56.1	12.3 - 35.5	60.6 - 6.09	≤ 200
Particulate matter (PM 2.5) • Baan Huay Nam Sai School • Ban Khui Pom Health Promoting Hospital			4.2 - 28.3 4.6 - 23.1	50 mg/m3 50 mg/m3



Noise Pollution Management

- Appropriate design and install the machines and equipment that may cause the noise pollution including e planning inspection and preventive maintenance. Plant bushy trees surrounding the power plant as green belt for buffering sound and wind that help to control noise level within the standards and regulations.
- Designate 3 check-points for measuring the noise level; the sources of noise in the power plant, the control room of the power plant and the boundaries of the power plant. The noises are controlled within the standards and regulations, with routine measuring the noise level in every 3 months.
- Provide ear muffs for employees to wear when working in areas with noise level exceeding 80 Decibels. Employees are required to wear the ear muffs when working in that areas which warning signs were installed to remind them of this regulation.

The results of noise measurement in power plants of Sahacogen & Affiliates in 2020 - 2022

Power Plants	Average Results (Min-Max)			Legal Standards
	2020	2021	2022	
				
The results of noise measurement in general (L_{eq} 24 hr)				
Power plant's fence line on the side	57.6-65.1	60.9-69.3	59.8-63.0	70 dBA
Ban Rai Nueng	55.1-64.9	54.8-62.8	56.2-58.5	70 dBA
The results of noise measurement in workplace - Personal noise dosimeter (L_{eq} 12 hr)	76.5-81.2	77.2-82.0	63.2-80.3	83 dBA
The results of noise measurement in general (L_{eq} 24 hr)				
Nong Pla Kho Temple	49.9-63.0	47.2-52.9	46.6-60.7	70 dBA
San Luang Temple	48.3-63.3	47.6-57.5	45.8-63.3	70 dBA
project fence area			62.7-64.7	70 dBA
The results of noise measurement in workplace - Personal noise dosimeter (Leq 12 hr)	79.5-86.3	77.4-81.2	79.3-80.4	83 dBA
				
The results of noise measurement in general (L_{eq} 24 hr)				
Baan Huay Nam Sai School	48.0 -52.5	48.7 - 55.8	47.6-56.7	70 dBA
Si Chum Phorn Wachirawat Temple	49.6 - 60.4	50.4 - 51.8	65.0-67.5	70 dBA
project fence area			51.3-58.5	70 dBA
The results of noise measurement in workplace - Personal noise dosimeter (Leq 12 hr)	77.7 - 82.4	77.7 - 81.9	78.6-80.3	83 dBA

Waste Management

Sahacogen is dedicated to manage waste according to the legal standards and the policies of each power plant. Wastes are divided into two categories: hazardous waste and non-hazardous waste. The company's waste management practices are as follows:

1. Hazardous wastes are those that can be harmful to the environment, such as transformer oil, lubricants and chemical containers. These wastes are disposed according to the approved procedures to the agencies authorized by the Department of Industrial Works.
2. Non-hazardous wastes are general wastes such as leftovers, wood, paper, wires, plastic bags, and construction materials. These wastes are classified before disposing to bury according to the standards and regulations or appropriately recycling. The waste bank project was established to purchase recyclable wastes from employees in order to foster employees to utilize resources effectively.

Moreover, biomass ashes from combustion process of the biomass power plant of Sahacogen Green and Sahagreen Forest is considered a non-hazardous waste. It has been developed and utilized for agricultural benefits and brick production. These resources are distributed to communities as part of the company's CSR campaign, adding value to non-hazardous wastes for optimal utilization

The amount of waste and waste from business processes.

Company	list	2020	2021	2022
	 Amount of waste and non-hazardous waste (tons)	184.6	163.385	168.72
	 Amount of waste and hazardous waste (tons)	25.09	28.54	28.74
	 Amount of waste and non-hazardous waste type biomass ash (tons)	11,780.69	9,619.07	12,521.71
	 Amount of waste and hazardous waste (tons)	2.85	5.49	5.22
	 Amount of waste and non-hazardous waste type biomass ash (tons)	5,202.14	6,805.38	6,367.89
	 Amount of waste and hazardous waste (tons)	0.85	1.48	2.52


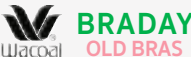

Waste management (garbage) project in 2022

- Sahacogen Green Co., Ltd. join the Lamphun Clean City for Sustainability Project 2022 for the 2nd consecutive year. To promote and develop business establishments towards a green industry. Propelling the Wet Waste Free Province Project, Lamphun Clean City Project without Foam (Foam), And Lamphun People Ruam Jai Project Pay attention to the environment, reduce, accept, reduce, reduce the use of plastic bags, handles and plastic straws. Including the extension of solid waste management in Lamphun Province to have concrete and continuous operations leading to further sustainability.
- Sahacogen Green Co., Ltd. join a discussion on the topic of agricultural waste management to reduce burning problems in open areas. together with network partners in both public and private sectors Campaign to reduce local burning in the northern region to raise awareness of the impact of the haze crisis and transfer knowledge on how to manage the area to reduce burning problems sustainably.
- Saha Green Forest Co., Ltd. participates in household hazardous waste management activities. In the community area around the biomass power plant, Kamphaeng Phet Province, to transfer knowledge and encourage communities to learn about proper waste separation and management.



Waste Bank for Environment Project

Waste Bank for Environment Project has been set up to motivate and enhance the eco-conscious awareness among employees

<p>Old desk calendar to be a material for the visually impaired</p>  <p>1 School</p> <p>225 pieces</p>	<p>Wacoal Braday" Old Bras to Deliver for proper disposal.</p>  <p>175 pieces</p>	<p>Aluminum donation for prosthetic legs</p>  <p>3,000 pieces</p>
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2022 Performance



Performance table of the Environmental Waste Bank Project of 2022 Summarize the amount of waste and the amount of greenhouse gases that can be reduced from waste sorting for recycling.

Type	Volume (Kilograms)	CO ₂ Reduction**(kgCO ₂ e)
Paper	510	251.94
Plastic	51	44.32
Metal	11,350	12,927.65
Glass	314	233.62
Aluminum	6	20.26
Total	12,231	13,477.78

**Low Emission Support Scheme: LESS (<http://ghgreduction.tgo.or.th/>)

CLIMATE CHANGE



Climate Change Implementation

Human beings activities have brought about global warming and climate change issues, especially GHG emission by fossil fuel consumption in energy sector, transportation sector, and industrial sector. Consequently, all sectors across the world have collaborated urgently tackling GHG emission. Thailand Priminister, General Prayuth Chan-ocha responses the resolution in COP 26 and lead Thailand to achieve Carbon Neutrality in 2050 and set goal to Net Zero within 2065.

The company realizes and participates tackling climate change issue including promote GHG management in company policy that beneficial to the organization, sociality, and Thailand environment. GHG management committee is assigned to implement the target through the company intention by awareness of environment upon the sense of social responsibility as **“good environment beneficial to sociality.”**

Year 2022 is the first year to launch the assessment of Carbon Footprint Organization or CFO. The assessment is to comprehend information of GHG emission reduction emitted by recent business activities and lead to determine GHG management guideline and set goal appropriately to reduce GHG emission from company activites in the future. With Advance Energy Plus Co., Ltd. as a consultant to prepare a list of the company's greenhouse gas emissions and absorption, and such reports have been verified by external assessors, namely: Bureau Veritas Certification (Thailand) represents an external auditor to verify the GHG emission. Carbon Footprint Organization is certified by Thailand Greenhouse Gas Management Organization (TGO), the CFO scope indicates sources of GHG emission by company activities that include emission in scope 1-3 of Sahacogen (Chonburi) PCL and affiliates.

Moreover, the company has determined management policy in climate action as a guideline for business sustainability growth as follows.

1. Assign GHG management committee to carry out as following tasks.
 - 1.1 To assess the risk of climate change that might affect to production and business execution.
 - 1.2 To propose integration plan to track direct and indirect GHG emission.
 - 1.3 To propose the action plan to respond climate change and plan to minimize the impact from any risk.
 - 1.4 To propose GHG emission reduction measure
2. Target setting of GHG emission in business activities.
3. Communicate to all employees and stakeholders regarding the awareness and participation in the reduction measure of GHG emission to handle climate change issue.



GHG management plan for low city carbon

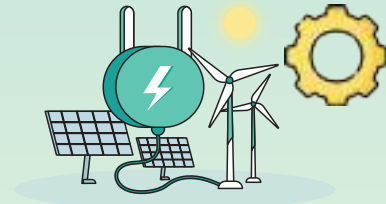
LOW CITY CARBON



01

To improve energy efficiency

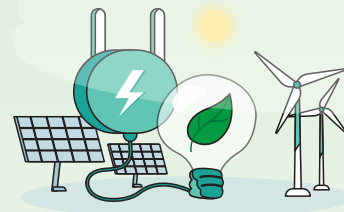
Utilizing the innovative technology combining with appropriate energy management



02

To apply eco-friendly clean energy

Developing clean energy and increasing proportion of biomass and renewable energy consumption



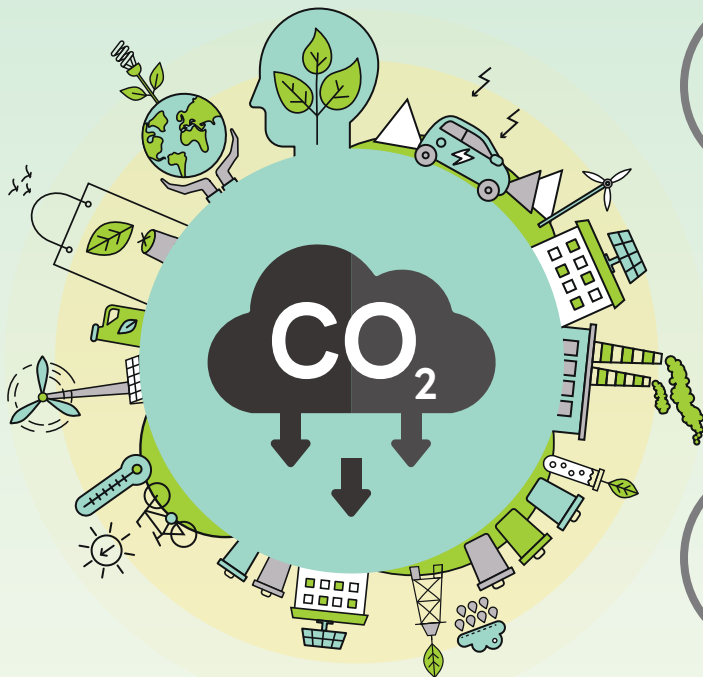
03

Carbon offset

- Energy Innovative: participate in renewable energy and GHG reduction project. For instance, International Renewable Energy Certificate (IREC), Joint Crediting Mechanism, and Clean Development Mechanism (CDM)

- Joint Crediting Mechanism (JCM)

- Arrange in house activity under the topic of reducing GHG in organization. To participate in neighboring community, government sector, and partners to enlarge green area for carbon sink by replanting






The amount of greenhouse gas emissions of Sahacogen (Chonburi) Plc. and its subsidiaries in 2022


Scope of work	GHG Emission (tonCO ₂ e)
Direct greenhouse gas emissions (Scope 1)	533,254.00
Indirect greenhouse gas emissions (Scope 2)	463.00
Other indirect greenhouse gas emissions (Scope 3)	140,022.00
Direct and indirect greenhouse gas emissions (Scope 1,2,3)	673,739.00

* The data of 2022 has already been verified by Bureau Veritas (Thailand) Co., Ltd., and It's in the process of applying for Carbon Footprint Organization (CFO) certification from Thailand Greenhouse Gas Management Organization. (Public Organization).

The amount of greenhouse gas emissions of Sahacogen (Chonburi) Plc. and its subsidiaries in 2022 (by company)

Scope of work				Total
Scope 1	525,399.38	4,692.99	3,161.05	533,254.00
Scope 2	15.60	425.47	21.90	463.00
Scope 3	139,785.15	174.15	62.26	140,022.00
Total	665,200.13	5,292.61	3,245.21	673,739.00

GHG emissions per unit (Carbon intensity)

Scope of work				Total
Direct and Indirect GHG emission by electricity generation (Equivalent tons of carbon dioxide)	665,200.13	5,292.61	3,245.21	673,739.00
Electricity Capacity (Megawatt-hour)	1,045,925.00	75,326.00	64,146.00	1,185,397.00
steam delivered to industrial customers (MMBTU)	838,345.00	250,524.00	0	1,371,528.11
GHG emission ratio in power sector / (TonCO ₂ /MWh)	0.515	0.036	0.051	0.448

The amount of direct and indirect greenhouse gas emissions of the Sahacogen Group in 2022 totaled 673,739 tons of carbon dioxide equivalent. The proportion of greenhouse gas emissions per power plant business unit is 0.448 tons of carbon dioxide equivalent per megawatt-hour. which is lower than the average of direct and indirect greenhouse gas emissions of the electricity industry in Thailand which is equivalent to 0.5986* tons of carbon dioxide equivalent per megawatt-hour/ (TonCO₂/MWh)

* Source: Thai National LCI Database, TII-METEC-NSTDA (with TGO electriciti 2016-2018)

GHG emission reduction project



International Renewable Energy Certificate (I-REC)

- The company has registered International Renewable Energy Certificate (I-REC) purposing to transfer IREC to the organization who intend to consume electricity from renewable energy sources in company activities. The objective is to minimize global warming from GHG emission.
- In 2022, Shahcogen Group delivered Renewable Energy Certificate which equivalent 73,608 tons CO₂eq that is one of responsibilities to reduce GHG emission.

RE Generator	Power generation capacity (MW)	Delivered Volume (RECs)	GHG reduction (tonCO ₂ eq)
Biomass Power Plant Sahacogen Green Co.,Ltd	66,100	66,000	39,468
Biomass Power Plant Sahagreen Forest Co.,Ltd	57,000	25,091	15,004
Biomass Power Plant Partner	45,000	32,000	19,136
Total	168,100	123,091	73,608



Clean Development Mechanism Project (CDM) by Sahagreen Forest Biomass Power Plant

- Reduce greenhouse gas emissions by 27,000 tons of carbon dioxide equivalents per year
- Cumulative reduction in greenhouse gas emissions from 2014-2022
- **Total 248,600 tons of carbon dioxide equivalent per year**



Smart Grid Project in Saha Group Industrial Park, Sriracha was funded by Japanese Government under Joint Crediting Mechanism (JCM)

- Renewable Energy Project in Saha Group Industrial Park, Sriracha has launched 10 Solar Rooftop projects providing electricity generation capacity over 15 MW that equivalent clean energy generation capacity up to 20% consuming in Industrial Park. That is equivalent CO₂ reduction over 6,000 tons in a year.
- Floating Solar at Saha Group Industrial Park, Sriracha is the first project launched in Thailand Industrial Park. This innovation would be a prototype to apply more utilization in the reservoir and become a standard including enhance quality of life in Thai Industrial Park. The power generation capacity of Floating Solar is 478.8 KW that could generate electricity 649,367 unit/year that equivalent CO₂ reduction 367 tons in a year.



Waste Bank for Environment Year 2022

- Project achievement can reduce total GHG emission 13.48 tons CO₂eq.



Energy Saving

Sahacogen focuses on the energy saving attempt. The policy was set to create awareness for energy saving among management and employees. The energy management committee is set to implement and monitor the activities such as doing reports of energy consumption, excursion trips, information announcement and activities with employees. The examples of activities are energy day, picture contest, energy saving motto selection and reduction of consumption campaign, etc.

In 2022, The company conducts activities and improves energy efficiency in all operational areas through the participation of personnel at all levels. It can significantly reduce operating costs as follows:

Sahacogen (Chonburi) Plc.

Energy reduction project (actual operation in 2022)	Project detail		Amount of electricity energy reduction (kWh / year)	Amount of heat energy reduced. (MJ / year)	Cost reduction (Baht / year)	Investment Amount (Baht)	payback period (year)
1. Steam trap maintenance measures in the steam distribution system.	Replace a malfunctioning Steam Trap device.	Target	-	3,408,519.00	520,146.00	272,160.00	0.52
		Result	-	3,408,519.00	925,518.00	256,534.00	0.28
2. Steam trap maintenance measures within the power plant.	Replace a malfunctioning Steam Trap device.	Target	-	919,417.00	209,622.00	62,240.00	0.30
		Result	-	919,417.00	220,206.00	52,440.00	0.24
3. Cooling Tower System Efficiency Improvement Measure # 1	Improved Cooling Tower Performance System	Target	Improve Efficiency 20%	-	1,705,102.00	23,000,000.00	13.49
		Result	Improve Efficiency 20%	-	4,367,410.00	23,000,000.00	5.27

Sahacogen Green Co., Ltd.

Project Name : Reduction of Heat Loss from Water in Desuperheat Process Steam Project.

Project description : Modify the control valve control method in Desuperheat to Auto mode according to the amount of steam consumption.

Details	Megajoule/Year	Bath/Year
Energy consumption level before project implementation	7,044,273	962,587
Level of energy consumption after project implementation	4,053,128	553,852
Energy saving effect	2,991,145	408,734
Investment	0	Bath
Payback period	0	Year
Energy conservation target	0.19%	percentage reduction of the amount of energy used previously.
Result of energy conservation	0.22%	percentage reduction of the amount of energy used previously.

Saha Green Forest Co., Ltd.

1. Project Name : Change light bulbs to reduce electricity consumption in warehouses and electricity generating buildings.

Project Description : Replaced 32 250-watt sodium bulbs with 9 200-watt LED bulbs.

Topic	Quantity	Unit
1. Quantitative target heat energy	22,230	MJ
2. Quantitative goal saving effect	100,924.20	THB/year

2. Project name: Measures to reduce steam leakage in the steam distribution pipeline system

Project Description : Replace a Malfunctioning Steam Trap Device to reduce the loss of steam within the power plant.

Project location : Super Heater 1 steam pipe area.

Topic	Quantity	Unit
1. Quantitative target heat energy	4,301,715	MJ
2. Quantitative goal saving effect	420,277.58	THB/year

3. Project name : Measure to reduce the amount of pressurized steam (Steam LP) used to warm water in the deaerator tank.

Project characteristics : Reduce feed water temperature from 120 °C down to 110 °C.

Project implementation location : Deaerator tank

Topic	Quantity	Unit
1. Quantitative target heat energy	10,105,781	MJ
2. Quantitative goal saving effect	1,042,440.00	THB/year

4. Project name : Reduce the use of diesel in the production process

Project Description: Use six-wheeled trucks to transport fuel instead of Roader trucks to load one trip at a time.

Project location: fuel yard

Topic	Quantity	Unit
1. Quantitative target heat energy	247,748	MJ
2. Quantitative goal saving effect	176,865.85	THB/year



BIODIVERSITY AND ECOSYSTEMS



Sahacogen (Chonburi) Public Company Limited, subsidiaries and the other operating units such as the trading center of biomass, fast-growing cultivation sites are located in Sahagroup industrial park, and the area allocated for industrial businesses, factories and agricultural businesses. The factory sites are developed specifically for factory building. The environmental impact assessment did not show any forest area covered. The wildlife animal was not found in the area. The the factory building, and business operation will cause the environmental impact to the aquatic and on-land biological resources at a low level.

However, the Company recognizes and places importance on taking care of natural resources and the environment in surrounding areas. Focus on engaging with communities and stakeholders to enhance knowledge and understanding of natural resource conservation. biodiversity and create a sustainable ecological balance.

Wild & Rare plants Collection Project

The Company places importance on the conservation of natural resources. Increasing green areas and taking care of trees in the project area. Therefore, a survey of plants around the company's location was conducted. And collected wild and rare plants. with experts from the Royal Forest Department as consultants for the project implementation the survey results of the company's total area of 148 rai (4 locations). It was found that, there were more than 30 types of wild and rare plants, totaling more than 500 trees such as *Dipterocarpus alatus* Roxb. ex G.Don, *Dalbergia cochinchinensis* Pierre. *Pterocarpus indicus* Willd. *Dracaena lochinchinensis* (Lour.) S.C.Chen., etc. It was also found that There are more and more small animals living in the area every year such as birds, squirrels, red ants, etc. Moreover, more than 3,000 freshwater fish species are released each year in nearby public water sources. Replacing the decreasing fish stocks, it can help restore freshwater fish resources and maintain the diversity of aquatic species as well as maintain the environment. natural balance of water sources. In addition, seasonal mushrooms and forest products are constantly found naturally. It shows the fertility of the area that still maintains good biodiversity and balance of the ecosystem.

Enhancing knowledge and understanding of natural resource conservation and biodiversity for communities and stakeholders. Public relations signs have been prepared to communicate to the community and external agencies to know and understand about the project implementation.



The Plant Bamboo Project

The planting areas provided by the government as well as the support in terms of training sessions about planting bamboo plants as a source of food and to generate revenue for people in local communities. Moreover, bamboo planting also helps reduce deforestation. The bamboo parts can be used in various ways. Soil fertility can also be improved and enhance the ecology variety. The project running supports the goal to comply with the united nation goals of sustainability development in economy, society and environment. The poverty reduction, the development of food supplies and nutritions; the sustainable agricultural activities; civilliance's well-being; good water supply and irrigation system; the protection and sustainable usage of the aquatic, on-land, forest resouces; and the support to biodiversity.

(Sustainable Development Goals –SDGs) focus in part of Economic, Society and Environment such as Poverty eradication, Improving food security and nutrition, Sustainable agriculture, Improving well-being in life and promoting well-being of people, Good water supply and sanitation, Protecting, restoring, and promoting sustainable use of onshore ecosystems, Sustainable forest management And increasing biological diversity etc. In 2018, Sahacogen (Chonburi) Public Company Limited and subsidiaries has organized activities to give bamboo seedlings, training, plant visits And planting bamboo in degraded forest areas Total value is 1,026,667 baht and has operated the project continuously until now.

In 2022, the company purchased more than 70 tons of leftover bamboo scraps from local farmers' household handicrafts to be used as raw materials in the production of Biochar. The biochar product is used to improve the quality and increase soil fertility. Helps increase agricultural productivity and helps restore deteriorated soil conditions. create sustainability in both economic aspects society and environment, This is in line with the guidelines for waste management and participation in supporting the circular economy.

Performance results are as follows:

Add green area
400
rai



Add green area Rehabilitating degraded forests by planting bamboo instead of more than 400 rai.

Create jobs
100
households



Create jobs and reduce unemployment problems for communities in the area, including more than 100 households.



Continuously creating food production for the community



Build the career and increase the potential of people in the community From the furniture making career project such as Chopsticks, bamboo skewers, bamboo basketry, Bamboo propagation, etc.



ข้อมูลเพิ่มเติม : <https://www.un.or.th/globalgoals/th/the-goals/>

INNOVATIONS



The company has developed innovations in electricity generation and investment combining concern environmental sustainability. The implementations correspond to Carbon Neutrality Target in 2050 including GHG emission Net Zero in 2065. According, Energy Policy and Planning Office (EPPO) and Department of Alternative Energy Development and Efficiency (DEDE), Energy Regulatory Commission have reviewed and improved electricity generation plan by renewable energy sources under PDP 2018 Rev.1 2021 – 2030. Committee on Energy Policy has approved the project, International Renewable Energy Certificate is to respond Thailand GHG reduction policy and implement to goal Net Zero in 2065 – 2070. Two biomass powerplants registered as registrants and participants purpose of sale Renewable Energy Certificate. The clients are mostly organizations that concern the climate change issue and require to consume electricity by renewable energy sources to reduce GHG from conventional electricity generation.



In 2022, the company delivered Renewable Energy Certificate to the organizations as following,

Lion Corporation
(Thailand) Limited



received **40,885** RECs

Thai Asahi Kasei
Spandex Company
Limited



received **40,000** RECs

Asahi Kasei Spunbond
(Thailand) Company
Limited



received **25,000** RECs

Tepco Energy Partner
International (Thailand)
Company Limited



received **58,000** RECs



Communication and Dissemination

In 2022, Sahacogen publicized knowledge on its business innovation through the following media:

Organizational Communication

Communication is an instrument fostering relationship and help understanding between employees. Thus, the company emphasizes the organizational communication to inform all employees about policies, guidelines, and information from the management in the same direction. There are many communication channels such as monthly magazines, SCG news, e-mail, intranet system (<http://myscg/intranet/>), website www.sahacogen.com, notice boards, and audio network system, etc.

External Communication

Printing Media

Sahacogen & Affiliates had publicized articles and information about energy and activities between Sahacogen and communities on specific, monthly and quarterly printing media;

- Suelamphun Newspaper (Lamphun)
- Lamphun News Newspaper (Lamphun)
- Chonburi Post Newspaper (Chonburi)
- Tung Setthi Newspaper (Kampaeng Phet)
- Green Energy Magazine



Exhibition

Sahacogen Group exhibited at the 26th Saha Group Fair at Bangkok International Trade & Exhibition Centre (BITEC). by presenting the results Business expansion and growth of the company. Including the commitment to drive clean energy for a sustainable future with the intention to reduce emissions corporate greenhouse. by participating in various projects such as The Renewable Energy Certificate (REC) project, The Clean Development Mechanism (CDM) Project and Joint Crediting Mechanism (JCM). In addition, Lamboochar bamboo charcoal products, innovative natural odor absorbing charcoal, have been introduced. at the event as well.

Open House for the education of sustainable energy

Sahacogen & Affiliates welcomes all government agencies, educational institutes, department of local administration, and other people both domestic and overseas for visiting the power generating process to enhance their knowledge and experiences. In 2022, there were 19 visiting groups, more than 502 people. The accumulative numbers of visitors during 2009-2022 are more than 500 groups or 16,000 people. Open House activities were organized under strict measures to prevent transmission of the Coronavirus Disease (Covid-19).



Television and online media

- A documentary about the reform program Public relations for the fuel management project from waste. Agriculture by the Internal Security Administration of Lamphun Province
- Public relations for the project to prevent and solve forest fire problems smog and small dust PM 2.5 from the purchase of sugar cane leaves to be used as fuel for electricity generation by the Office Public Relations, Kamphaeng Phet Province and the Provincial Security Operations Command Kamphaeng Phet

AWARDS 2022



Thailand Sustainability Investment 2022

Sahacogen (Chonburi) Plc. has received The Sustainability Investment award for listed companies that conduct business in accordance with corporate governance with social responsibility. Organized by the Stock Exchange of Thailand.

Sustainability Disclosure Acknowledgement 2022

Sahacogen (Chonburi) Plc. has received The Acknowledgments Awards for Disclosure of Sustainability in 2022 from Thaipat Institute.



Sahacogen (Chonburi) Plc. certified Green Industry Level 3 (Green System)

from the Ministry of Industry with systematic environmental management. There is a follow-up evaluation, and review for continuous improvement.

Sahacogen (Chonburi) Plc. has received a certificate of honor Participating in activities to promote corporate social responsibility (CSR) by the Office of Social Development and Human Security, Chonburi Province.



AWARDS 2022

Sahacogen Green Co, Ltd. has been certified with the highest level of safety, occupational health, and work environment management standards (Platinum) from the Institute for the Promotion of Occupational Safety, Health, and Work Environment. (Public Organization) or NESDB. The project was established to encourage business establishments to manage safety, occupational health and working environment in a systematic and sustainable manner.



Sahacogen (Chonburi) Plc. has received The Investors' Choice Award 2022 By Thai Investors Association supporting from The Stock Exchange of Thailand (SET).

Sahacogen (Chonburi) Plc. has rated by TRIS Rating in the company rating of "A" with a "stable" outlook.



Good corporate governance assessment score or "Excellent" Sahacogen (Chonburi) Plc. has received the 5 TIA good corporate governance assessment score or "Excellent" from the Corporate Governance Survey of Thai Listed Companies 2022 (CGR), By Thai Institute of Directors (IOD) supporting from The Stock Exchange of Thailand (SET).

Sahacogen (Chonburi) Plc. has Certified for the renewal of the Anti-Corruption Alliance by ThaAi Private Sector Collective Action Against Corruption (CAC)



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พลังงานจลน์
ค.ปร = $\frac{1}{2}mv^2$



SAHACOGEN
(CHONBURI) PUBLIC COMPANY LIMITED

บริษัท สหโคเจน (ชลบุรี) จำกัด (มหาชน)

