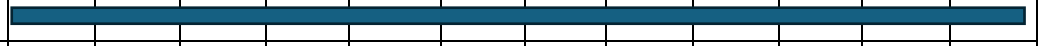
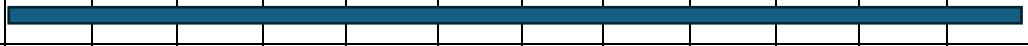
Plans/Projects/Activities

Environmental Aspect

Projects/Training/Activities Environmental Plan

รายการ	2024											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Develop guidelines, design and present various project/activities.												
2. Training on Greenhouse Gas Emission Reporting for Organizations to Engineers and Architects.												
3. Training activities to provide environmental management knowledge to employees and contractors, communicated to various departments to stimulate understanding and foster cooperation in implementing the company's policies.												
4. EIA mitigation review and patrol												
5. Environmental management for the surrounding community of the project.												
6. Energy reduction activities.												
7. Greenhouse gas reduction activities for the organization.												
8. EV Car Conversion Project.												
9. Waste Separation Project.												
10. Converting food waste into compost Project.												
11. Recycle waste materials project.												
12. Solar Power Installation Project (Solar cell).												

13. Water Recycling Project.	
14. SCGP Recycle Old Paper for New Paper Project.	
15. Turn Plastic into Robes Project.	
16. WeCycle Award 2024 Project.	
17. Care The Bear Project.	
18. Monitoring and Evaluation, Inspection, and Measurement of Progress.	
19. Improvement and Review, Updating the Plan to Align with the Set Goals.	
20. Training and Reporting on Climate Change Performance for Executives.	
21. Report on the Progress of ESG Operations from Various Departments to the Sustainability Development Management Committee.	

Proposer

[redacted]

(Environmental Engineer)

Approver

[redacted]

(Vice President - Safety and Environment Department)

“Vacuum Cleaners for Surface Finishing Work Project”

Principles and Rationale

In the construction process, there will be activities that may cause the dispersion of dust particles and impact on workers and surrounding communities the construction area. Recognizing the importance of society and the environment, which according to the sustainable development in the environmental sustainability management, regarding air quality management, the company has innovation for reducing the dispersion of dust from the source.

Purpose

1. To reduce the dispersion of dust particles from the source.
2. To reduce the impact of dust particles on the environment, operators and surrounding communities.

Method of Implementations

Connect the vacuum cleaner to the grinder machine for finishing surface work. To reduce the dust dispersion from the source.

Project Performance

In 2024 The Pink Line Extension Si Rat - Muang Thong Thani Project has air quality measurement results that the Total Suspended Particulate (TSP) is within the standard criteria not exceed 0.33 mg/m^3

“Install High Pressure Water Jet and Steel Ball Shooting Machines To Reduce Dust Dispersion and Replace the Cup Brushes for Scrubbing Project”

Principles and Rationale

In the process of cleaning scaffolding equipment that may cause the dispersion of dust particles in the work area and impact to workers and surrounding communities the construction area. Recognizing the importance of society and the environment, which according to the sustainable development in environmental sustainability management, the company has installed machinery that helps clean scaffolding equipment and can reduce dust dispersion at the source to reduce the environmental impact of sustainable air quality management.

Purpose

1. To reduce the dispersion of dust particles from the source.
2. To reduce the impact of dust particles on the environment, operators and surrounding communities.

Method of Implementation

1. Installing a steel ball shooting machine with a dust bag to remove rust from the equipment and prevent dust dispersion. The machine collects dust in the tank and transfers it to the bag for proper disposal.
2. Set the area for cleaning the scaffolding equipment. Then install a 1,000-bar water jet and clean the scaffolding equipment that has been completely rusted.

Project Performance

After using a 1,000-bar high pressure water jet and a steel ball shooting machine with a dust bag to clean the scaffolding equipment, it can be reducing dust dispersion in the surrounding area.

“Recycle Water Project”

Principles and Rationale

Water is a resource that is important for living and economic activities. Sustainable water resource management is one of the most important developments. To prevent the water scarcity for consumption, the company has given importance to water management, which according to the company's guidelines for sustainable business development and environmental sustainability management, Therefore, we have started a water recycle project to reduce and use water resources sustainably for maximum benefit.

Purpose

1. To reduce water resource usage.
2. To reduce costs from resource usage.
3. To encourage employees to use water resources efficiency.
4. To reduce the organization's indirect greenhouse gas emissions.
5. To reduce the dust dispersion surrounding the area.

Project Goals

Able to reuse 40% of recycled water resources within the organization per year.

Project Performance

The method of operation depends on the suitability of the work and the conditions of the area. The results of operations for 2024 are summarized as follows:

Construction Site	Method of Implementation	Project Performance
STEC: Government Center Phase2 (Zone C) Project.	Use a Water truck to pump water from the rainwater reservoir in front of Building B of the construction area and spray water around the construction area to prevent dust dispersion.	1,704 cubic meters of water can be reused, accounting for 45 percent.
STEC: Thai Oil Clean Energy Project.	Use a Water trucks to pump up treated wastewater from the construction project and spray water around the construction area to prevent dust dispersion.	2,628 cubic meters of water can be reused, accounting for 41 percent.
STEC: Materials and Equipment Management Project. (CIC, CEC)	A manhole was constructed to collect water into a 2000-liter storage tank for use in watering plants and vegetable gardens, as well as for spraying to reduce dust dispersion and washing floors in the repair shop weekly.	52.8 cubic meters of water can be reused, accounting for 55 percent.
SNT	Use a Water trucks to pump up from wastewater treatment plant and spray water around the construction area to prevent dust dispersion.	Water reused was 907.2 cubic meters, accounting for 42 percent.

“Sustain by Sorting Project”

Principles and Rationale

Waste separation has been promoted more and more as the world becomes aware of the global warming problem and the reduction of greenhouse gas emissions. Waste that is landfilled or incinerated releases methane, a greenhouse gas with the potential to cause global warming. Waste separation is therefore considered one of the methods that can reduce greenhouse gas emissions and help preserve the environment. Recognizing the importance of society and the environment, which according to the sustainable development in the environmental sustainability management, it can meet the company's sustainability goals. In the environmental dimension, in terms of Garbage and Waste Management, the company has managed waste separation as a waste management process. It can separate recyclable waste from non-reusable waste, which will help reduce landfill or incineration and also reduce the cost of transportation and landfilling waste.

Purpose

1. To Reduce the amount of waste that needs to landfill or incineration.
2. To increase the recycling rate.
3. To reduce greenhouse gas emissions.
4. To reduce the impact on the environment.
5. To reduce the cost of waste management.
6. To promote sustainable resource utilization due to the separated materials will be reused, reducing the use of new natural resources.
7. To raise awareness and sustainable behavior in the Organization.

Project Goals

Waste separation operations include all units.

Method of Implementation

1. Research the types of garbage and waste by the organization.
2. Plan and Practices for Waste Management.
3. Prepare containers for waste separation, use clear colors or symbols to separate waste.
4. Provide training for employees or those involved in waste management.
5. Waste separation, collect and transport, and weigh the quantity to measure the results of the operation.
6. Recycle from waste separation and manage the non-recyclable waste.
7. Continuously monitor and evaluate the results of the waste separation Project.

Project Performance

In 2024, the company has separation and recorded amount of waste has been implemented to include all units.

“Turn Plastic into Robes Project”

Principles and Rationale

Recognizing of the importance of solving environmental problems in terms of waste and waste management through recycling, which according to the sustainable development in the environmental sustainability management, the company has managed recycled materials resulting from business operations through recycling methods to deal with recycled materials such as plastic bottles from such business operations.

Purpose

1. To reduce the amount of clear plastic bottle waste (PET) to be recycle process.
2. To encourage employees in the company to participate in waste separation.
3. To foster engagement with external agencies, enabling efficient and maximized resource circulation.
4. To reduce the organization's indirect greenhouse gas emissions.

Method of Implementation

Employees and contractors within the construction area sorted out waste from clear plastic bottles (PET), such as drinking water bottles, and then collected and donated them to the Wat Jak Daeng Small and Micro Community Enterprise, Song Khanong Subdistrict, Phra Pradaeng District, Samut Prakan Province, to be recycled into recycled fibers and woven into robes.

Project Performance

In 2024, the Donation of plastic bottles (PET) for recycling, which resulted in a reduction of 273 kilograms of water bottle waste that would have been sent for disposal. This also led to a reduction of 281 $kgCO_2e$.

“WeCYCLE Kho Khuad Khong Ther Project”

Principles and Rationale

Recognizing of the importance of solving environmental problems in terms of waste and waste management through recycling, which according to the sustainable development in the environmental sustainability management, the company has managed recycled materials generated from business operations through recycling methods by joining the WHA Group’s “WeCYCLE” project, which recycles used plastic bottles in accordance with the principles of the Circular Economy in order to utilize resources efficiently and sustainably.

Purpose

1. To reduce the amount of clear plastic bottles (PET) waste for recycling.
2. To encourage company employees to participate in waste separation.
3. To encourage engagement with external organizations, resulting in efficient and maximized resource circulation.
4. To reduce the organization's indirect greenhouse gas emissions.

Method of Implementation

Employees and contractors within the construction area sorted out waste from clear plastic bottles (PET), such as drinking water bottles, and then collected and donated them to the WHA Group's WeCYCLE project to be recycled, mixed with water hyacinth fibers to produce school bags for students.

Project Performance

In 2024, the Donation of plastic bottles (PET) for recycling, which resulted in a reduction of 120.60 kilograms of water bottle waste that would have been sent for disposal. This also led to a reduction of 124.34 kgCO_2e.

“Converting food waste into compost Project”

Principles and Rationale

Recognizing of the importance of the environment as part of sustainable development, it can also meet the company's sustainability goals in the environmental dimension. The company has managed garbage and waste management from its business operations by turning food scraps into fertilizer, which is a process that has many benefits in terms of the environment, economy, and society. It helps reduce waste and pollution, promotes efficient resource management, and also reduces waste management costs.

Purpose

1. Reduce the amount of food waste that is discarded and must be disposed.
2. To reduce environmental pollution and greenhouse gas emissions from waste disposal.
3. To achieve efficient resource utilization by repurposing food waste for compost production, which will reduce the use of chemical fertilizers.
4. To raise awareness about waste management within the organization and encourage employee participation in waste separation.
5. Reduce waste disposal costs.

Method of Implementation

1. Prepare sufficient containers for supporting waste and waste separate area from general waste in construction sites.
2. Provide training and raise awareness of waste separation for employees.
3. Provide a composer to be used to shred waste into fertilizer.
4. When the compost is complete, it will be packed in bags or appropriate containers to be distributed to those who want to use it. There is a distribution system for interested employees.
5. Follow up and evaluate results.

Project Performance

In 2024, there was a total of 827.54 kilograms of food waste that went into the waste decomposition process to produce fertilizer, of which 109.95 kilograms could be produced as fertilizer, accounting for 13.29 percent, and reducing greenhouse gas emissions by 656 kgCO_2e.

“Create a materials from scrap metal Project”

Principles and Rationale

Nowadays, construction is an industry that uses a lot of materials and results in waste from leftover materials such as steel, concrete, plastic and other materials. The problem of waste management has an impact on the environment, both in terms of increasing the amount of waste that needs to be disposed and the unsustainable use of natural resources. Recycling construction materials is a way to reduce this problem by modifying or recycling leftover steel and other materials from construction to be used in various projects, which helps reduce resource loss and the use of new materials. Therefore, recycling and modifying leftover materials is a good choice for preserving the environment and reducing the use of new resources, which is considered a good way to support sustainable development.

Purpose

1. To reduce the amount of waste from construction such as scrap metal.
2. To reduce the impact from landfill and incineration from construction waste that causes pollution, including reducing greenhouse gas emissions.
3. Encourage about using resources effectively and sustainable.
4. Add value to construction waste materials by modifying or recycling.
5. Awareness and encourage effective waste management in organizations.

Method of Implementation

1. Separation recyclable materials.
2. Awareness among stakeholders to ensure the project is successful and results in both resource saving and pollution reduction.
3. Recycle or modify materials to be reusable, such as cable covers, water pipes, garbage bag baskets, plant pot stands, cable holders, and walkways across drainage channels.

Project Performance

In 2024, the company was able to recycle and reduce the amount of scrap metal from construction processes into the disposal process by a total of 1,390 kilograms.

“Waste Steel Management Program Project”

Principles and Rationale

In operations, steel cutting activities often create waste in the form of construction materials (scrap steel). Recognizing of the importance of the environment as part of sustainable development, which according to the sustainable development in the environmental sustainability management, such as using resources cost-effectively, reducing construction waste, to control, prevent and reduce waste at the source reduction, in order to reduce the impact on the environment as much as possible.

Purpose

1. To reduce of waste materials from construction (steel bars) by planning the cutting of steel bars to leave the least amount of waste.
2. To reduce the environmental impact caused by cutting scrap steel.

Project Goals

SNT Concrete Solution Co., Ltd. reduces the generation of construction waste (steel bars) to no more than 4 percent of the amount of steel imported for use.

Method of Implementation

Provide a program to manage reinforcing steel by entering data for reinforcing steel in each project into the program. Then let the program analyze the data, displaying the results in the form of individual steel bars that must be cut into lengths, and each length must be used with which steel. Then pass it on to the steel cutting operator according to the data received. This will control the cutting to use each steel bar to its cost-effectively, reducing the amount of scrap steel left over from cutting as much as possible.

Project Performance

In 2024, SNT Concrete Solutions Co., Ltd. had the amount of scrap steel that had to be disposed of reduced to 3.81 percent of the amount of steel imported for use.

“Donate construction waste materials to the community Project”

Principles and Rationale

The construction activity, it is inevitable that there will be waste or materials left over from construction, such as concrete scraps, pile scraps, which are problems that often occur from construction activities. Recognizing of the importance of the social and which according to the sustainable development in the environmental sustainability management, the waste materials from construction are donated and used to benefit communities that request them in order to create public utility areas for communities surrounding the construction area.

Purpose

1. To use construction waste, such as concrete and pile waste to public spaces construction for communities surrounding the construction area and awareness about using resources cost-effectively.
2. To reduce the amount of construction waste such as concrete and pile waste that will be brought into the disposal process.
3. To enhance the relationship between the organization and the surrounding communities.

Method of Implementation

1. Employees and contractors separate construction waste such as concrete waste and pile waste.
2. Provide the internal report request approval by Project Manager to remove concrete waste and pile waste from the construction project.
3. Transport concrete waste and pile waste to the location in the community.

Project Performance

In 2024, construction waste was transported to public utility areas surrounding communities and was able to reduce construction waste and waste that would have been brought into the disposal process by 9,753 tons, with details as follows:

Construction Site	Project description	Weight (tons)
STEC: Pluak Daeng Power plant construction Project.	Concrete scraps and pile scraps for the entrance road and the area for installing community water supply equipment, Map Yang Phon Subdistrict, Pluak Daeng District, Rayong Province, Village No. 1, 2 and 5.	420
STEC: Pluak Daeng Power plant construction Project.	Using concrete scraps to landfill a pond in the community's public utility area.	5,908
SNT	Donate of concrete scraps from production to communities around the construction area to be used for landfilling, road construction, and community public utilities.	3,425

“Solar Flow Wastewater Treatment Turbines Project”

Principles and Rationale

Recognizing of the importance of the social and environment as part of sustainable development, the Company is committed to taking actions to help reduce greenhouse gas (GHG) emissions, which are the cause of climate change, especially in wastewater management, which is an important process that can help reduce methane (CH4) emissions from traditional wastewater treatment processes. In addition, the Company uses solar cells to replace fossil fuel electricity to drive wastewater treatment turbines, which not only helps reduce pollution but also encourage the sustainable use of clean energy, to reduce the impact of climate change and encourage sustainable development in all aspects.

Purpose

1. To reduce greenhouse gas emissions.
2. To encourage the using clean energy.
3. To encourage the sustainable development.

Project Goals

Solar Flow Project can operate at full efficiency using solar energy without relying on external electricity sources by up to 70%.

Method of Implementation

Starts with surveying and designing the solar powered wastewater turbine system, then installing the system and performing performance tests. After that, maintenance and training of operators will be provided to ensure sustainable operation.




Project Performance

In 2024, Thai Oil Clean Energy Refinery Construction Project and the Gulf Sriracha Power Plant Construction Project will be able to use 100% of solar energy (Solar Cell) for wastewater treatment turbines, reducing electricity consumption by 38,880 kWh/year.

“Solar Scan Fingerprint Scanner Project”

Principles and Rationale

The construction project of Thai Oil Clean Energy Refinery, which has a fingerprint recording system to record the entry and exit information of workers, but due to the nature of the area, it is not possible to install an electrical system. Therefore, a generator must be used to produce electricity, which results in the use of fuel for the operation. Therefore, this project was created to replace the use of electricity from a generator, reduce fuel usage, reduce greenhouse gas emissions, which according to the sustainable development in the environmental sustainability management.

Purpose

Replaceable the energy consumption from the generator with solar energy (Solar cell) to reduce fuel consumption and greenhouse gas emissions.

Project Goals

Install solar panels that can support the fingerprint scanner for at least 70% of the total usage time each day.

Method of Implementation

1. Install the solar cell panel to collect energy from sunlight into electrical power in a suitable location.
2. Connect the power cable from the solar cell system to the fingerprint scanner.

Project Performance

In 2024, Thai Oil Clean Energy Refinery Construction Project will be able to install solar panels that can support the use of fingerprint scanners for 100% of the total usage time each day.

“Solar Cell at The fabrication plant in Rayong Project”

Principles and Rationale

The Company has given importance to the use of renewable and alternative energy. Therefore, it has initiated various projects to reduce fossil fuel consumption and reduce greenhouse gas emissions, which according to the sustainable development in the environmental sustainability management.

Purpose

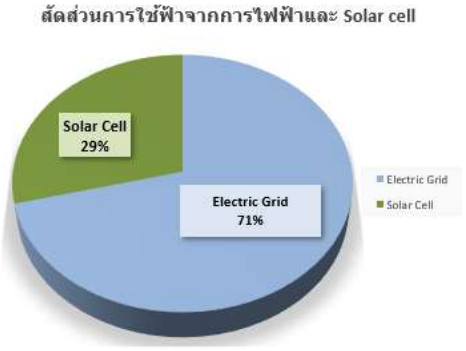
1. To encourage the renewable energy and alternative energy.
2. To encourage the reduce greenhouse gas emissions.

Project Goals

Use 25 percent of electricity from renewable energy for electricity consumption.

Method of Implementation

Installing 324 kilowatts of solar panels to generate electricity on the roof of The fabrication plant in Rayong.



Project Performance

The fabrication plant in Rayong of STEC installed solar panels to generate 324 kilowatts of electricity. In 2024, the plant was able to generate 329,634 kilowatts-hour (kWh) of electricity from solar energy for use in the plant or 29% of electricity consumed in the plant.

“Install solar panels to generate electricity of SNT Project”

Principles and Rationale

The Company has given importance to the use of renewable and alternative energy. Therefore, it has initiated various projects to reduce fossil fuel consumption and reduce greenhouse gas emissions, which according to the sustainable development in environmental sustainability management.

Purpose

1. To encourage renewable energy and alternative energy.
2. To encourage the organization's indirect greenhouse gas emissions.

Project Goals

Use 25 percent of electricity from renewable energy for electricity consumption.

Method of Implementation

Installing 564 kilowatts of solar panels to generate electricity on the roof of the SNT Concrete Solution Co., Ltd. in Nonthaburi Province.

Project Performance

SNT Concrete Solutions Co., Ltd. installed solar panels to generate 564 kilowatts of electricity. In 2024, the plant was able to generate 553,695 kilowatts-hour (kWh) of electricity from solar energy for use in the plant or 39.99% of electricity consumed in the plant.

“Solar Cell for Cconstruction Office”

Principles and Rationale

The Company has given importance to the use of renewable and alternative energy. Therefore, it has initiated various projects to reduce fossil fuel consumption and reduce greenhouse gas emissions, which according to the sustainable development in the environmental sustainability management.

Purpose

1. To encourage renewable energy and alternative energy.
2. To encourage the organization's indirect greenhouse gas emissions.

Project Goals

Increase the number of field offices that use solar energy (Solar cell) as the main source of energy by at least 10% in all projects.

Method of Implementation

Installing solar panels to generate electricity on the roof of the construction offices.

Project Performance

In 2024, implemented to install solar panels for construction offices, STEC’s construction area (Solar Power Plant Project 5 sites, Motorway#1 and #2 Project), which accounts for 10.52% of the total project and able to generate 87,900 kilowatts-hour (kWh) of electricity from solar energy for use in the project.

Future operational expansion

Expand the scope of solar panel installation and use the generated electricity within the construction offices.

“Installation streetlights around the construction office and Stock Yard Project”

Principles and Rationale

The Company has given importance to the use of renewable and alternative energy. Therefore, it has initiated various projects to reduce fossil fuel consumption and reduce greenhouse gas emissions, which according to the sustainable development in environmental sustainability management.

Purpose

1. To encourage renewable energy and alternative energy.
2. To encourage the organization's indirect greenhouse gas emissions.

Project Goals

Increase the number of solar cell construction office used in streetlights around the construction office and stock yard by at least 10% in all projects.

Method of Implementation

Install solar panels to generate electricity for streetlights around the construction office and stock yard.

Project Performance

In 2024, implemented to install solar panels for construction offices, streetlights around the construction office and Stock Yard in STEC’s construction area (Solar Power Plant Project 5 sites, Motorway#1 and #2 Project) Gulf Sriracha Power Plant Construction and Thai Oil Clean Energy Refinery Construction, which accounts for 21.05% of the total project and able to generate of electricity from solar energy for use in the project as follows:

- **Solar Power Plant Project 5 sites, Motorway#1 and #2 Project** generate 16,308 kWh of electricity from solar energy.
- **Gulf Sriracha Power Plant Construction** generate 1,500 kWh of electricity from solar energy.
- **Thai Oil Clean Energy Refinery Construction** generate 2,205 kWh of electricity from solar energy.

“Increase route efficiency, Transportation management, Reduce pollution emissions”

Principles and Rationale

In construction operations, especially road construction work, which has a variety of work areas, sometimes it is necessary to travel within the unit to withdraw equipment and materials for use at the construction site, resulting in waste in machinery and fuel. Recognizing of the importance of the environment as part of sustainable development, which according to the sustainable development in the environmental sustainability management, regarding reducing energy consumption, by implementing an internal transportation system that can reduce energy consumption and greenhouse gas emissions.

Purpose

1. To improve travel efficiency through transportation adjustments.
2. To reduce fuel consumption and air pollution caused by vehicle use.
3. To reduce the organization's direct greenhouse gas emissions.
4. To reduce expenses related to fuel consumption and vehicle maintenance.

Project Goals

It is expected that oil consumption will be reduced by 5 percent from normal oil consumption.

Method of Implementation

1. Analyze and establish vehicle routes to cover all areas within the construction area, ensuring the most cost-effective and fuel-efficient.
2. Adjust schedules to align with work operations, reduce the number of vehicles, and improve vehicle routes management.
3. Issue an internal announcement to inform employees and enable them to plan their work accordingly.
4. Follow up and performance assessments.

Project Performance

From the implementation of the project during October - December 2024, it was found that oil usage was reduced by 288 liters, or 3 percent, and direct greenhouse gas emissions were reduced by 789 kgCO_2e.

“Switched to using Electric Vehicle (EV) Project”

Principles and Rationale

At present, the transition to the use of electric vehicles (EV) has become a matter of great interest from both the government and private sectors, especially in terms of solving air pollution problems, reducing greenhouse gas emissions, and developing sustainable economies. This change not only responds to environmental needs, but also encourage energy and encourage the growth of new technologies that benefit society as a whole. The Company has emphasized the use of renewable and alternative energy. Therefore, it has initiated various projects to reduce the use of fossil fuels and reduce greenhouse gas emissions, which according to the sustainable development in the environmental sustainability management.

Purpose

1. To reduce energy consumption.
2. To reduce greenhouse gas emissions and air pollution from internal combustion engine vehicles.
3. To encourage the development of sustainable technologies.
4. To comply with company policies.
5. To prepare for future technological changes as the world shifts towards renewable energy and sustainable technologies.

Project Goals

Change 3 combustion engine vehicles to electric vehicles (EV) by 2024.

Method of Implementation

1. Establish a plan for vehicle replacement and financial budgeting.
2. Change
3. Implement a trial period.
4. Monitor performance and expand the scope of operations.

Project Performance

In 2024, the company switched to using electric vehicles, replacing 6 combustion engine vehicles, saving 11,015 liters of fuel, which is expected to reduce greenhouse gas emissions by about 24 tons of CO_2 equivalent.

Future operational expansion

This year, the conversion to 6 electric vehicles (EVs) is a good start to the adoption of clean technology in the organization. However, the future expansion must be planned and implemented in many dimensions so that this change can be expanded to a wider level sustainably.

“Knock Down Worker Campsite”

Principles and Rationale

Recognizing of the importance of the social and environment as part of sustainable development, the company has designed and improved the Knock-down accommodation for the company's construction workers, who are the main force in the construction industry, to have a good and hygienic living environment, which according to the sustainable development in the environmental sustainability management, such as using resources cost-effectively, reducing waste from construction of worker accommodation, reusing construction materials and reduce greenhouse gas emissions in various areas.

Purpose

1. To reduce resource consumption and costs associated with building temporary worker accommodations.
2. To reduce waste and reuse construction materials in the building of temporary worker accommodations.
3. To encourage using resources cost-effectively
4. To encourage the organization's indirect greenhouse gas emissions.

Project Goals

Reduce resource usage by reusing more than 50% of steel materials during the first relocation.

Method of Implementation

1. Research the original temporary worker accommodations construction model to calculate the amount of construction materials and costs.
2. Design the construction of a new temporary worker accommodations model, including calculating the amount of construction materials that can be reused and the costs that can be reduced.
3. Proceed with the construction of a new temporary worker accommodations model.
4. Report on the results of the operation.
5. Implement the new temporary worker accommodations construction model in all construction units.

Project Performance

The company has prepared a sample of a 2-storey, 40-room Camp Knockdown house, 1 unit, to be demolished and relocated to a new unit. In the case of operating according to the company's manual, the results of the operation are as follows:

Descriptions	Relocation#1	Relocation#2
Recyclable Structural Steel (kg.)	22,492	19,118
Cost reductions (Baht)	608,644	517,347

“SCGP Recycle exchange old paper for new paper Project”

Principles and Rationale

Recognizing of the importance of the using resources cost-effectively as part of sustainable development, which according to the sustainable development in the environmental sustainability management, the company has managed resources from business operations by recycling them. It has agreed to jointly develop a circular economy with SCGP under the project "SCGP Recycle exchange old paper for new paper" to manage recycled paper materials from such business operations.

Purpose

1. To reduce the amount of waste by managing recycled materials such as scrap paper generated from the Company's business operations using sustainable recycling methods and processes in accordance with the principles of the circular economy.
2. To encourage employee participation in waste separation.
3. To encourage engagement with external organizations, in the development of a circular economy.
4. To reduce the organization's indirect greenhouse gas emissions.

Method of Implementation

Employees and contractors within the construction site area and office separate waste paper, then collect and deliver to SCG Packaging Public Company Limited. (SCGP) at the Construction Materials and Equipment Management Center (CIC), Klong Tamru Subdistrict, Mueang Chonburi District, Chonburi Province, to be recycled into new products such as printing paper and paper furniture.

Project Performance

In 2024, Project to manage recyclable paper from the Company’s business operations was able to deliver 47.83 tons of paper for recycling and reduce carbon dioxide emissions by 32,524 kgCO_2e.

“Charnvirakul Building Sustainable Communities and Society Development Project”

Principles and Rationale

In addition, in accordance with the company’s policy to establish the “Sino-Thai Payback to the Society” project, the company constructed the Charnvirakul Building as a classroom and library building for schools in areas that lack financial resources, as part of its to encourage education in Thailand and is a sustainable development of the business in the social dimension. With an awareness of the importance of social and environmental issues, which are part of sustainable development, the company has encourage the development of schools and sustainable education, considering to environmental impacts and the efficient use of resources simultaneously to achieve the company's sustainability goals environment dimension. The company has managed resources to reduce the impact of using new resources following the circular economy, by constructing durable buildings and efficiently reusing construction materials. The strength, safety, and suitability of the materials are the primary considerations. This is a way to maximize the benefits of existing resources.

Purpose

1. To encourage awareness about using resources cost-effectively and maximum benefit.
2. To enhance the relationship with surrounding communities construction area.
3. To reduce the organization's indirect greenhouse gas emissions.

Method of Implementation

1. Evaluate and leftover construction materials separate, inspect the quality of materials to ensure they can be reused without affecting the strength and safety of the building.
2. Plan the use of leftover construction materials in the design and construction of buildings, taking into account the strength, safety and suitability of materials.
3. Start construction of the school or building.
4. Inspect and estimate the stability and safety of the building.

Project Performance

In 2024, the Company was able to reduce the impact from the use of new resources by using 8,644.77 kilograms of leftover steel materials in the project and reducing Scope 3 Category 1 greenhouse gas emissions by 14 tCO_2eq.

“Use containers for tools and materials instead of small tool boxes"

Principles and Rationale

Nowadays, storing tools and materials in the workplace is important for orderly work and fast and convenient access to tools. Using small tool boxes for storage may have limitations, such as disorganized storage, loss or confusion of small tools, or damage from storage in an inappropriate area. They may also be made of materials that are not very durable or cannot be recycled. Therefore, the use of large and strong "containers" to store tools and materials is considered, which will help to store them in an orderly manner, safely, and efficiently. This reduces the use of resources to produce new materials and reduces the amount of waste from discarding used materials.

Purpose

Encourage and support the using resources cost-effectively and sustainable, and help reduce the amount of waste generated from the disposal of end-of-life materials.

Project Goals

Reduce resource usage in small toolbox fabrication and reduce waste generation of small toolboxes.

Method of Implementation

1. Assess the number of tools and materials to be stored, along with the types and sizes of tools currently in use and inspect the space available for storing the container.
2. Select containers made of durable materials for use and environment and determine the size of the container appropriate for the number and types of tools, including the management inside the container.
3. Install the container in the prepared area and manage tools and materials in the container according to the type of tool.
4. Keep tools and materials organized in a container.
5. Provide training to employee to ensure how to use containers to keep tools, as well as how to properly maintain and organize tools.

Project Performance

In 2024, The construction project of Thai Oil Clean Energy Refinery was able to reduce the use of tool boxes by 280 boxes.

“Care The Bear”

Principles and Rationale

Nowadays, Environmental problems are currently severe and have a great impact. This can be seen from the frequency and severity of natural disasters that occur, which affect the economy, society and the environment. Recognizing of the importance of the social and environment as part of sustainable development, in terms of climate change management, the company has joined the “Care the Bear” Project, which involves adjusting behaviors to reduce emissions from organizing events or activities in both online and onsite formats.

Purpose

1. To reduce the amount of waste from organizing events and activities.
2. Encourage employees to have awareness about using resources cost-effectively.
3. To reduce greenhouse gas emissions.
4. To reduce costs by organizing events and activities.

Method of Implementation

Apply to join the project and study the details of the Care the bear project. Then campaign and promote activities to reduce greenhouse gas emissions, including:

- Promote the use of public transportation or carpooling.
- Reduce paper usage by using electronic documents instead of printing documents.
- Reduce the use of plastic and plastic water bottles by having participants bring their own cups.
- Avoid using foam from packaging or foam for decoration by arranging buffet food and serving it on plates, and encourage participants to take appropriate portions of food.
- Reduce energy consumption from electrical appliances or switch to energy-saving appliances.
- Design using recyclable decorative materials, reduce food waste at the event.
- Record data on the Climate Care Collaboration Platform website: Care the bear project.

“Care The Bear” (Continued)

Project Performance

The performance of the Company's Care the Bear project in 2024 is summarized as follows:

- Able to reduce the use of plastic water bottles (PET) by a total of 1,139 bottles.
- Able to reduce paper usage by 14,000 sheets.
- Able to reduce paper/cardboard waste by 83 kilograms.
- Able to reduce food waste by 89 kilograms.

This initiative has resulted in a reduction of 19,820.15 kilograms of CO_2 equivalent emissions, equivalent to planting 2,202 trees.

“Hydraulic Cement”

Principles and Rationale

The implementation for supporting the use of hydraulic cement is based on the awareness of the impact on the environment. Hydraulic cement is a sustainable and environmental friendly alternative because this type of cement contains more environmentally friendly materials. Using this type of cement will help reduce greenhouse gas emissions from the construction material production process because hydraulic cement contains a smaller proportion of ingredients than Portland cement, resulting in a production process that reduces greenhouse gas emissions and reduces energy use more efficiently. Choosing hydraulic cement not only helps reduce environmental impacts but also plays a part in supporting environmentally friendly construction, supporting sustainable development, reducing the carbon footprint of products delivered to customers, and using resources in a worthwhile and most beneficial way according to the principles of the circular economy, leading to a low carbon society.

Purpose

1. Support and encourage the use of green materials.
2. To reduce the organization's indirect greenhouse gas emissions.

Method of Implementation

The implementation of the hydraulic cement project will help reduce the environmental impact of the production of construction materials. There is control and evaluation at every stage, from material selection, employee training, material quality inspection to environmental impact assessment, to ensure that the projects can be carried out sustainably and effectively reduce energy consumption and greenhouse gas emissions.

Project Performance

In 2024, the utilization of hydraulic cement was as follows:

- STEC used 800 tons of hydraulic cement in powder form and 1,635,552 tons in ready-mixed form.
- SNT used 32,235 tons of hydraulic cement in powder form.

Which can reduce Scope 3 Category 1 greenhouse gas emissions as follows:

- Hydraulic cement in powder form reduces GHG by 1,288 tons of CO_2 equivalent.
- Hydraulic cement in ready-mixed form reduces GHG as follows:
  - At strength of 120-300 kg/cm² reduces GHG by 5,608 tons of CO_2 equivalent.
  - At strength of 300-400 kg/cm², reduces GHG by 4,531 tons of CO_2 equivalent.
  - At strength >400 kg/cm², reduces GHG by 100 tons of CO_2 equivalent.

Training activities to provide environmental management knowledge to employees and contractors.

Images of environmental management training for employees and contractors in the project.

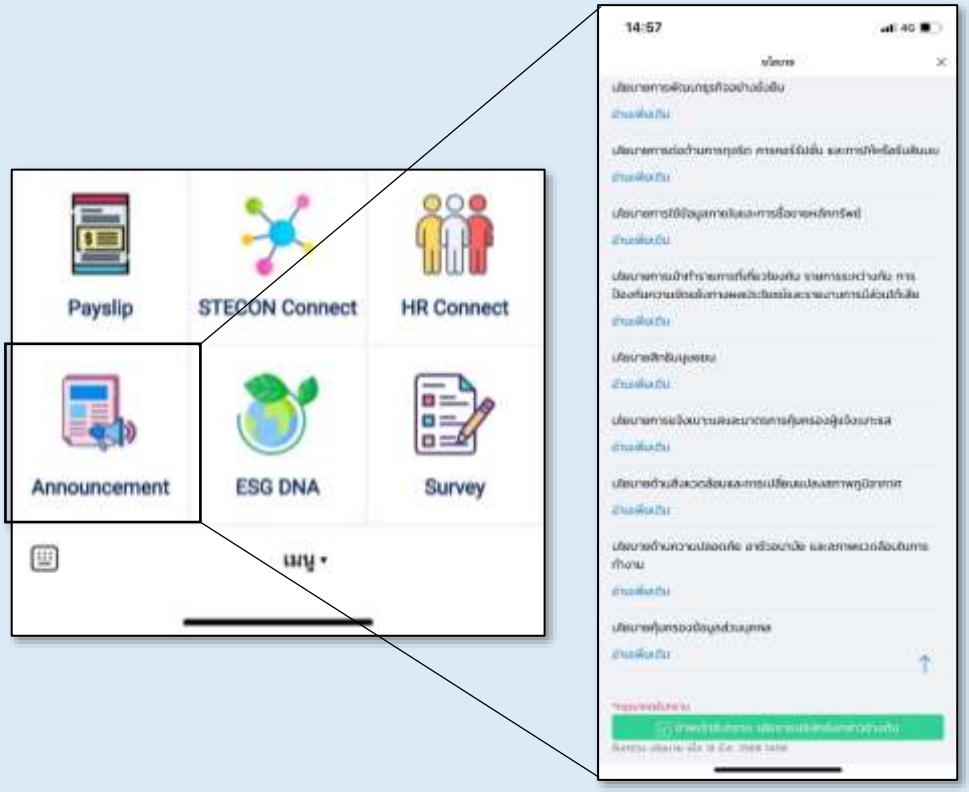
Sample images of environmental management training documents in the project.

Training activities for knowledge and exchange of opinions on climate change.

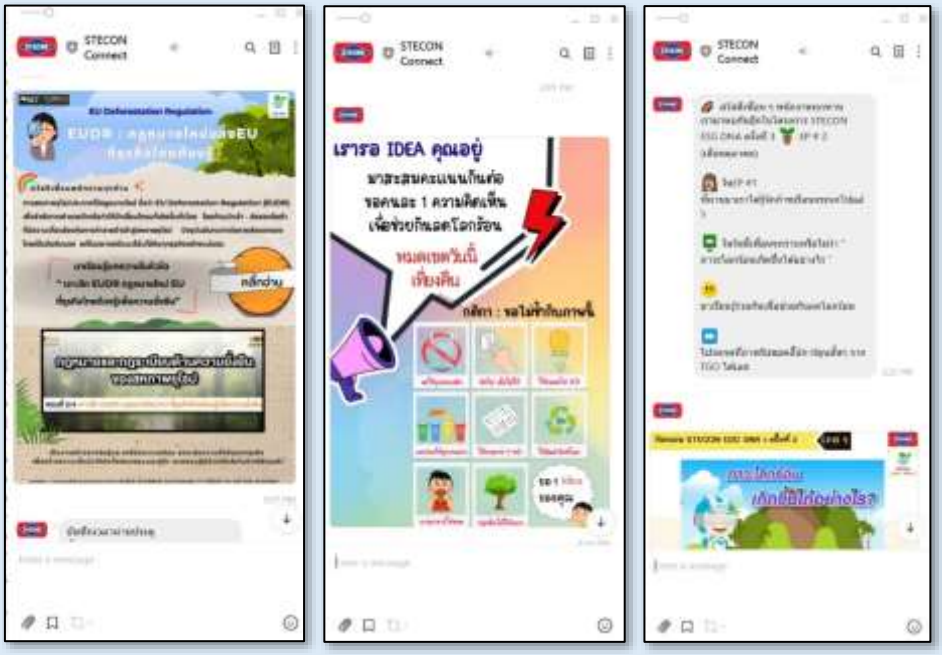
Images of training for knowledge and exchanging opinions on climate change.

Sample images of training documents on climate change.

Activities where employees participate in environmental management.



Activities for announcing environmental and climate change policies through the Line STECON Connect system to inform employees and ensure implementation.



ESG DNA activities through the Line STECON Connect system to inform employees raise and awareness about the importance of sustainable development in the environmental aspect.

Activities where employees participate in environmental management.

(continued)

Images of activities promoting water conservation.

Images of emphasizing to employees and contractors to work carefully to reduce environmental impacts through the Toolbox Talk activity

Activities to involve employees in environmental management around the construction project area.

Images of assigning employees and contractors to carry out Housekeeping activities and clean the area around the construction project to participate in environmental management within the project.

Images of monitor compliance with environmental impact prevention and mitigation measures.

Activities to reduce the organization's greenhouse gas emissions.

Support the efficient and economical use of resources, such as electricity conservation and using stairs instead of elevators.

CARE THE BEAR
Change the Climate Change
ลด-โลก-ร้อน

Care the Bear Project, in which the company is interested in participating, aims to change behaviors to reduce greenhouse gas emissions from organizing events or activities in both Online and Onsite formats.

Activities to collaborate with various organizations to support actions that reduce greenhouse gas emissions.

Images of participating in seminars with various organizations to support actions that reduce greenhouse gas emissions.