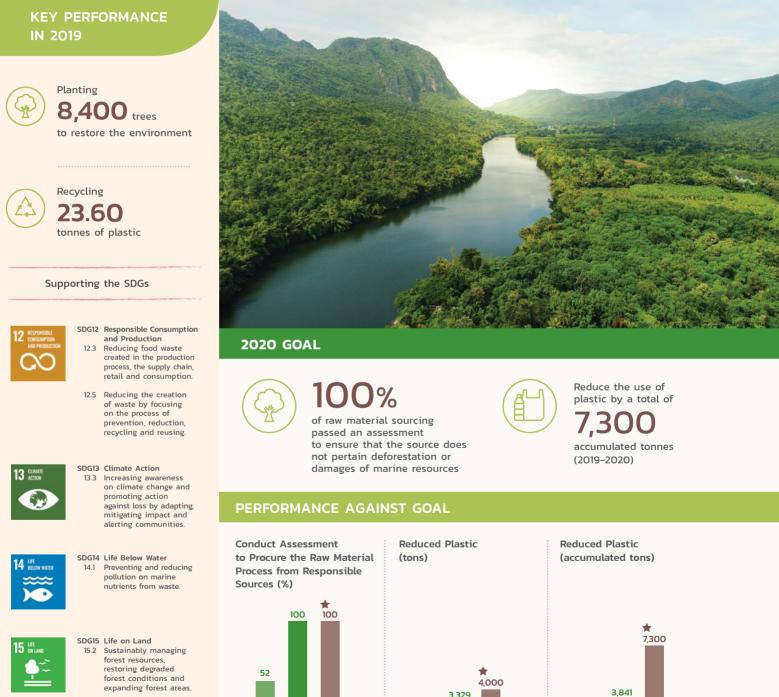
Protecting the Ecosystem and Committing to Being Green



3,329

2019

2020

Goal

512

2018

2019

2020

Goal

512

2018

expanding forest areas

2018

2019

2020

Goal

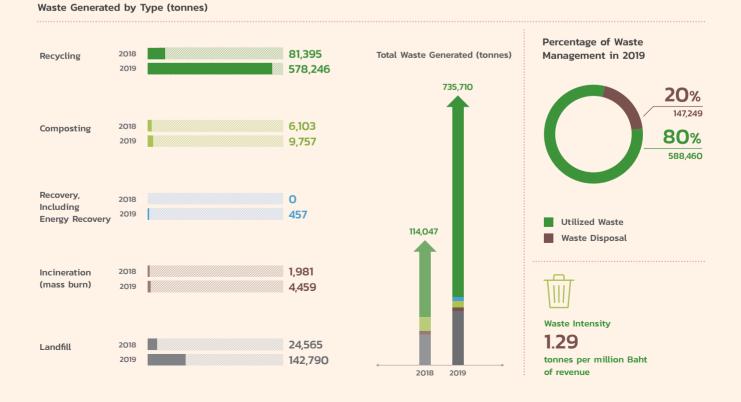
Challenges

Waste Management

Influenced by current events and our changing world, digital technology and innovations have underwent rapid development. However, biodiversity has plummeted due to climate change and human actions. Aside from the loss in biodiversity, the increasing amount of plastic in the oceans and depleting natural resources are major points of concern. CP ALL Plc. and its Subsidiaries ("the Company") are committed to environmental management and biodiversity. The Company is conscious of its impact from plastic waste on the environment and the long-term effect on its business reputation and resource management. Therefore, the Company focuses and supports environmental conservation and the protection of biodiversity in order to mitigate the current impact and preserve natural resources for future generations.

PROGRESS IN 2019 Image: Project Imag

ECOSYSTEM AND BIODIVERSITY PROTECTION DASHBOARD



Management Approach

The Company is committed to be a sustainable business that is environmentally responsible, through awareness raising. The Company's attention is focused on mitigating impacts from the business, products and service under the environmental policy, as well as sustainable procurement policy and business partner guideline implemented throughout the supply chain. These policies and guidelines are set in place with the goal of utilizing resources efficiently and using less of the already limited natural fuels. In addition to the aforementioned goals, the Company is adamant on being a part in solving climate change challenges, promoting efficient water management, reducing deforestation and preventing environmental damage, which directly affects biodiversity. The Company combines environmental impact mitigation with business operations under the "7 Go Green" strategy and develops projects on waste management and green packaging to reduce the impact on the environment and biodiversity. Additionally, the Company promotes and supports reusing waste and creating value from it through circular economy. For starters, there is the 7 Go Green Recycled Plastic Road project and the Eco Store project. These projects increase the business' ability to grow while sustainably preserving natural resources and protecting biodiversity.



7 Go Green Recycled Plastics Road

The 7 Go Green Recycles Plastics Road applies circular economy to complement the plastic management of bags, trays, bottles and cups for recycling. The project plays a part in solving the global crisis on marine plastics and is a collaboration between CP ALL Plc., SCG Chemicals Company Limited and Dow Thailand Group. The recycled plastic is used to build roads and undergoes multidisciplinary processes and techniques that increase the road's strength and endurance against corrosion. This collaboration on recycled plastic roads is the first of its kind to provide support and development to the communities around retail stores by taking plastic waste that is separated from offices, the distribution center, 7-Eleven stores, CPRAM Company Limited, Panyapiwat Institute of Management, Panyapiwat Technology College, hospitals and communities around 7-Eleven stores. Approximately 0.865 tonnes have been brought back to use in communities.



At present, roads were built around two 7-Eleven stores at Sai Mai Soi 3 and Rat Phatthana Soi 24, and two office areas. The Company is steadfast in developing and scaling this project to other areas depending on the condition of the area. For example, the Flagship Store area provides communication and a Green Total Image for all. It is further expansion to Thara Pattaya Project, PIM EEC Project, in Chonburi Province and the Chaeng Wattana Office Building to reduce the amount of plastics that enters the ecosystem and affects biodiversity.



Furthermore, the Company aims to focus on the study of reusing milk and food cartons (aseptic cartons) in the store. At this moment, the study is conducted by Tetra Pak (Thailand) Co., Ltd. The producers of aseptic cartons and Fiberpat Co., Ltd. are developing the recycling process of aseptic cartons into household decorations to reduce environmental impact and promote recycling. Moreover, this collaboration improves the corporate image on environmental friendliness. Recycled material from milk and juice cartons can be used in stores as rooves, mirrors and other decorations. The three types of remaining materials use to produce equipment or interior decorations for the 7-Eleven stores under "Green Store" project.

3 Types of Remaining Materials



Waste from 7–11 stores, Such as plastic bags, Plastic bottles, Cans, Plastic straws and Glass bottles



Domestic waste, Such as egg shells



Construction materials that have been certified as environmentally friendly materials

Next Plan



Launch of the pilot **3** stores per year Expanding the remaining materials uses to









Magic Box Recycling for Sharing

The Company intends to reduce environmental impact by promoting and supporting the recycling of plastics. Under the principle of circular economy, the Company provides opportunities for students and schools in need of support through collaboration with Ampol Food Processing Company Limited, Tetra Pak (Thailand) Company Limited, Thai Parcel Company Limited and SIG Combiblock Company Limited. The partnered organizations collect donated UHT cartons and paper beverage cartons that have been disassembled, washed and stored. The donated cartons are recycled into tables and chairs for students in necessitous schools. An amount of 2,500 cartons can be recycled into one set consisting of one table and one chair. In 2019, a number of 28,010 cartons were donated. In the future, the Company plans to buy UHT cartons and paper boxes that have been disassembled, washed and stored, and add them to the Waste Bank Project.



Greenroof Project

Additionally, CPRAM Company Limited, Lat Krabang has implemented the Greenroof project. UHT cartons from the bakery production process and staff that consume the beverages are recycled into rooves.





In 2019, this project was able to reduce the amount of waste disposal by







If calculated in terms of Green House Gases, it is 17 tonnes Co,e. The Company produced **1,123** pieces of 1 m x 2.4 m roof tiles.

Partnership for Eco Bags

Siam Makro Public Company Limited to intigate environmental impact by promoting circular economy for sustainable consumption. The Company has designated its policy and target to increase eco packaging from 20% to 40% within 2019 and partnered with King Energy and Medical Solutions Company Limited. The Company promoted and supported recycling, and produced eco garbage bags that were made from landfill plastics. The collaboration birthed an eco-garbage bag under the name of "Hero".



Eco-garbage bag project can reduce the amount of plastics in landfills by

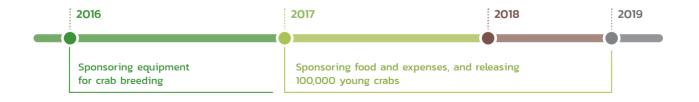
20,000 tonnes per year.

Sustainable Blue Crab Project

Crab meat is one of the main raw materials in CPRAM's factory and is a key component of ready-to-eat dishes in 7-Eleven. At present, the demand for crab meat is continuously increasing. CPRAM acknowledges the importance of the above issue and has, therefore, extended the concept of preserving blue crabs in the Gulf of Thailand and the Andaman Sea under the Sustainable Blue Crab project. By collaborating with the Department of Fisheries, Surat Thani Coastal Fisheries Research and Development Center and Vila Crepe Products Company Limited, the Company aims to increase the number of blue crabs along the coast of Surat Thani and preserve the province's natural resources. Simultaneously, the collaboration supports entrepreneurs who are local fishermen to practice sustainable fishing through local breeding of crabs and regulations so that the crabs can mature and grow larger. The Company has been able to increase the number of crabs in its natural habitat by 100,000 crabs. In conclusion, the project is designed to be long-term and has been continuously driven since 2012.



Increased the number of crabs in its natural habitat by 100,000 crabs





The number of candidate who submitted videos to the New Gen Zero Food Waste project

259 videos in 1st year 363 videos in 2nd year



Students from the secondary level submitted

109 videos in 1st year 127 videos in 2nd year



Students from the graduate level submitted

150 videos in 1st year236 videos in 2nd year

New Gen Zero Food Waste Project

The objective of the project was to raise awareness on food waste among the new generation through Facebook. The new generation plays an important role in creating and driving change. To empower them, a competition was held with the challenge of producing a 3-minute video under the concept "The End of Food Waste". The competition provided a means of support and a stage for secondary and graduate level students to show their abilities and creativity in raising awareness. The videos showcase the issue of food waste where it comprised 41.95% to 44.99% of garbage in Bangkok. The New Gen Zero Food Waste project shared information regarding the global trend on food waste, an approach to utilize food waste, methods for prevent food waste in people's daily lives and means of eliminating food waste via online channels. In the effort to create another channel to raise awareness on food waste, 259 videos were submitted to the New Gen Zero Food Waste project during its first year. Students from the secondary level submitted 109 videos and students from the graduate level submitted 150 videos. The piece of art from the graduate level won the first prize and the team was awarded 100,000 baht along with a trophy and certificate. The team was called "Why Don't We Eat Kao Lham in the Refrigerator?" from King Mongkut's University of Technology Thonburi. The winner of the secondary level was awarded 80,000 baht with a trophy and certificate. The team was called "Abstract" from the Demonstration School of Srinakharinwirot University, Pathumwan. During the New Gen Zero Food Waste Project Year 2, there were 363 teams that submitted video clips. They were 127 from the secondary level and 236 from the graduate level. The winning piece from the graduate level was "3 Phak the Revenge of Vegetable" by team "Chakorn Studio" studying at Chandrakasem Rajabhat University. The winning piece from the secondary level was "Warning! Food Waste!" by team "Who Sells Chicken Eggs" studying at Suankularb Wittayalai School.



Reducing Environmental Hazards with a Good Heart Project

It is one of the projects that has been extended under the 7 Go Green strategy. Participants kayaked to collect garbage on Samet Island. The event was held on the World Environment Day on 5th June with the goal to maintain cleanliness and care for natural resources and the environment.



Reforestation Project

The Office of Operation 2 in the NE area led employees to participate in community service activities with provincial finance administrators from Nakhon Phanom, government agencies, state enterprises, private organizations, local government organizations, schools and the people of Nakhon Phanom province. As a team, they planted a total of 6,810 yellow star trees and economic crops, such as teak trees, Siamese rosewood trees, black rosewood trees, Pradu trees and bamboo, along the Nong Kin Reservoir, Nong Kin Subdistrict, Mueang Nakhon Phanom District in honor of His Majesty King Vajiralongkorn. The event was held under the auspicious occasion of the coronation to promote energy conservation, restore natural resources and the environment in Nakhon Phanom in 2019. The goal was to restore forests back to fertile green areas, reduce carbon dioxide, provide a suitable location to relax and establish an economic crop learning center of Nakhon Phanom.

Being aware of the importance of forests and mangrove forests, the Company's distribution centers organized a reforestation and mangrove forest project in different areas. The forest restoration project and dams at Salak Phra Wildlife Sanctuary in Kanchanaburi as well as the Chalerm Phrakiat Mangrove Forest at Bang Khun Thian Mangrove Learning Center in Bangkok were initiated by the distribution center at Bang Bua Thong.



Planted a total of 6,810 yellow star trees and economic crops



Love Phi Phi, Say No to Plastic Bag

Following the success of the Lanta Go Green project, the company has continued to expand its area of influence on reducing the impact of plastic bags at sea. A collaboration with the Tourism Authority of Thailand, the Office of Natural Resources and Environment, Krabi Ao Nang Subdistrict Administration Organization, Noppharat Thara-Phi Phi Islands National Park, Green World Foundation, Phi Phi Protection Group and Phi Phi Island Tourism Club founded the "Love Phi Phi, Say No to Plastic Bag" project

- Educating children at the Royal School of Koh Phi Phi on waste sorting, the types of waste and the impact of waste on the environment under the 3R principle – Reduce, Reuse and Recycle – through activities to create a educational center on waste separation.
- 2 Campaigning to tourists, communities and people on the island on environmental awareness and the importance of reducing plastic bags.
- Collecting garbage with students while creating awareness on preserving natural resources. Furthermore, the Company campaigned to reduce the use of plastic bags on 4 islands, namely Koh Lanta, Koh Yao Noi, Koh Samet and Koh Lipe, and is ready to extend the campaign to other islands.

in celebration of the World Environment Day on 5th June. The project organized a campaign to reduce and stop using plastic bags on the islands, which are important natural attractions. Employees, customers, communities and the public were invited to reject plastic bags and use cloth bags instead. They also participated in a big cleaning activity and persuaded travelers to stop using plastic bags and to not bring the bags onto the islands. Other activities are listed below:



GRI Standard	Requested Data	Unit	2016	2017	2018	2019
305-2 (a)	Energy Indirect (Scope 2) GHG emissions	Tonnes CO ₂ e	1,123,536.20	1,175,060.15	1,272,977.98	1,387,096.90
	Electricity purchased	Tonnes CO ₂ e	1,123,536.20	1,175,060.15	1,272,977.98	1,387,096.90
	Energy Reduction	Tonnes CO ₂ e	N/A	N/A	4,357.98	25,967.91
305-3 (a)	Other Indirect (Scope 3) GHG emissions	Tonnes CO ₂ e	N/A	N/A	N/A	1,274,754.60
	Purchased goods and services	Tonnes CO ₂ e	N/A	N/A	N/A	231,528.50
	Upstream transportation and distribution	Tonnes CO ₂ e	N/A	N/A	N/A	90,128.25
	Waste generated in operations	Tonnes CO ₂ e	N/A	N/A	N/A	192,510.20
	• Business travel	Tonnes CO ₂ e	N/A	N/A	N/A	2,588.75
	Employee commuting	Tonnes CO ₂ e	N/A	N/A	N/A	2,934.80
	Processing of sold products	Tonnes CO ₂ e	N/A	N/A	N/A	741,535.40
	• End-of-life treatment of sold products	Tonnes CO ₂ e	N/A	N/A	N/A	13,528.70
305-4 (a)	GHG Emissions Intensity	Tonnes CO ₂ e per million THB of revenue	2.50	2.42	2.44	2.45
	Total Waste Generated	Tonnes	21,720.63	28,153.96	114,047.21	735,710.89
306-2 (a)	Hazardous Waste	Tonnes	21.34	29.02	30.93	21,448.74
	Recycling	Tonnes	0.04	2.25	1.94	16,943.75
	• Recovery, including energy recovery	Tonnes	N/A	N/A	N/A	457.00
	Incineration (mass burn)	Tonnes	18.01	23.76	26.54	2,680.54
	• Landfill	Tonnes	3.29	3.01	2.45	1,367.45
306-2 (b)	Non – Hazardous Waste	Tonnes	21,699.29	28,124.94	114,016.28	714,262.15
	Recycling	Tonnes	31.16	32.76	81,394.03	561,302.84
	Composting	Tonnes	2,021.71	5,115.01	6,103.60	9,757.64
	 Incineration (mass burn) 	Tonnes	1,193.51	1,651.77	1,955.43	1,778.93
	• Landfill	Tonnes	18,452.91	21,325.40	24,563.22	141,422.74
	Total waste that has been utilized	Tonnes	2,052.91	5,150.02	87,449.57	588,461.23
	Total waste disposal	Tonnes	19,667.72	23,003.94	26,547.64	147,249.66
	The ratio of waste that has been utilized per total waste generated		0.09	0.18	0.77	0.80

Note

- N/A = Not Available
- Sustainability performance reporting is made in accordance to the reporting framework of the GRI Standard, version 2016 (2018 revision)
- Energy consumption (Gigajoules) is the multiple of fuel volume and the conversion factor of each fuel type (referencing the Department of Alternative Energy Development and Efficiency : DEDE)
- Total energy consumption within the organization is the sum of all consumed of non-renewable energy, renewable energy and electricity purchased externally
- Energy intensity is total energy consumption per million THB of revenue Total water withdrawal is the sum of all usage of municipal water supply (referencing average prices of the Metropolitan Water Authority and Provincial Waterworks Authority of each locations) and groundwater (referencing Department of Groundwater Resources)
- Total water withdrawal from water stress areas covers municipal water supply and groundwater, and has been assessed with the Aqueduct Water Risk Atlas of the Water Resources Institute (WRI)
- Water intensity covers municipal water supply and groundwater volumes per million THB of revenue

- Greenhouse gas emission is the multiple of information on activities that release greenhouse gases ("Activity Data") and the Emission Factor (referencing the Thailand Greenhouse Gas Emission Management Organization, and is reported as Global Warming Potential (GWP) following guidelines of the Intergovernmental Panel on Climate Change (IPCC)
- Direct greenhouse gas emissions (Scope 1) covers all greenhouse gas emission volumes from methane form waste water treatment, mobile combustion, and biogenic carbon dioxide emission
- Energy indirect greenhouse gas emissions (Scope 2) covers all greenhouse gas emission volumes from energy consumption of electricity purchased externally to the organization
- Other indirect greenhouse gas emissions (Scope 3) includes other greenhouse gas emission volumes that operations outside of the organization's management
- Greenhouse gas emissions reduction volume covers renewable energy consumption and reduction of plastic bag usage
- Greenhouse gas emissions intensity covers all direct and energy indirect greenhouse gas emission volumes per million THB of revenue
- Total waste generated volume is the sum of hazardous waste and non-hazardous waste. In 2019, the data collection scope expanded to include other product of distribution centers, including oil-contaminated containers and cargo crates, and was improved to increase data accuracy