Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

CP ALL (Public Company Limited) and its Subsidiaries - "CP ALL" is unique in being part of the distribution channels for products and services to consumers, as well as being a bridge connecting the upstream, midstream, and downstream supply chains. CP ALL has generated 852,605 million THB revenue as of 31 December 2022 with the market cap of 613,096.67 million THB. Our core business reported here in CDP Climate Change 2023 includes retail, wholesale and food manufacturing as follows.

Convenient Store Service
7-Eleven is a one-stop convenient store that offers fresh, ready-to-eat meals, beverages and a wide variety of products. Over the past decades, the Company has managed its convenience stores through its network scattered in different areas, namely, residential areas, offices, academic zones and gas stations, covering every province across the country. In 2022, CP ALL has reached a total of 13,838 stores. In 2022, 7-Eleven contributed 42% revenue of the CP ALL.

Wholesale services & Retailing
The revenue propotion from Wholesale services & Retailing is around 52% of CP ALL revenue. Siam Makro Public Company Limited is the operator of membership based Cash and Carry Trade Centers, registered under the name of "Makro," distributing consumer products to customers nationwide. Target customers include small and medium-sized enterprises, namely, retailers, HORECA, institutions and business service providers.
Siam Makro's retailing business is managed by Lotus's, a leading retailer with multiple distribution channels. Lotus's retail business advantage lies in its strong domestic supply chain, distribution system, logistics network, and brand equity. Main products include fresh food, consumer and general goods, liquor and tobacco, and clothing. It sells these products under various domestic and international brands, including brands from small and medium enterprises (SMEs) and under Lotus's own private label. Lotus's retail customers vary in age, income, and household sizes.

Food, bakery, and ready-to-eat meals services

CPRAM Co., Ltd. manufactures and distributes over 900 SKUs of food, bakeries, and “Ready-to Eat” menu items through 7-Eleven stores, supermarkets, restaurants and leading stores more than 20,000 stores throughout the country and exported oversea around the world.

Apart from these 3 business units, CP ALL also has offered financial services (cash card and payment service), education services (secondary school, vocational school and higher education institution and training provider), information services, marketing media services and logistics management services. These minor services are, nonetheless, not included in the scope of reporting.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

3 years

Select the number of past reporting years you will be providing Scope 2 emissions data for

3 years

Select the number of past reporting years you will be providing Scope 3 emissions data for

3 years

C0.3

(C0.3) Select the countries/areas in which you operate.

Thailand

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

THB

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	CPALL.BK
Yes, an ISIN code	TH0737010Y08
Yes, an ISIN code	TH0737010Y16
Yes, an ISIN code	TH0737010R15

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	The highest responsibility regarding climate change on the Board-level of CP ALL belongs to the Sustainability and Corporate Governance Committee. Chaired by an independent director, the Committee takes climate-related roles and responsibilities according to its charter as follows; 1) Frame policy and guideline on promoting innovation, environmental social responsibility (including climate change topic), and sustainable development plan, 2) Oversee and ensure that the

	Company's Board of Directors and executives act in full compliance with the established sustainability policy as well as review and assess the result, 3) Report the results of the various activities undertaken, the results of the assessment of the compliance and the key issues relating to environmental social responsibility, and sustainable management to the Board of Directors at least twice a year, 4) Oversee, ensure and monitor the progress of the activities of the various Sub-Committees established by the Sustainability and Corporate Governance Committee (e.g. Sustainable Development Sub-Committee), and give recommendations and support as necessary. The Sustainability and Corporate Governance Committee has a direct supervision over climate-related policy, strategy, action plan, risk and opportunity management through Sustainable Development Sub-Committee, 5) Coordinate with various sub-committees and working groups in considering issues related to environmental social responsibility, and sustainable management and give recommendations as necessary, 6) Encourage and support the Company to communicate with Directors, executives, employees at all levels and related parties in an adequate and continuous manner, so that they will all be fully aware of and understand sustainability policy, and related guidelines, 7) Oversee the completion of sustainability report and getting approval from the Board of Director prior to public disclosure. One of the most remarkable climate-related decision made in 2020 by the Committee was the endorsement of Net Zero Carbon 2030 as part of 7 Go Green Strategy. In 2021, CPALL also issued a commitment letter to set a net zero target, including a long term science-based target. CPALL is also committed to be part of the Business Ambition towards 1.5 degree campaign and join the Race to Zero campaign.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing and guiding employee incentives Reviewing and guiding strategy	Sustainability and Corporate Governance Committee is chaired by an independent director from the Board of Director. The Committee members include the Chairman of Audit committee, the Chairman of Remuneration and Nomination Committee and a member of Executive Committee. Quarterly meetings are scheduled for the Committee in order update and discuss on sustainability performance including climate change topic and report to the Board of Director at least twice a year. As an annual process, the Committee reviewing and guiding annual budgets overseeing major capital expensitures, guiding employee incentives,

	Overseeing and guiding the development of a transition plan Overseeing and guiding public policy engagement Reviewing and guiding the risk management process	reviewing and guideline climate stretegy, overseeing and guiding the development of a transition plan, overseeing and guiding public policy engagement and reviewing and guiding the risk management process related to Climate issues. The Committee is supported by the Sustainable Development Sub-Committee where the progress against climate action plans and environmental performances are monitored continuously and reported to the Committee at least semi-annually. In this manner, CP ALL's climate-related issues are overseen and controlled by our board-level committee who has competencies and supervisory power in different areas.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	CP ALL assess climate change competency of director based on their experience related to climate change issue. CPALL's director is competence in Climate-related issue as he has experience overseeing sustainability and climate of multiple listed company as director. In addition, he is also a chairman of Global Compact Network Thailand which is a local network for United Nation Global Compact in Thailand.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Providing climate-related employee incentives

Other, please specify

Public policy engagement to drive the nation's climate agenda

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Chief Executive Officer (CEO) is responsibility for managing annual budgets for climate mitigation activities and also managing major capital and/or operational expenditures related to low-carbon products or services (including R&D). Overall management of CEO is reported to board directly as the quarterly to discuss and track the climate-related responsibilities of CEO. This is to ensure the management of CEO is aligned with organization's climate commitments and/or climate transition plan.

Position or committee

Other C-Suite Officer, please specify

Managing Director

Climate-related responsibilities of this position

Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Managing director is responsible for monitoring progress against climate-related corporate targets, managing public policy engagement on climate-realted issues and managing climate-related risks and opportunities. The managing director also oversights the SVP, Corporate Asset and Facilities Management (CAF-M) who resonsponsible for driving innovative energy management at stores and increasing proportion of renewable energy in energy protfolio and lead energy conservation committee. The commitee manages energy reduction and efficiency performance of organization. Managing director supervises Assistant Vice President, Social and Environbmental Management who responsible for driving innovative GHG emission management and lead 7 Go

Green committee. The committee manages the implementation of organization’s climate commitments which is "Carbon Neutral by 2030 and Net Zero GHG Emissions by 2050".

Position or committee

Sustainability committee

Climate-related responsibilities of this position

Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Assessing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Sustainable Development Sub-Committee as an important mechanism in driving processes and ensuring that executives and employees of the Company and its subsidiaries correctly and completely understand and earnestly practice business ethics and sustainable development of the organization. This is considered part of the Company’s organizational culture that the top management has established as the corporate governance observance that is one of the organization’s strategies and objectives. Both sub-committees must report to the Sustainability and Corporate Governance Committee every quarter.

Responsibilities of the Sub-Committee include;
1) Reviewing policies, strategies, action plans and KPIs in environmental management including climate change. The results are reported to the Committee for approval annually.
2) Evaluating emerging trends, climate risks and opportunities that could potentially affect business.
3) Ensuring the alignment of business operation with sustainability policies, strategies, action plans and KPIs including elements related to climate change.
4) Promoting understanding and providing recognition for employees of all levels to enable effective realization of the sustainability policies and guidelines.
5) Monitoring progress and performance on sustainability topics including climate change.

Furthermore, Corporate Sustainability Management Division whose roles encompass environmental management acts as a focal point in coordinating with relevant functions to monitor climate-related topics, at monthly to yearly interval depending on the nature of topics. The results are reported to the Committee at least semi-annually. Additionally, climate-related data will be consolidated annually and presented to the Sustainability and Corporate Governance Committee for reviewing as part of sustainability reporting process.
The involvement of top managements across the entire organization in this Sub-Committee makes it a robust platform to exchange information, discuss key climate topics, form mutual commitments, and collaborate towards the goals.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure
Salary increase

Performance indicator(s)

Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

CEO is entitled to monetary incentive from climate change management because climate change performance (i.e. GHG emission) is a part of the internal Corporate Sustainability Score (derived from S&P Global Corporate Sustainability Assessment score - also known as DJSI). This score is one of our CEO's KPIs and Corporate KPIs on Sustainability.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Overall sustainability program's performance including the climate performance (Dow Jones Sustainability Index (DJSI) scores) is one of the CEO's KPIs. KPIs are monitored on yearly basis and affected to bonus of Chief Executive Officer (CEO). This is an incentive which contributed to the implementation of CPALL climate commitments. CPAll commits to achieve Carbon Neutral by 2030 and Net Zero GHG Emissions by 2050. We have tracked and recorded our performances against our commitments every year. The incentivized KPI is set to ensure that, the management well manages on the climate-related issues of the organization.

Entitled to incentive

Executive officer

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure
Salary increase

Performance indicator(s)

Energy efficiency improvement
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Senior Vice President - Corporate Asset and Facilities Management (CAF-M) is entitled to monetary incentive from energy efficiency management. His KPI is directly tied with overall facilities' store energy reduction. The SVP is also responsible for driving innovative energy management at stores and increasing proportion of renewable energy in energy portfolio. Besides, the SVP also leads energy conservation committee whose KPIs are tied with "energy reduction and efficiency performance" cascaded from the Corporate KPIs on Sustainability. Overall facility store energy reduction is weighted 10% for Senior Vice President of Corporate Asset and Facilities Management department. Moreover, energy reduction and efficiency performance are also the KPIs of our Energy Conservation Committee. The target and goal have been cascaded and collaborated with other functions i.e. purchasing department and operation department.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Energy efficiency management is part of the Senior Vice President - Corporate Asset and Facilities Management (CAF-M) KPI. In case CP ALL manage well on efficient energy consumption. This affects to reduce GHG emission of the organization. His KPIs are monitored on yearly basis and affected to bonus. This is an incentive which

contributed to the implementation of CP ALL climate commitments. CP ALL commits to achieve Carbon Neutral by 2030 and Net Zero GHG Emissions by 2050. We have tracked and recorded our performances against our commitments every year.

Entitled to incentive

Executive officer

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure
Salary increase

Performance indicator(s)

Achievement of a climate-related target
Reduction in absolute emissions
Increased share of low-carbon energy in total energy consumption
Increased share of renewable energy in total energy consumption
Increased investment in low-carbon R&D
Increased share of revenue from low-carbon products or services in product or service portfolio
Increased engagement with suppliers on climate-related issues
Increased engagement with customers on climate-related issues
Increased supplier compliance with a climate-related requirement

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Assistant Vice President, Social and Environmental Management is entitled to monetary incentive from GHG emissions reduction. His KPI is directly tied with overall GHG emissions reduction and Promote Green product with 40% weight. The AVP is also responsible for driving innovative GHG emission management. The AVP also leads 7 Go Green committee whose KPIs are tied with “Carbon Neutral by 2030 and Net Zero GHG Emissions by 2050” cascaded from the Corporate Sustainability KPIs. Overall facility GHG emissions and Promote Green product is weighted 40% for Assistant Vice President of Social and Environmental Management department. Moreover, GHG emissions and Promote Green product performance are also the KPIs of our 7 Go Green Committee. The target and goal have been cascaded and collaborated with other functions i.e. purchasing department and operation department.

Explain how this incentive contributes to the implementation of your organization’s climate commitments and/or climate transition plan

Climate change performance (e.g GHG emission) is a part of the internal Corporate Sustainability Score. This score related to Corporate KPIs on Sustainability. KPIs are monitored on yearly basis and affected to bonus of the organization. This is an incentive

which contributed to the implementation of CP ALL climate commitments. CP ALL commits to achieve Carbon Neutral by 2030 and Net Zero GHG Emissions by 2050. We have tracked and recorded our performances against our commitments every year.

Entitled to incentive

Business unit manager

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure
Salary increase

Performance indicator(s)

Achievement of a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Energy efficiency improvement
Reduction in total energy consumption
Increased investment in low-carbon R&D
Increased share of revenue from low-carbon products or services in product or service portfolio
Increased engagement with suppliers on climate-related issues
Increased engagement with customers on climate-related issues
Increased supplier compliance with a climate-related requirement

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

1.Business Unit Managers are entitled to monetary incentive from energy reduction and efficiency performance. Their KPIs i.e. energy reduction and efficiency performance are cascaded from the Corporate Sustainability KPIs. Furthermore, Business Unit Managers who take part in Energy Conservation Committee also have the KPI directly tied with Corporate Sustainability Score (derived from DJSI score). Achievement of individual KPIs on “energy reduction and efficiency performance” will contribute to the incentives of Business Unit Managers. Furthermore, if the energy reduction and efficiency performance targets are achieved, members of the Energy Conservation Committee will also be rewarded with monetary incentive.

2.Business Unit Managers are entitled to monetary incentive from GHG emissions reduction performance. Their KPIs i.e. GHG emissions reduction performance are cascaded from the Corporate Sustainability KPIs. Furthermore, Business Unit Managers who take part in 7 Go Green Committee also have the KPI directly tied with Corporate Sustainability Score (derived from DJSI score). Achievement of individual KPIs on “GHG emissions reduction performance” will contribute to the incentives of Business Unit

Managers. Furthermore, if the GHG emissions reduction performance targets are achieved, members of the 7 Go Green Committee will also be rewarded with monetary incentive.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Incentivize KPIs for Business Unit Managers are set to ensure their operational managements aligned with CP ALL commits to achieve Carbon Neutral by 2030 and Net Zero GHG Emissions by 2050. They directly connect with employees at all levels. The Business Unit Managers such as CPALL's Head of Corporate Sustainability Management Division and other related divisions directly oversight the implementation of employee awareness campaign or training program on climate-related issues. In case all of employees aware the climate-related issues, this can accelerate the climate transition plan to achieve and in line with the setting timeframe. The initiative campaigns and programs such as reducing, stopping, sorting post consumption plastic packaging, reduction of single-use plastics, reducing paper usage, increasing energy reduction and efficiency etc. Through this end, the greenhouse gas emission can be reduced within the setting timeframe.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	The length of period considered as short-term is aligning with corporate risk management procedure.
Medium-term	3	7	The length of period considered as medium-term is aligning with corporate risk management procedure. This time horizon align with our target of carbon neutrality within 2030
Long-term	7	30	The longest time horizon considered in CP ALL's Climate Scenario Analysis is up to approximately years 30 years (in 2050). This is reflected by our target on carbon neutrality within 2030 and net zero greenhouse gas emission within 2050 which is beyond Thailand's Nationally Determined Contribution (NDC), which aims to achieve 30% greenhouse gas emissions reduction by 2030 compared to BAU.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

i) A definition of 'substantive financial or strategic impact

CP ALL defines substantive financial and strategic impact when assessing the climate-related risks and opportunities as those impacts resulted from climate change that cause a significant operational disruption, financial loss, reputational damage, loss of employee wellbeing and trusts, as well as, legal violation (and the opposite in terms of opportunities)

ii) A description of the quantifiable indicator(s) used to define substantive financial or strategic impact

The indicators used by CP ALL to classify whether a certain climate-related risk are substantive are for example;

- Leading to financial impact of 1% of revenue in that period (approx. 8,526.05 million THB in 2022 from total revenue 852,605 million THB) or more
- Affecting over 10% of business operation disruption
- Incurring long-term reputational damage in media channels
- Causing mass health and safety incidents or fatalities
- Resulting in lawsuit which affects over 10% of business operation
- Affecting employee and management turnover

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

i. Process used to determine which risks and opportunities could have a substantive financial or strategic impact : The process to identify climate risks and opportunities that could have substantive financial or strategic impacts at CP ALL is carried out in Bottom-up and Top-down approach. In a bottom-up approach, Risk champions, who are representatives of each business unit and support function, are in charge of identifying climate-related risk issues related to their direct operations as well as upstream and downstream, mainly in the short to medium term. Subsequently, the impact and likelihood of individual risk topics are evaluated based on established risk criteria. Risk champions convene quarterly to discuss key risks together and assess if there are any potential to cause significant financial or strategic impact. Changes in risk status from the previous period are also updated. For risks with substantive financial or strategic impact, key risk indicators (KRI) will be specified to monitor early warning signals and establish response plans. The situation and results of risk management are reported quarterly to the Risk Management Committee and semi-annually to the Audit Committee. In addition, relevant climate-related opportunities covering own operations, upstream and downstream of the value chain are identified, assessed and managed internally for each function. The results are reported to the sustainability working group as part of the annual sustainability reporting. In the top-down approach, the Sustainability Sub-committee are in charge of identifying and assessing current and emerging climate-related risks and opportunities (covering short-term, medium-term, and long-term). Risks and opportunities with significant financial or strategic influence are supervised and managed by corresponding senior management. The management status and results are reported to the Audit Committee and the Sustainability and Corporate Governance Committee semi-annually.
ii. Case studies of the process :

Case study of climate-related physical risk
According to the projection of increasing rainfall in Thailand as a result of climate change, Risks champion of CP ALL recognized the high impact of severe flood likely to occur in the future, thus, formulated and deployed flood response plan based on a lesson learned from a catastrophic flood event in 2011. The stores in flood-prone areas were identified and renovated into “Flood resistant stores” with well-established pre-, during and post- incident response plan. Additionally, sea level rise is also another emerging issue that causes saline tap water and could potentially threaten agricultural areas causing supply shortage for critical products of CP ALL resulting in revenue loss. Initial assessment of financial impact was conducted with mitigation measures in the process of development and implementation. The management of flood risk and sea level rise are identified from the bottom-up approach and managed closely by Corporate Asset and Facility Management function (CAF-M) and Business Development function.

Case study of climate-related transitional risk
In response to increasingly stringent climate policies and regulations such as Nationally Determined Contribution (NDC), building energy efficiency, plastic waste and refrigerant, CP ALL closely monitors transitional risk from regulatory change in various topics that might have a significant impact on our operation. Some have come into effect, for instance, Roadmap on plastic waste management and Building Energy Code B.E. 2552 (2009), while others are yet to be legislated but could potentially cause substantive

impact such as refrigerant banning and National Climate Change Act. Such transition risks are monitored centrally by Sustainable Development Sub-Committee as well as the business units with direct responsibility. CP ALL proactively responded to these current and future regulations through various activities i.e. organization carbon footprint monitoring, single-use plastic bag reduction campaign, green building design and refrigerant replacement. Recently, CP ALL has announced its target to r be Carbon Neutral by 2030 and be Net Zero in GHG emission by 2050 and intends to cooperate and control the rising global temperatures to be within 1.5 degrees Celsius in accordance with the GHG reduction targets under the Paris Agreement. CPALL also issue a letter of commitment to set a net zero target including long-term science based target and be part of the Race to Zero campaign. This is one of the most strategic decision made to inspire climate action in Thailand and to demonstrate climate leadership internationally.

Case study of climate-related opportunities
As Thailand is located in the region with high solar irradiance, solar energy presents as major opportunities for CP ALL. To illustrate this, an opportunity to save cost and reduce GHG emission using solar PV was recognized by Corporate Asset and Facilities Management Function (CAF-M) since 2014. CP ALL continuously tracked the advancement in technical efficiency as well as cost-benefit ratio, and payback period. Once the feasibility threshold was reached in 2017, we commenced the installation of solar PV in distribution centers and stores across country. The company continuously develops energy efficiency and environmentally friendly management through the 7 Go Green strategy in addition to increasing renewable energy consumption proportions for business activities. In 2022, CPALL continuously promotes electricity generation projects from solar energy via installed Solar PV Rooftops. This can generate electricity around 130,141.3 MWh, equivalent to approximately 57,912.9 tCO2e saving/year and save 309,610,649.45 THB/year.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	CP ALL always considers current regulations when assessing climate-related risks. One of our considerations is the escalation of is the recently announced Roadmap on Plastic Waste Management 2018-2030. Driven by the problem of plastic pollution and the environmental concerns on fossil-based resources, the roadmap outlines the phase-out of various plastic items used by CP ALL by 2022, namely plastic bags, straws and cups. The use of alternative materials is expected to increase our costs in the short term. Another specific regulation is the Building Energy Code B.E. 2552 (2009), which requires large buildings to comply with energy standards. These risks are flagged from top-down and bottom-up risk assessments and classified as transitional

		regulatory risks, which are monitored and managed by the Corporate Legal and Compliance Unit.
Emerging regulation	Relevant, always included	CP ALL always considers emerging regulations in climate-related risk assessment, even if they have not yet been implemented. Since 2016, Thailand have pledged to reduce the greenhouse gas emissions of BAU-level projects by 30% by 2030. Moreover, in COP 26, the Thai Government also pledged to be carbon neutral by 2050 and net zero by 2065 with a potential to escalate the NDC up to 40% compared to BAU. We also observe that the National Climate Change Act is soon to be legislated requiring private companies to report GHG emission data upon request. Furthermore, Thai Greenhouse Gas Management Organization (Public Organization) or "TGO" is collaborating with multiple industries to determine baseline emissions and evaluate opportunities for implementing carbon control measures, namely emission cap and trade. Carbon tax are also under investigation. Although Thailand's climate regulatory regime is not yet clear, CP ALL expected that the cap and trade emission reduction scheme will be introduced within the next 5-10 years. As this regulation has an impact on fuel prices, this may affect the cost structure of our operations and supply chain. For instance, other regulations under consideration include the replacement of the ozone-depleting refrigerant R410a, control of transport caused by PM2.5, and taxes on plastic. CP ALL identifies these risks through a top-down and bottom-up approach, and classifies them as transitional regulatory risks, which are monitored and managed by the company's legal and compliance department. In addition, the Sustainability Promotion Department acts as a technical expert to provide risk-related data for preparation.
Technology	Relevant, always included	CP ALL always takes into account technological implications in climate risk assessments. A shift in consumer preference towards greener products will require new technologies and infrastructure investments to develop such products such as plant-based products, meat substitutes, plastic substitutes. As experienced by CP ALL, technological advancements for in refrigerating system could potentially lead to the lack of spare parts, driving CPALL to change the refrigerant to the ones with lower Global Warming Potential (GWP). In addition, technology can be the determining factor in policies that could lead to the early phase-out of our assets, such as the HVAC and refrigerating systems. CP ALL identified these risks through both the top-down approach of the Information and Technology Committee and the bottom-up approach of the Product Development and Quality Assurance and Management departments.
Legal	Relevant, always included	CP ALL always considers legal implications in climate-related risk assessments. However, we regard that litigations directly related to climate change might not come into effect in the close future. Nonetheless, as physical impacts from climate intensify, cases related

		to breaching of contracts by our suppliers may increase due to supply and labor shortages which affect products and services delivery. CP ALL identified these risks through both top-down and bottom-up approach and classified them as the transitional legal risk which was monitored and managed by Corporate Legal and Compliance Unit.
Market	Relevant, always included	CP ALL always considers potential market shifts in climate-related risk assessments. The growing portion of green consumers such as plant-based food or meat substitutes which are healthy and environmental-friendly, can lead to a market opportunity loss for CP ALL if we cannot properly deliver environmentally friendly products in response to the growing demand. Furthermore, low-waste packaging trend stemmed from Roadmap on Plastic Waste Management 2018-2030 and burgeoning Circular Economy concept is receiving high interest among consumers necessitating the change in product design. These may have implications on the increased investment cost to develop new products. CP ALL identified these risks through both top-down and bottom-up approach and classified them as as the transitional market risk which was monitored and managed by Corporate Marketing Division and Product Development and Quality Assurance Division.
Reputation	Relevant, always included	CP ALL always takes into account reputational impact in climate risk assessments. The anti-plastic movement and failure to meet our climate commitments could jeopardize our reputation as the largest convenience store chain and wholesaler in Thailand with high expectations on sustainability. In addition, being inactive or not fully active on climate change can also negatively affect the value of the CP ALL brand. CP ALL has identified these risks through a top-down and bottom-up approach and classifies them as transformational risks managed by Corporate Communications, Reputation Management Division as well as Corporate Sustainability Management Division
Acute physical	Relevant, always included	CP ALL always takes the acute physical impact into account in its climate risk assessment. As Thailand is located in the tropical monsoon region, flooding is one of our biggest concerns as it causes business disruption due to logistical barriers, production shutdowns and difficult transportation of employees. In addition, it also leads to loss of revenue due to absenteeism, incurring repair costs and higher insurance premium claims. In addition, extreme weather and unusual weather also cause employees to take a lot of sick leave as well as other physical and mental health problems (such as heatstroke, colds, fever, dengue fever, depression), affect productivity. Periodic droughts can lead to product shortages from suppliers that depend on local water consumption. CP ALL has identified these risks through bottom-up and top-down approaches and classifies them as acute physical risks supervised and managed by the risk management committee with the assistance of risk managers in different business units.

Chronic physical	Relevant, always included	CP ALL systematically takes chronic physical variability into account in climate risk assessments. Among many, sea level rise is a slow progressing process that begins to affect our operation. The increase in average temperature and the number of hot days can also affect the electricity consumption in air conditioning and cold logistics systems. In addition, changes in rainfall and extreme variability in weather conditions can also trigger insect outbreaks or crop pest diseases that affect agricultural supply chains. Rising ambient temperatures can also affect the health of employees, as hot work environments affect their productivity. CP ALL has identified these risks using a bottom-up approach and classifies them as chronic physical risks which are overseen primarily by the Risk Management Committee with the assistance of local Risk Champions.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Flood (coastal, fluvial, pluvial, groundwater)

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

As Thailand is one of the most exposed regions to the climate physical impacts, flooding as a result of heavy rainfall could affect CP ALL in many ways. Flooding can disrupt the operation of our store in flood-prone areas such as the central plain of Thailand i.e. Bangkok, Samutprakarn, Nonthaburi, Pathum thani, Saraburi, Nakhonpathom, Samutsakorn, Chachoengsao, and Prachinburi provinces. Based on 2011 Thailand flood which was among the most notable major flood events, our stores in 836 locations were inundated or cut off from transportation route resulted in revenue loss from the

store shutdown, absence of customers, logistic disruption and property damage. With rising global temperature, the intensity and frequency of flooding might be escalated. CP ALL anticipates and prepares for large-scale flooding once every decade and more frequent episodes of small scale flooding in some locations.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

120,985,888,845.64

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Loss in revenues from operational disruption and insurance claim are the main considerations in financial impact estimation. The reported figure is calculated based on the sales lost from stores affected by the Flood in 2011 (54,745 million THB from 836 stores) and insurance claims from such event (310 million THB), extrapolated with the current number of stores (13,838 stores) in flood risk areas in 2022 (121% growth). This results in 120,985,888,845.64 THB.

Cost of response to risk

1,045,440,000

Description of response and explanation of cost calculation

To minimize damage in the future, Flood Response Plan was developed and deployed across the country. The plan consists of renovating of physical facilities (Water-resilient store) under this concept, various aspects were considered, such as high walls, floor designs, doors that can hold against the force of water, piping system and pumps as well as establishing an operational guidance for personnel on how to prepare and respond before, during and after flood events. Flood insurance was also applied to cover expenses and opportunity losses from the disaster. The reported cost of response was estimated from the average store renovation cost to become Water-resilient store (approx. 165,000 THB/store) across 6,336 locations that are in flood-prone areas.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased direct costs

Company-specific description

The growing concerns on climate action failure drive the governments and international regulators to raise the regulatory standards to lower GHG emissions within the increasingly pressing timeline in order to keep the world temperature well below 2 degree Celsius. Thailand is no exception. The Nationally Determined Contributions (NDC) of Thailand aims to reduce 30% of GHG by 2030 compared to BAU, to be carbon neutral by 2050 and net zero by 2065. CP ALL foresees that such commitment may lead to various GHG reduction measures from the government including energy and emission regulations. Yet, it is still uncertain how and to what extent future regulations might affect our business. Nonetheless, we recently began to observe the effect of regulatory changes such as the amendment of Building Energy Code B.E. 2552 (2009) which requires certain types of large buildings e.g. offices, department stores, to comply with energy standards. The upcoming National Climate Change Act also requires private sector to report its emission data. The Department of Industrial Works are steering towards low GWP refrigerants. The other areas that could potentially be affected by future legislation and regulation are i.e. transportation, waste management, etc. We also anticipate the implementation of carbon cap and trade or carbon tax in the next 5-10 years. If not managed properly, these may lead to increased cost of compliance and more exposure to environmental law violations.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4,987,380,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Based on our transitional scenario analysis, we quantify the amount of emission surplus that needs to be offset in order to comply with NDC. When we deducted the emission in Business As Usual (BAU) scenario with NDC Scenario, the cumulative surplus emission from 2026-2030 is 3,460,640 tCO2e. With Voluntary Emission Reduction (VER) carbon offset price at 1,639 THB/tCO2e, the financial impact for carbon offset is 4,987.38 million THB.

Cost of response to risk

1,918,176,253

Description of response and explanation of cost calculation

To avoid high cost of carbon offset, CP ALL invested in Energy Efficiency Project and Refrigerant System Improvement Project with a total of 1,918,176,253 THB. CP ALL also seeks to expand renewable energy in collaboration with our electricity supplier with no investment cost which will contribute to our emission reduction.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Sea level rise

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

As the central plain of Thailand, where the majority of our stores are located, is vulnerable to the sea level rise, CP ALL is aware of the risk that this might lead to increasing salinity in tap water as it began to occur during the past few years. While the cause is an interplay between the sea level rise, storm surge and the mass of riverine water, slowly intensifying irregularities of climate condition is likely to increase the frequency and severity of saline tap water. Impacts to our operation include; the loss of sales on fresh-made drinkable products and beverages due to poor water quality, the

need to procure fresh water and drinking water from other areas, the increased maintenance cost on water filtration. Other impacts in supply chain concern the productivity of agricultural products in the central area that may become scarce leading to high sourcing cost.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

1,000,000,000

Potential financial impact figure – maximum (currency)

1,500,000,000

Explanation of financial impact figure

Loss of sale opportunities for product groups necessitating good quality of water, such as All Café freshly made beverage, 7-Select beverage machine, and Slurpee. In the event that products and services cannot be sold for 7 days, the cost of providing clean water for consumption will increase. Such cost is estimated in the range of Baht 1,000 – 1,500 million.

Cost of response to risk

0

Description of response and explanation of cost calculation

To adapt to this impact, CP ALL is under process of adding sea level rise impact in store selection criteria. Operationally, we plan to increase water filtration capacity to accommodate short-term increase in salinity and secure our sales. Furthermore, a collaboration with fresh water supplier is needed to ensure stable supply during the time in need. Alternative sources of agricultural products are to be prepared to avoid product shortage. The management cost is considered negligible (0 THB) since these are the general responsibility of our existing team.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased direct costs

Company-specific description

Emerging public awareness and concerns on plastic pollution has been endorsed by the government reflected by Thailand's Roadmap on Plastic Waste Management 2018-2030. Announced in 2019, the roadmap addresses plastic waste pollution which has implications on GHG emission and fossil-based resource use. Three types of plastic including plastic cap seals in water bottles, oxo-degradable plastics, and plastic microbeads has been banned in 2019 and four other types of plastic including plastic bags with less than 36 microns thickness, styrofoam food boxes, plastic straws, and single-use plastic cups will be banned in the near future. Moreover, it aims that 100 percent of plastic waste will be recycled by 2027. In short term, this could lead to a high transition cost to using sustainable substitute materials for plastic items in use as packaging or given-away at CP ALL i.e. bags, cutleries, straws and plastic containers. Furthermore, pandemic outbreak like COVID-19 will raise hygiene concerns among customers and increase the demands on plastic containers and cutlery. These impacts are likely to increase the direct cost for CP ALL.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

215,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Short-term increase in substitute material cost is the main consideration in financial impact estimation. The reported financial impact is based on the additional cost of bio-plastic bag that is used as a replacement for single use plastic bag with increased durability, reusability and recyclability. The additional cost of bio-plastic bag with increased thickness was multiplied by the projected usage of plastic bag across the country, The single use plastic bags with less than 36 microns thickness will be banned.

Cost of response to risk

460,000

Description of response and explanation of cost calculation

CP ALL values customer's health and safety as our priority while following the environmental regulations and seeking to save the environment beyond legal requirements as much as possible. Therefore, CP ALL strictly abides by Ministry of Health recommendations on customer hygiene by providing consumable items where necessary while engaging with suppliers to replace plastic with other alternative materials which are good for the environment and can be mass produced at low cost. Furthermore, CP ALL continuously executes campaigns on single use plastic reduction to raise awareness and encourage customers to lower their environmental impact. The reported cost of response to risk is estimated based on annual budget for public communication on plastic reduction campaign (460,000 THB). The supplier engagement cost is considered none since it is part of regular internal process on product development.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Shift toward decentralized energy generation

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

CP ALL aims to become carbon neutral by 2030 and net zero by 2050. To realize such ambitious target, renewable energy sourcing is our significant contributing area that needs to be realized, especially electricity from solar PV. The technological advancement of solar PV's efficiency nowadays not only helps CP ALL reducing energy cost but also provides benefits by being a back-up electrical supply in case of grid failure and contributing to the positive environmental awareness of CP ALL. This opportunity has been seized for all 3 business units of CP ALL including 7-Eleven, CPRAM and Makro.

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

309,610,649.45

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Energy cost saving is the main financial benefit received from shifting toward decentralized renewable energy generation. The reported financial impact is estimated based on the difference in electricity cost between traditional grid provider and on-site solar PV generation, multiplied by electricity consumption over 25 years lifetime. Based on the implementation in 2022, it generated 46,994.17 MWh/year and save 309,610,649.45 THB/year. Moreover, this will lead to Scope 2 GHG saving of approximately 57,912.90 tCO2e/year which puts CP ALL closer to achieving the emission target.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

The success of this target is tied with our executive's compensation. The cost to realize opportunity is considered none (0 THB) due to the partnership model of this initiative which requires no investment cost on solar rooftop from CP ALL.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Move to more efficient buildings

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

As the majority of CP ALL's GHG emission is from Scope 2 (around 99%) accounted by electricity consumption, improving energy efficiency on our facilities has direct benefits on lower electricity use, which translates into lower cost of energy and GHG emission. Proactively moving towards energy efficient building also keeps CP ALL secured from energy and GHG regulations and legislations that may arise in the future. Furthermore, it also provides positive impression to customers when they visited our flagship stores. This opportunity is available for 7-Eleven stores and Makro branches across country.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

768,706,015

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Energy cost saving is the main financial benefit received from moving toward more efficient buildings. The impact figure is estimated from the sum of annual electricity saving (kWh) from all initiatives in 'Green Store' and 'Green Logistic' sub-strategy multiplied by cost of electricity per unit (THB/kWh) in 2022, resulted in 768,706,015 THB. Such initiatives are, for example, Efficiency improvement of cooling coils for large cooling vaults project, Inverter Air Conditioner Project, LED Light Bulb Project and In-Store Climate Monitoring Project. The lifetimes of these initiatives range from 6 to 10 years, thus, providing more financial benefit than its cost.

Cost to realize opportunity

515,728,708

Strategy to realize opportunity and explanation of cost calculation

CP ALL continuously improves building energy efficiency through 'Green Store' and 'Green Logistic' sub-strategy. These involve various activities e.g. efficiency improvement of HVAC system and lighting (e.g. Efficiency improvement of cooling coils for large cooling vaults project, Inverter Air Conditioner Project, LED Light Bulb Project and In-Store Climate Monitoring Project) Moreover, some of our flagship stores e.g. 'Tara Square' and 'Tara Pattaya' 7-Eleven Store was also built in compliance to Thai's Rating of Energy and Environmental Sustainability (TREES) PLATINUM Level which is also known as Green Building Standard. Learnings from such pilot facilities will subsequently be applied in other locations. The cost to realize this opportunity is estimated based on the sum of lifetime investment cost of all initiatives under 'Green Store' and 'Green Logistic' sub-strategy implemented in 2022 (495,732,708 THB and 19,996,000 THB, respectively).

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Green consumerism has gain popularity over the recent years due to growing sustainability concerns of the young generations worldwide with market value exceeding 100,000 million THB per year on the rise. CP ALL has been aware that the demand in low carbon products is likely to be higher in the years to come, thus, started to develop eco-friendly product lines while accumulating market knowledge throughout the process. Moreover, we seek to gain the confident from the green consumers by registering our products officially with Thailand Greenhouse Gas management organization (TGO) and communicate the progress in our Sustainability Report annually.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

923,193,308.33

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Revenue generation from low carbon products is the main consideration in financial impact estimation. The reported figure is calculated based on the summation of revenue generation in 2022 from
(1) 1 product certified with Carbon Footprint for Product label (CFP) with revenue of 11,689,255 THB and
(2) 5 products certified with the Carbon Footprint Reduction Label (CFR) with revenue of 911,504,053.33 THB

Cost to realize opportunity

65,000

Strategy to realize opportunity and explanation of cost calculation

CP ALL has been aware that the demand in low carbon products is gaining interest in the years to come, thus, started to develop eco-friendly product lines. These involves sourcing of low carbon ingredients, process improvement, industrial waste reduction and dematerialization of unnecessary parts of packaging. Moreover, we promotes confidence among green consumers by registering our products officially with Thailand

Greenhouse Gas management organization (TGO) and communicate through our Sustainability Report annually. As of 2022, there is 1 product certified with Carbon Footprint for Product label (CFP), namely; "Vegan basil with rice". There are 5 products certified with Carbon Footprint Reduction Label (CFR), namely; "Ezygo pork basil with rice", "Big Minced Pork with Salty Egg Bun", "Big Minced Pork Bun", "Shrimp dumpling" and "Crab Dumpling". The reported cost to realize opportunity (65,000 THB) is estimated based on product registration cost (17,000 THB) and consultation & audit cost (48,000 THB) in 2022. Costs associated with R&D process of packaging and other low carbon product sourcing are considered negligible (0 THB) since it is integrated in regular internal product development process without additional cost.

Comment

Identifier

Opp4

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Primary potential financial impact

Reduced direct costs

Company-specific description

Food waste is an considered a material environmental impact for retail business like CP ALL. According to the Pollution Control Department in 2017, organic waste in municipal waste stream accounted for 64% of the country’s garbage. Part of which is from private sector. In 2022, CP ALL's food waste have been analyzed and found that there are 8 groups of the significant waste which are Plants vegetables and fruits, Meat and seafood, Dairy product, Ready to Eat (RTE), Beverage, Processed food, Bakery products and others. The highest volume was Plants vegetables and fruits group at 21,304.13 tons or 33.08% of total food waste. CP ALL realizes our role in reducing the food waste in operation which does not only cuts the emission from waste treatment but also saves cost for our company and improves our reputation in terms of food waste.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

16,247,910

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Revenue generations from turning waste into soil conditioner and feed are considered in our initial financial impact estimation. The reported figure is calculated based on the weight of food waste sold to be repurposed into soil conditioner and feed in 2022. This is multiplied by the general price of raw material of soil conditioner and feed at 1,000 THB/ton respectively. The result is 16,247,910 THB of annual revenue generation for CP ALL.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

As part of 7 Go Green Strategy under Green store sub-strategy, In 2020, CP ALL issued its first Food Loss and Waste Management Policy. CP ALL's two strategic action areas to tackle food waste issue are 1) to measure and analyze the waste proportions and 2) to reduce, control and utilize critical waste. Corporate sustainability targets was also set; to have zero waste to landfill within 2030.

The cost to realize this opportunity was considered none (0 THB) as no additional operational expense and capital investment is required. Food waste reduction is part of our normal process of operational efficiency improvement where the our existing business units are responsible for.

Comment

As part of 7 Go Green Strategy under Green store sub-strategy, In 2020, CP ALL issued its first Food Loss and Waste Management Policy. CP ALL's two strategic action areas to tackle food waste issue are 1) to measure and analyze the waste proportions and 2) to reduce, control and utilize critical waste. Corporate sustainability targets was also set; to have zero waste to landfill within 2030.

The cost to realize this opportunity was considered none (0 THB) as no additional operational expense and capital investment is required. Food waste reduction is part of

our normal process of operational efficiency improvement where the our existing business units are responsible for.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

At the moment, CP ALL are taking feedback on our transition plan from our major shareholder Charoen Pokphand Group (CP group) and working to align ourselves to their ambition of carbon neutral by 2030 and Net zero by 2050. We are currently working on our transition plan disclosure and will adapt a different feedback mechanism in the near future. Furthermore, we communicate about our climate ambitions, strategy and targets through our Annual Report and Sustainability Report which are available for feedback from all stakeholder groups including shareholders.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

GHG-Emissions-Scenario-CP-ALL.pdf

CP-ALL-SD-2022.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 8.5	Company-wide		The mean sea level is rising up due to the impact of climate change. Due to the NASA Global Climate Change, Vital Signs of the Planet reports the observing land ice is having rate of change decreasing 151 billion metric tons per year. The Antarctica mass variation since 2002 is decreasing trend which the present period (2019-2020) variation range is around -2,000 to -3,000 Gt.. This scenario is aligned with Representative Concentration Pathway 8.5 (RCP8.5) . Indicators and factors used for the assessment • Areas: The central area of Thailand where focus on the provinces located near the gulf of Thailand and surrounding area reported impacts on the water quality. (Bangkok, Samutprakarn, Nonthaburi, Pathum thani, Saraburi, Nakhonpathom, Samutsakorn, Chachoengsao, and Prachinburi provinces) • Cost associated with water filtration: the cost is determined by shorten life service time of membrane or filter. • Cost associated with procuring fresh water: in order to maintain quality and service of the store, fresh water is required to procure from other sources. The volume is reflecting washing and cleaning activities (excluding drinking or production) • Value of losing opportunity to sale specific products that got impacted from brackish water: in order to maintain quality of the products, drinkable products, and beverages that prepare or brew at store assumed / will be non-available on the specific period. The brackish water will have impacts on these products' quality. Sensitivity testing factor is focusing exposure time of these impacts (default at 30 days) to the business which aims to identify maximum days that cause impacts on the business at the threshold (as 1% of sale). The lower sensitivity analysis is indicating low impacts from the climate change and aligned with RCP2.6 where the globe is maintain temperature at well below 2°C.

Physical climate scenarios RCP 2.6	Company-wide		The mean sea level is rising up due to the impact of climate change. Due to the NASA Global Climate Change, Vital Signs of the Planet reports the observing land ice is having rate of change decreasing 151 billion metric tons per year. The Antarctica mass variation since 2002 is decreasing trend which the present period (2019-2020) variation range is around -2,000 to -3,000 Gt.. This scenario is aligned with Representative Concentration Pathway 8.5 (RCP8.5) Indicators and factors used for the assessment • Areas: The central area of Thailand where focus on the provinces located near the gulf of Thailand and surrounding area reported impacts on the water qulity. (Bangkok, Samutprakarn, Nonthaburi, Pathum thani, Saraburi, Nakhonpathom, Samutsakorn, Chachoengsao, and Prachinburi provinces) • Cost associated with water filtration: the cost is determined by shorten life service time of membrane or filter. • Cost associated with procuring fresh water: in order to maintain quality and service of the store, fresh water is required to procure from other sources. The volume is reflecting washing and cleaning activities (excluding drinking or production) • Value of losing opportunity to sale specific products that got impacted from brackish water: in order to maintain quality of the products, drinkable products, and beverages that prepare or brew at store assumed / will be non-available on the specific period. The brackish water will have impacts on these products' quality. Sensitivity testing factor is focusing exposure time of these impacts (default at 30 days) to the business which aims to identify maximum days that cause impacts on the business at the threshold (as 1% of sale). The lower sensitivity analysis is indicating low impacts from the climate change and aligned with RCP2.6 where the globe is maintain temperature at well below 2°C
Transition scenarios IEA NZE 2050	Company-wide		Forecasting information for GHG emission 2030 by considering the Group-wide performance, the scope has covered fugitive emission, adding refrigerants consumption since, 2018 which reflect management control capping the emissions growth. For other sources of GHG emission, the Company is on track to

			measure, monitor, and manage which will include this scope in the corporate strategy. One of scenario used are IEA NZE 2050 scenario: business operates according to Business as Usual: BAU case, 8% growth, reduction of GHG emissions at 4.2% each year as implementing GHG emissions reduction, and implementing carbon offsetting, targeting to be carbon neutral or net zero carbon at 2030, this scenario is aligned with the science-based target at below 2°C as implementing GHG emissions reduction.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

For Scenario Analysis of Physical Risk: Risks of increasing sea level and erosion of brackish water due to climate change
What action is required to mitigate emerging climate risk of increasing sea level ?

For Scenario Analysis of Transition Risk: Carbon offsetting
What is the cost associate with climate change mitigation and linkage with business case which reflect effort and preparations required for target year 2030 for each scenario?

Results of the climate-related scenario analysis with respect to the focal questions

For Scenario Analysis of Physical Risk: Risks of increasing sea level and erosion of brackish water due to climate change

The Company developed comprehensive risk policy and risk management plan, governed by Risk Management Committee. Climate change risk has been integrated as a risk factor against the Company's business operations, aiming to review risk management approach thoroughly at least twice a year. This ensures risk management is aligned and is part of the decision behind determining business operation strategy. Simultaneously, the Company set up for Flood Scenario & Preparation plans for 7-Eleven stores, by studying for consistency with natural disaster statistics, coupled with the public sector's risk assessment data, such as spatial climate change-induced risk database. This could be used to substantiate risk assessment of store branches in each areas, to develop business continuity plans, and post-incident restoration plan. The extent includes reports on impacts from rising sea levels, which may trigger floods and high-tides, subsequently culminating in saltwater instruction, directly to Risk Management Committee. This enables stipulation of directions and identification of crisis

mitigation approach, such as.
- Changes for high-quality water filters that could affectively filter salinity
- Review and adjust conditions to select branch stores' location, with considerations to the increasing sea level impacts
- Set up water-resilient store project, to ready branch stores against floods starting from the process of designing, mid-incident, to designing for mobility in case of relocation when needed
- Establish restoration plan for branch stores post-floods

Protection and adaptation plans
The results have been reported to the corporate governance and sustainability development subcommittees in order to obtain directions and discussion the action needed to protect or mitigate the
foreseeable impacts. The progress of the plans will be reports to the Sustainability and Corporate Governance Committee periodically.
- Upgrade water filtration machine to have higher capacity dealing with salinity;
- Update store selection criteria by considering the sea level rise impacts;
- Collaboration with water supply to ensure fresh water availability during the period;
- Support and engage with local community to make understanding and ensure water accessibility of locals and valuable groups;
- Support farmer by associated with the expert on the protection plan and good agricultural practices

For Scenario Analysis of Transition Risk: Carbon offsetting
Carbon offsetting cost on target year 2030 scenarios
- Carbon Emissions (CEF2030): 4,987.38 million THB
- Target limited GHGs growth at 4% (NDC scenario): 3,419.83 million THB
- Target GHGs reduction at 4.2% each year (IEA NZE 2050 scenario): 2,892.68 million THB

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Influences on Strategy : Climate risks and opportunities have influenced 7 Go Green strategy of CP ALL especially in 2 areas; Green Living and Green Packaging. Various initiatives under these two sub-strategies are mainly driven by shifting consumer preferences towards green products and current regulation regarding plastic waste. Currently, the objectives and key

		initiatives of 7 Go Green Strategy are planned with time horizon up until 2030. Examples of the substantial strategic decision: Green Living: One of the most significant strategic decisions made was (1) The launch of campaign “Reduce a Bag a Day, You Can Do It,” which help reducing single use plastic waste and associated GHG emission in packaging production. This led to both financial saving and successful customer engagement. (2) The development of low carbon products that are certified with Carbon Footprint Reduction (CFR) label by a nationally recognized organization, Thailand Greenhouse Gas Management Organization (TGO). Green Packaging: One of the most significant strategic decisions made was the integration of circular economy concept in packaging design by reducing materials used or using more sustainable substitutes e.g. straw-free cup lid, low-plastic rice bowl, PVC-free packaging. Ultimately, CP ALL set a long-term target to convert 100% of the utilized plastic packaging in private brand to be reusable, or recyclable, or compostable by 2025.
Supply chain and/or value chain	Yes	Influences on Strategy Climate risks and opportunities have influenced 7 Go Green strategy of CP ALL especially in 2 areas; Green Packaging and Green Logistic. Various initiatives under these two sub-strategies are mainly driven by current regulation regarding plastic waste and emerging regulation to control pollutants from transportation (PM2.5, GHG) in which cooperation with suppliers in the value chain is imperative. Currently, the objectives and key initiatives of 7 Go Green Strategy are planned with time horizon up until 2030. Examples of the substantial strategic decision Green Packaging: One of the most significant strategic decisions made was the integration of circular economy concept in packaging design by reducing materials usage or using more sustainable substitutes e.g. straw-free cup lid, low-plastic rice bowl, PVC-free packaging. Such initiatives involve many major packaging suppliers that needs to be on-board to work towards the same circular economy objectives. Additionally, CP ALL set a long-term target regarding supply chain management convert 100% of the utilized plastic packaging in private brand to be reusable, or recyclable, or compostable by 2025.

		Green Logistic: One of the most significant strategic decisions made was on Electric Vehicle (EV) Project, a pilot project to utilize electric vehicles for transporting goods with 5 EV trucks.
Investment in R&D	Yes	Influences on Strategy Climate risks and opportunities have influenced 7 Go Green strategy of CP ALL especially in 3 areas; Green Living, Green Packaging and Green Store. Various initiatives under these three sub-strategies are mainly driven by shifting customer preferences towards green product, current regulation regarding plastic waste and emerging regulation on building energy efficiency. Currently, the objectives and key initiatives of 7 Go Green Strategy are planned with time horizon up until 2030. Examples of the substantial strategic decision Green Living: One of the most significant strategic decisions made was the development of low carbon products that are certified with Carbon Footprint Reduction (CFR) label by recognised organization, Thailand Greenhouse Gas management Organization (TGO). Green Packaging: One of the most significant strategic decisions made was the integration of circular economy concept in packaging design by reducing materials used or using more sustainable substitutes e.g. straw-free cup lid, low-plastic rice bowl. Such initiative demands R&D to tailor a sound user experience while ensuring functionality and customer acceptance. Additionally, CP ALL set a long-term target regarding supply chain management to convert 100% of the utilized plastic packaging in private brand to be reusable, or recyclable, or compostable by 2025. Green Store: The continuous improvement of store energy efficiency is captured in Green Store sub-strategy. One of the most significant strategic decisions made in 2022 was to invest 1,918 million THB in energy saving project and refrigerant improvement project.
Operations	Yes	Influences on Strategy Climate risks and opportunities has influenced 7 Go Green strategy of CP ALL especially in 2 ares; Green Store and Green Logistic. Various initiatives under these two sub-strategies are mainly driven by emerging regulation on building energy efficiency and refrigerant improvement, and increased access to renewable energy. CP ALL aim to used 131,071.49 MWh of renewable energy. Currently, the objectives and key initiatives of 7 Go Green Strategy are

		planned with time horizon up until 2030. Furthermore, physical climate risks such as flooding was embeded in corporate-wide risk management strategy that the establishment of new facilities are required to be evaluated for flood risks. Flood insurance coverage and flood response plan are ensured for facilities in flood prone areas. Examples of the substantial strategic decision Green Store: The continuous improvement of store energy efficiency is captured in Green Store sub-strategy. One of the most significant strategic decisions made in 2022 was to invest 1,918 million THB in energy saving project and refrigerant improvement project, which utilized electricity from renewable energy sources amounting to 120,611.23 MWh. This can be reduced GHG emission by 119,974.21 tCO2e. The Company's goal in 2030 is to reduce total energy usage growth by 25%, compared to Business as Usual (BAU). Green Logistic: One of the most significant strategic decisions made was on Electric Vehicle (EV) Project, a pilot project to utilize electric transport vehicles within the transportation and delivery system 1,013 vehicles and electric vehicles charging stations 24 stations, which reduced GHG emission by 1,427.75 tCO2e.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Acquisitions and divestments	CP ALL's financial planning has been influenced by climate-related risks and opportunities in many aspects. For instance, increased likelihood and intensity of flooding could have a significant impact on our revenue generation due to operational disruption. Though unavoidable in nature, a good flood response plan, adaptation of infrastructure and insurance coverage could help lower the impact and enable a rapid recovery. Yet, there are associated management costs that needs to be factored in our capital expenditure and operating costs. Furthermore, commodity shortage from supply chain disruption could also escalate the price of product supplies, which contributes to our direct cost. At CP ALL, the timeframe for financial planning related to flooding is in medium term (3-6 years) considering the rare occurrence of major floods and more

		frequent local floods in some parts of Thailand. Regarding the regulatory risk, CP ALL recently integrated environmental consideration including energy consumption and GHG emission in merger and acquisition process as per Environmental Policy revision in 2020. This serves to ensure that our climate performance in the next decade is complied with the Nationally Determined Contribution (NDC) of Thailand as well as our Net Zero Carbon goal in 2030. In terms of climate-related opportunities, energy efficiency improvement initiative and installation of solar rooftop are by far our most remarkable examples of how the climate change has affected our financial planning. Phasing out of low efficiency equipment and installation of high energy-performance system may raise short-term capital expenditures but can cut the operating cost of energy in medium- and long-term. Expanding renewable energy through installation of solar rooftop across all major facilities, however, does not increase our capital expenditure cost, thanks to the partnership program. Moreover, it could save our indirect cost in terms of lower electricity cost and reduce the risk of blackout during peak hours. The solar rooftop in 100% of distribution centers could save as much as 409.2 million THB throughout its lifetime. Moreover, it can also lower our exposure to carbon tax or costs related to cap and trade scheme in the future which may impact our direct cost. At CP ALL, the timeframe for financial planning related to energy efficiency program and renewable installation ranges from now up to 25 years in the future.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition
Row 1	No, but we plan to in the next two years

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

Intensity target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

236,045.11

Base year Scope 2 emissions covered by target (metric tons CO2e)

1,572,464.61

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

1,808,509.72

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

0

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

435,377.379

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

1,501,380.233

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

1,936,757.612

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

-7.091357629

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

This long-term target is our part of our 2030 Carbon Neutral ambition. The absolute target covers Scope 1 and Scope 2 emissions (market-based) of 4 business units across Thailand (100%), namely; CPALL, CPRAM, Makro and Lotus. With a projection of annual revenue growth at 8%, we aim to cut the emission at 4.2% reduction from BAU each year through the implementation of energy efficiency program, solar installation, refrigerant replacement. This self-reduction aligns with science-based target's 1.5 degree scenario in absolute contraction approach. The remaining emission is to be compensated with carbon offset available in Thailand (i.e. T-VER).

Plan for achieving target, and progress made to the end of the reporting year

"Company has appointed a committee on sustainable development to oversee the management of actions
against climate change and specific working teams, such as the energy efficiency and conservation team, the solar rooftop installation team, the green packaging development team, the planting team for sustainable communities, the excess food management team and the GHG management team. Each of
these teams have adopted an GHG accounting system to meet international standards in measuring and reporting emissions and in reducing the organization’s GHG emissions according to the ISO 14064-1 standard of 2018. will lead to degradation of the ecosystem and may trigger conflict in the future. Additionally, added pressure from the demands of the private sectors is forcing the public sectors to announce the “Climate Emergency Declaration” in the future. The declaration will have a direct effect

on the business sector and industries. Thus, preparation for these changes is necessary for all sectors
in order to build consciousness in lowering or regulating the temperature and minimizing the business operation’s impact to climate change. In response, the Company has taken part reducing GHG emissions and has prepared itself for the country’s upcoming policy change by continuously and increasingly supporting GHG emissions reduction throughout the supply chain."

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Abs 2

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2
Scope 3

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Category 1: Purchased goods and services
Category 2: Capital goods
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 6: Business travel
Category 7: Employee commuting
Category 9: Downstream transportation and distribution
Category 12: End-of-life treatment of sold products

Base year

2022

Base year Scope 1 emissions covered by target (metric tons CO2e)

435,377.38

Base year Scope 2 emissions covered by target (metric tons CO2e)

1,501,380.23

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

12,525,820.4

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

47,305.39

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

268,798.35

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

90,303.47

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

2,077.74

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

153,865.7

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

94,192.64

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

9,330.91

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

13,191,694.6

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

15,128,452.21

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

100

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2050

Targeted reduction from base year (%)

100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

0

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

435,377.38

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

1,501,380.23

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

12,525,820.4

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

47,305.39

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

268,798.35

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

90,303.47

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

2,077.74

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

153,865.7

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

94,192.64

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

9,330.91

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

13,191,694.6

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

15,128,452.21

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

0

Target status in reporting year

New

Please explain target coverage and identify any exclusions

"This long-term target is our part of our 2050 net zero ambition compared to BAU. The absolute target covers Scope 1,2 and 3 emissions (market-based) of 4 business units across Thailand (100%), namely; CPALL, CPRAM and Makro. With a projection of annual revenue growth at 8%, we aim to cut the emission at 4.2% reduction from BAU each year through the implementation of energy efficiency program, solar installation, refrigerant replacement. This self-reduction aligns with science-based target's 1.5 degree scenario in absolute contraction approach. The remaining emission is to be

compensated with carbon offset available in Thailand (i.e. T-VER)."

Plan for achieving target, and progress made to the end of the reporting year

"Company has appointed a committee on sustainable development to oversee the management of actions against climate change and specific working teams, such as the energy efficiency and conservation team, the solar rooftop installation team, the green packaging development team, the planting team for sustainable communities, the excess food management team and the GHG management team. Each of these teams have adopted an GHG accounting system to meet international standards in measuring and reporting emissions and in reducing the organization's GHG emissions according to the ISO 14064-1 standard of 2018. will lead to degradation of the ecosystem and may trigger conflict in the future. Additionally, added pressure from the demands of the private sectors is forcing the public sectors to announce the "Climate Emergency Declaration" in the future. The declaration will have a direct effect on the business sector and industries. Thus, preparation for these changes is necessary for all sectors in order to build consciousness in lowering or regulating the temperature and minimizing the business operation's impact to climate change. In response, the Company has taken part reducing GHG emissions and has prepared itself for the country's upcoming policy change by continuously and increasingly supporting GHG emissions reduction throughout the supply chain."

List the emissions reduction initiatives which contributed most to achieving this target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Target ambition

1.5°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Scope 3 category(ies)

Intensity metric

Metric tons CO2e per unit revenue

Base year

2021

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

0.000000432

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.000002878

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.00000331

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

100

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

0

% change anticipated in absolute Scope 1+2 emissions

100

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

0.0000005106

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.0000017609

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.00000227

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

31.419939577

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

This long-term target is our part of our 2030 Carbon Neutral ambition. The absolute target covers Scope 1 and Scope 2 emissions (market-based) of 4 business units across Thailand (100%), namely; CPALL, CPRAM, Makro and Lotus. With a projection of annual revenue growth at 8%, we aim to cut the emission at 4.2% reduction from BAU each year through the implementation of energy efficiency program, solar installation, refrigerant replacement. This self-reduction aligns with science-based target's 1.5 degree scenario in absolute contraction approach. The remaining emission is to be compensated with carbon offset available in Thailand (i.e. T-VER).

Plan for achieving target, and progress made to the end of the reporting year

Company has appointed a committee on sustainable development to oversee the management of actions
against climate change and specific working teams, such as the energy efficiency and conservation team, the solar rooftop installation team, the green packaging development team, the planting team for sustainable communities, the excess food management team and the GHG management team. Each of
these teams have adopted an GHG accounting system to meet international standards in measuring and reporting emissions and in reducing the organization’s GHG emissions according to the ISO 14064-1 standard of 2018. will lead to degradation of the ecosystem and may trigger conflict in the future. Additionally, added pressure from the demands of the private sectors is forcing the public sectors to announce the “Climate Emergency Declaration” in the future. The declaration will have a direct effect on the business sector and industries. Thus, preparation for these changes is necessary for all sectors
in order to build consciousness in lowering or regulating the temperature and minimizing the business operation’s impact to climate change. In response, the Company has taken part reducing GHG emissions and has prepared itself for the country’s upcoming policy change by continuously and increasingly supporting GHG emissions reduction throughout the supply chain.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1
Abs2
Int1

Target year for achieving net zero

2050

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Please explain target coverage and identify any exclusions

This target covers all emissions in scope 1-3 without any exclusions.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

CPALL aims to be carbon neutral by 2030 and Net Zero by 2050. The absolute target covers Scope 1-2 emissions (market-based) and scope 3 emissions including 3 business units across Thailand (100%), namely; CPALL, CPRAM and Makro. With a projection of annual revenue growth at 8%, we aim to cut the emission at 4.2% reduction from BAU each year through the implementation of energy efficiency program, solar installation, refrigerant replacement. This self-reduction aligns with science-based target's 1.5 degree scenario in absolute contraction approach. The remaining emission is to be compensated with carbon offset available in Thailand (i.e. T-VER). CPALL will also collaborate with other sectors such as communities, foundations, the public sector, and local organization in reafforestation.

Planned actions to mitigate emissions beyond your value chain (optional)

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*		
Implemented*	5	512,794.58
Not to be implemented		

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy generation

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

59,243.38

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

309,610,649

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

21-30 years

Comment

7 Go Green - Green Store: Renewable Energy Project
CPALL have installed solar PV on Lotus's stores and distribution centers, CPRAM manufacturing facilities, 7-Eleven stores, Makro stores and office building. This project can reduce our scope 2 emission from electricity consumption. No investment cost is required for CPALL as it is a business model with our renewable energy supplier where CP ALL offers the space for installation for a reduced electricity cost.

Initiative category & Initiative type

Transportation
Company fleet vehicle replacement

Estimated annual CO2e savings (metric tonnes CO2e)

1,427.75

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

15,780,000

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

"Green Logistic
CPALL Public Company Limited has continued the policy to implement more environmentally friendly transportation and distribution systems through implementing energy management emphasizing fuel consumption reduction and lower greenhouse gas emissions.
In 2022, the 7 Go Green environmental strategy which encompasses Green Logistics implemented the following measures:

- 7Delivery services uses 100% EV bikes, Installation of EV charging stations (Continuously) in front of 7-Eleven stores
- 7-11 distribution centers bakery and dry Chonburi implemented the EV 4-wheel truck experiment project that uses electrical energy only for transportation center to 7-Eleven Chon Buri area of 1,300 stores
- Replacement of diesel transport trucks to fully electric vehicles (EV) with pilot project initiation in bakery product transportation and distribution for 21 routes in Bangkok.
- Changed the logistic vehicles from normal 4-wheel trucks to jumbo 4-wheel trucks, therefore able to carry more per trip by 30%. "

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify

Lighting, Automatic Voltage Regulator (AVR), Building Energy Management System (BEMS), Building Automation System (BAS)

Estimated annual CO2e savings (metric tonnes CO2e)

19,587

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

124,995,705

Investment required (unit currency – as specified in C0.4)

723,581,183

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

"7 Go Green - Efficiency Energy Management Project

CPALL implemented energy management system in our facilities, consists of replace conventinal light bulbs with hig-efficiency LEDs at retail centers, installed the Automatic Voltage Regulator (AVR) to adjust or reduce voltage thereby mainting power supply electricity for energy saving which prevents electrical loss from excessive voltage, installed Building Energy Management System (BEMS) to compiling energy storage data

for analysis and energy management, installed Building Automation System (BAS)

which manages energy consumption, collects data, and processes various system operations to enable efficient energy consumption and cost-effectiveness. "

Initiative category & Initiative type

Fugitive emissions reductions

Refrigerant leakage reduction

Estimated annual CO2e savings (metric tonnes CO2e)

40,800.09

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

163,541,940

Investment required (unit currency – as specified in C0.4)

1,194,595,070

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

"7 Go Green - Green Store: Efficiency Management Project

This project focused on refrigerant replacement with alternatives with lower Global Warming Potential (GWP) in congruence with Montreal Protocol, Kigali Amendment and recommendations of Department of industrial works. Also, training of maintenance workers in collaboration with external parties was promoted to improve refrigerant efficiency."

Initiative category & Initiative type

Waste reduction and material circularity

Waste reduction

Estimated annual CO2e savings (metric tonnes CO2e)

391,736.36

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 3 category 12: End-of-life treatment of sold products

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

12,014,580

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

"7 Go Green - Green Living, Green Packaging: Circular Economy based packaging management program
The Company aims to minimize plastic waste and packaging volumes destined for landfill through circular economy-based waste management support. This approach enables plastic packaging for Private Brand products to be reusable, recyclable, and compostable under the ""Reduce-Reuse-Recycle (3R)"" concept by operating under 3 main measures as follows:
1. Reduce plastic usage at-source
2. Reduce and replace plastic usage at consumption stage
3. Reduction of plastic and non-plastic packaging waste after consumption"

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Financial optimization calculations	CP ALL conducts feasibility analysis in the decision making process of all investments. Programs that have a payback period lower than 2 years are considered as attractive.
Compliance with regulatory requirements/standards	Total compliance with regulatory standards is one of the strongest investment drivers for CP ALL since we are abide by laws and regulatory systems of the operating country.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Thailand Greenhouse Gas Organization - Carbon Footprint Reduction Label

Type of product(s) or service(s)

Other

Other, please specify

Ready-to-Eat Food

Description of product(s) or service(s)

The Company promotes the creation of various innovative products that are environmentally-friendly by assessing the carbon footprint of the product and requesting the product carbon footprint registration from the Thailand Greenhouse Gas Management Organization (Public Organization): (TGO). In 2021, the Company registered to be certified with the Carbon Footprint Product Label for 1 products and proceeded with the Carbon Footprint Reduction Label for 5 products. Furthermore, products with reduced plastic usage in packaging are also included as low carbon products due to less material required and emission reductions in production process and disposal.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Cradle-to-grave

Functional unit used

1 pack

Reference product/service or baseline scenario used

According to TGO, The product registered as Carbon Footprint Reduction Label (CFR) shall comply with the following requirements,

1. The certified CFP of its present year compared to base year certified CFP shall be reduced not less than 2% or

2. The certified CFP of its present year is equal to or less than the product category benchmarking threshold and not more than its base year certified value.

The reference product for CPALL is the same product certified withCFP in the previous years.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Cradle-to-grave

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

0.000007612

Explain your calculation of avoided emissions, including any assumptions

Carbon Footprint Reduction Label (CFR) or Global Warming Reduction Label is a label that demonstrates a certified Carbon Footprint of Product (CFP) and its emissions reduction based on the Thailand Greenhouse Gas Organization (TGO) eligible reduction criteria. The CFR evaluation and process include the quantification and certification of base year and present year CFP and the comparison results between the base year and present year certified CFP or against its product category benchmarking threshold announced by TGO.

According to TGO, The product registered as CFR shall comply with the following requirements,
1. The certified CFP of its present year compared to base year certified CFP shall be reduced not less than 2% or
2. The certified CFP of its present year is equal to or less than the product category benchmarking threshold and not more than its base year certified value.

Therefore, the methodology of Carbon Footprint Reduction Label by TGO is in accordance with the attributional approach by the Comparative Emissions Impacts of Products (WRI) where the same type of product is compare with those that would otherwise be produced in the market.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0.108

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

Yes, an acquisition

Name of organization(s) acquired, divested from, or merged with

CP Retail Development Co., Ltd. and its subsidiaries

Details of structural change(s), including completion dates

On October 25 2021, Siam Makro Public Company Limited (“Makro”), a subsidiary of CP ALL, acquired in CP Retail Development Company Limited (“Lotus’s”) by way of accepting an entire business transfer from CP Retail Holding Company Limited (“CPRH”). Makro paid CPRH in its newly issued ordinary shares instead of cash in this transaction. Subsequently, CPRH registered for its dissolution and delivered the shares it received from Makro to CPRH shareholders, which consists of the Company, Charoen Pokphand Holding Company Limited, and CP Merchandising Company Limited, according to shareholding proportions. In 2022, environmental data of Lotus's has been consolidated.

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in boundary	CPALL has expand the boundary of emission accounting to cover CP Retail Development Co., Ltd. and its subsidiaries (Lotus's)

C5.1c

(C5.1c) Have your organization’s base year emissions and past years’ emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years’ recalculation
Row 1	Yes	Scope 1 Scope 2, location-based	CPALL recalculated base year emissions for all relevant ghg emission (Scope 1,Scope 2, Scope 3)	Yes

		Scope 2, market-based Scope 3		

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

236,045.11

Comment

CPALL's GHG emissions scope 1 data is calculated by including performance of 4 main business units: CPALL, CPRAM, Makro and Lotus's representing more than 95% of our operation. The GHG emission from the chemical oxygen demand (COD) content in CPRAM's wastewater treatment unit. Fuel combustions are calculated from the expense record of fuel usage on various activities i.e. transportation, etc. Fugitive emission from refrigerant leakage. Stationary combustion from diesel power generator This emission data has been verified by the independent third party.

Scope 2 (location-based)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

1,578,842.68

Comment

CPALL's GHG emissions scope 2 (location-based) data is calculated from total electricity consumption multiplied by emission factor of Thailand's national grid acquired from the Thailand Energy Policy and Planning Office, Ministry of Energy.

Scope 2 (market-based)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

1,572,464.61

Comment

CPALL’s GHG emissions scope 2 (market-based) data is calculated from total electricity consumption multiplied by emission factor supplied by electricity producers. This figure represents 100% of our operation. In 2022, the emission has been recalculated to include Lotus's

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

12,824,060.79

Comment

Scope 3 category 2: Capital goods

Base year start

January 1, 2022

Base year end

December 31, 2022

Base year emissions (metric tons CO2e)

47,305.39

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not relevant. See explanation in C6.5

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

141,122.76

Comment

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

90,956.37

Comment

Scope 3 category 6: Business travel

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

793.62

Comment

Scope 3 category 7: Employee commuting

Base year start

January 1, 2022

Base year end

December 31, 2022

Base year emissions (metric tons CO2e)

153,865.7

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not relevant. See explanation in C6.5

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2022

Base year end

December 31, 2022

Base year emissions (metric tons CO2e)

94,192.64

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not relevant. See explanation in C6.5

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not relevant. See explanation in C6.5

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

10,226.12

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not relevant. See explanation in C6.5

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not relevant. See explanation in C6.5

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not relevant. See explanation in C6.5

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

Thailand Greenhouse Gas Management Organization: The National Guideline Carbon Footprint for organization
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
435,377.38

Start date
January 1, 2022

End date
December 31, 2022

Comment
CPALL's GHG emissions scope 1 data is calculated by including performance of 4 main business units: CPALL, CPRAM, Makro and Lotus's representing more than 95% of our operation

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
324,357.53

Start date
January 1, 2021

End date
December 31, 2021

Comment
In 2021, CPALL expanded the scope of data collection to include Fugitive Emission and Stationary Combustion.

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)
236,045.11

Start date

January 1, 2020

End date

December 31, 2020

Comment

"CPALL's GHG emissions scope 1 data is calculated by including performance of 3 main business units: CPALL, CPRAM and Makro representing more than 95% of our operation. The GHG emission from the COD content in CPRAM's wastewater treatment unit. Fuel combustions are calculated from the expense record of fuel usage on various activities i.e. transportation, etc. This emission data has been verified by the independent third party."

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

214,860.15

Start date

January 1, 2019

End date

December 31, 2019

Comment

In 2019, CPALL expanded the scope of data collection to include mobile combustion of CPRAM, Makro, CPALL Head office and retail stores and increased the number of wastewater treatment plants into the scope

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

-

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

1,555,362.43

Scope 2, market-based (if applicable)

1,501,380.23

Start date

January 1, 2022

End date

December 31, 2022

Comment

Past year 1

Scope 2, location-based

1,476,174.03

Scope 2, market-based (if applicable)

1,454,368.73

Start date

January 1, 2021

End date

December 31, 2021

Comment

Past year 2

Scope 2, location-based

1,578,842.68

Scope 2, market-based (if applicable)

1,572,464.61

Start date

January 1, 2020

End date

December 31, 2020

Comment

"Location-based data is calculated from total electricity consumption multiplied by emission factor of Thailand's national grid acquired from the Energy Policy and Planning Office (EPPO). Market-based data is calculated from total electricity consumption multiplied by emission factor supplied by electricity producers. This figure represents 100% of our operation."

Past year 3

Scope 2, location-based

1,218,051.27

Scope 2, market-based (if applicable)

1,126,421.13

Start date

January 1, 2019

End date

December 31, 2019

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

12,525,820.4

Emissions calculation methodology

Hybrid method
Spend-based method
Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

As a retailer, the emissions of goods and services are one of CPALL's most significant Scope 3 emissions. CPALL aims to collect and report the emissions from goods and services to understand the impact of CPALL on GHG emissions. Various initiatives have been implemented with upstream suppliers to mitigate the environmental impact of plastic packaging such as the inclusion of plastic labels to facilitate recycling, and the use of recycled plastic in suitable products. Furthermore, CPALL has set a target to achieve 100% reusable, recyclable, and compostable plastic in its packaging by 2050.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

47,305.39

Emissions calculation methodology

Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Since CPALL is the most extensive convenience store chain in Thailand, consturction of our store can be a relevant source of emission. Therefore, CPALL will calculate the emission from the our contruction material of our store using average product method.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not relevant, explanation provided

Please explain

The CPALL's operation does not involve with intensive fuel-and-energy-related activities.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

268,798.35

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

"Since CPALL is the most extensive convenience store chain in Thailand, transporting goods from manufacturers and merchants to our facilities (ie stores and distribution centers) is an important activity in our business, which is also very relevant to our scope 3 emissions. Therefore, CPALL will track the emission performance of our suppliers' delivery services to obtain information on future carbon emission reduction plans."

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

90,303.47

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Although we have utilized more than 73% of the recorded waste for other purposes, CPALL is conscious about our waste disposal emissions. The current scope includes waste from factories, offices, shops and distribution centers. In the future, we will further expand the scope, include stores nationwide, and improve data quality. This number represents emissions from landfills and the incineration of hazardous and non-hazardous wastes that are disposed of in our operations.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2,077.74

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

With facilities and business requirements to meet partners nationwide and in other countries, air transport contributes to the recognizable portion of Scope 3 emissions. Due
to the overseas business expansion plan, emissions from future business trips will become increasingly important for CPALL. Please note that the extent of our ground transportation contribution is negligible, because in most cases, the cost of fuel from the service provider is directly borne by our company, which is why it is included in the scope 1 emissions

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

153,865.7

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

In 2022, the COVID situation in Thailand is getting better, Therefore, CPALL proceeds to allow more employees to come back to work on-site. So, employee commuting increased significantly by 2022, CPALL considers scope 3 emissions from this activity and will track the emissions record to improve emissions reduction plan further.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

This Scope 3 emission category is negligible since CPALL has only limited number of operating sites where we are lessee.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

94,192.64

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

In 2022, CPALL considers the scope 3 emission from downstream transportation and distribution activities such as 7 delivery vehicles from 7 Eleven CPALL and subcontract vehicles of Lotus. The scope 3 emissions for this category is 0.71% of the total operation emissions equal to 94,192.64 tCO2e.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

CPALL's main business is retail store in which processing of sold product dose not significantly contribute to GHG emissions.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

CPALL's main business is retail store in which use of sold product dose not significantly contribute to GHG emissions.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

9,330.91

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

CPALL acknowledges the significant quantity of waste generated by the products it sells. CPALL is currently assessing the emissions produced by our products and can estimate the contributions arising from our use of plastic and banana products.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

This scope 3 emission category is negligible for CPALL due to the CPALL has only limited number of operating sites where we are lessor.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

This scope 3 emission category is not applicable for CPALL, as CPALL includes emissions from all the stores owned by our business partners in our scope 1 and 2 emissions accounting.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

This scope 3 emission category is not relevant for CPALL, as CPALL's business does not have financial investment and banking as our core business activity.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2021

End date

December 31, 2021

Scope 3: Purchased goods and services (metric tons CO2e)

12,824,060.79

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

197,321.23

Scope 3: Waste generated in operations (metric tons CO2e)

99,866.65

Scope 3: Business travel (metric tons CO2e)

141.14

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

10,108.25

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Past year 2

Start date

January 1, 2020

End date

December 31, 2020

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

141,122.76

Scope 3: Waste generated in operations (metric tons CO2e)

90,956.37

Scope 3: Business travel (metric tons CO2e)

793.62

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

10,226.12

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Past year 3

Start date

January 1, 2019

End date

December 31, 2019

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

90,128.25

Scope 3: Waste generated in operations (metric tons CO2e)

192,510.2

Scope 3: Business travel (metric tons CO2e)

2,588.75

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

13,528.7

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment

Row 1	1,387.26	Biogenic emission from Biodiesel and Bioethanol consumption

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.00000227

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

1,936,757.61

Metric denominator

unit total revenue

Metric denominator: Unit total

852,605,218,842

Scope 2 figure used

Market-based

% change from previous year

25.08

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities

Please explain

"Due to CPALL's energy efficiency program, we are able to lower the emission intensity. CPALL is able to maintain the emission at the relatively same level with revenue 45% higher, the emission intensity is currently at 2.27 tCO2e per 1 million THB, which is less than 25% lower from the previous year."

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	50,607.84	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	556.81	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	384,212.73	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Thailand	435,377.38

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
CPALL	266,685.13
CPRAM	35,855.8
Makro	33,459.71
Lotus	99,376.75

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Thailand	1,555,362.43	1,501,380.23

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
CPALL	913,327.961	899,234.99
CPRAM	67,862.907	66,855.23
Makro	191,129.471	173,550.98
Lotus	383,042.084	361,739.02

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation

Change in renewable energy consumption	59,243.38	Decreased	3.3306	"This decrease in emission is accounted by replacing purchased electricity with renewable energy generated from solar PV. To explain the calculation in brief, 59,243.38 tCO2e was additionally avoided from solar PV compared to last year. Total Scope 1+2 emissions in 2021 was 1,778,726.26 tCO2e, therefore we arrived at 1.57 % through (59,243.38/1,778,726.26) * 100 = -3.3306% (a 3.3306% decrease in emissions)."
Other emissions reduction activities	453,551.2	Decreased	25.4987	"The change from emission reduction initiatives is calculated based on the sum of initiatives implemented in 2022 that contribute to Scope 1 and Scope 2 emission reduction excluding renewable projects to avoid double counting. To explain the calculation in brief, 453,551.2 tCO2e was avoided from emission reduction initiatives. Total Scope 1+2 emissions in 2021 was 1,778,726.26 tCO2e, therefore we arrived at 1.34 % through (453,551.2/1,778,726.26) * 100 = -25.4987% (a 25.4987% decrease in emissions)."
Divestment				
Acquisitions				
Mergers				
Change in output	670,825.93	Increased	37.7138	"This increase in emission is accounted by business growth and business recovery from Covid-19. To explain the calculation in brief, 40,577.11 tCO2e was increased from business growth Total Scope 1+2 emissions in 2020 was 1,778,726.26 tCO2e, therefore we arrived at 1.34 % through (670,825.93/1,778,726.26) * 100 =

				2.88% (a 2.88% decrease in emissions)."
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No

Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)		208,164.6	208,164.6
Consumption of purchased or acquired electricity		121,309.26	3,373,915.5	3,495,224.76
Consumption of self-generated non-fuel renewable energy		13,304.94		13,304.94
Total energy consumption		134,614.2	3,582,080.1	3,716,694.3

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

Total fuel MWh consumed by the organization

Comment

Other biomass

Heating value

Total fuel MWh consumed by the organization

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

4,240.09

Comment

Biodiesel and Bioethanol fuel used in mobile combustion

Coal

Heating value

Total fuel MWh consumed by the organization

Comment

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

72,863.26

Comment

Consumption of gasoline and diesel fuel used in mobile combustion

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

131,059.58

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

Total fuel MWh consumed by the organization

Comment

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

208,162.93

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)

Electricity	8,833	8,833	8,833	8,833
Heat	121,667.67	121,667.67	4,471.94	4,471.94
Steam				
Cooling				

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption

Thailand

Sourcing method

Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

121,308.3

Tracking instrument used

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Thailand

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2018

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
Thailand

Consumption of purchased electricity (MWh)
3,495,196.46

Consumption of self-generated electricity (MWh)
8,833

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
4,471.94

Total non-fuel energy consumption (MWh) [Auto-calculated]

3,508,501.4

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Other, please specify
Water withdrawal per unit of revenue

Metric value
22.04

Metric numerator
Water withdrawal (Cubic meters)

Metric denominator (intensity metric only)
Total Revenue (Million Baht)

% change from previous year
18.37

Direction of change

Decreased

Please explain

Description

Waste

Metric value

64,410.08

Metric numerator

Food loss and waste to land fill (ton)

Metric denominator (intensity metric only)

-

% change from previous year

3.84

Direction of change

Decreased

Please explain

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

CP-ALL-SD-2022.pdf

Page/ section reference

This assurance statement is publicly disclosed in CPALL Sustainability Report 2022 Page 264
Available online at https://www.cpall.co.th/wp-content/uploads/2023/03/CP-ALL-SD-2022.pdf

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

CP-ALL-SD-2022.pdf

Page/ section reference

This assurance statement is publicly disclosed in CPALL Sustainability Report 2022 Page 264

Available online at https://www.cpall.co.th/wp-content/uploads/2023/03/CP-ALL-SD-2022.pdf

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services
Scope 3: Upstream transportation and distribution
Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

CP-ALL-SD-2022.pdf

Page/section reference

This assurance statement is publicly disclosed in CPALL Sustainability Report 2022 Page 264
Available online at https://www.cpall.co.th/wp-content/uploads/2023/03/CP-ALL-SD-2022.pdf

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	AA1000AS, moderate level of assurance on GRI Standards 302-1 Energy consumption within the organization	CPALL verified the reported energy consumption in Sustainability Report 2022 according to GRI Standards 302-1 Energy consumption within the organization. The verification was carried out by independent party; Lloyd's Register Quality Assurance Ltd. CPALL Sustainability Report 2022
C8. Energy	Energy consumption	AA1000AS, moderate level of assurance on GRI Standards 305-4 GHG emissions intensity	CPALL verified the reported GHG emissions intensity in Sustainability Report 2022 according to GRI Standards 305-4 GHG emissions intensity. The verification was carried out by independent party; Lloyd's Register Quality Assurance Ltd. CPALL Sustainability Report 2022
C4. Targets and performance	Other, please specify Waste generated	AA1000AS, moderate level of assurance against GRI Standards 306-2 Waste by type and disposal method.	CPALL verified the reported waste disposal in Sustainability Report 2022 according to GRI Standards 306-2 Waste by typeand disposal method. The verification was carried out by independent party; Lloyd's Register Quality Assurance Ltd. CPALL Sustainability Report 2022
C4. Targets and performance	Other, please specify Carbon footprint for organization	Carbon footprint for organization label by Thailand Greenhouse Gas management Organization (TGO)	CPALL has registered for Carbon Product Footprint for Organization by Thailand Greenhouse Gas Management (TGO)
C2. Risks and opportunities	Product footprint verification	Carbon footprint for products label by Thailand Greenhouse Gas Management Organization (TGO)	In 2022, CPALL has been registered 6 products for the carbon footprint product label and registered 5 products for the carbon footprint reduction label with the Carbon Footprint Labelling by

			Thailand Greenhouse Gas management organization (TGO).

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

CPALL anticipated that from 2026, a cap-and-trade and/or carbon tax scheme will be enforced in Thailand. Multiple industries in Thailand might be regulated by this, firstly in carbon-intensive industries such as oil and gas and power sector, followed by other industries including retail. Therefore, the company appointed the Corporate Sustainability Management Division to be responsible for monitoring the regulatory change and to notify relevant business units/functions about potential impacts and prepare strategic response measures in a timely manner. In order to familiarize our employees with the system in advance, CPALL participated in the Thailand Voluntary Emission Reduction Program (T-VER) by the Thai Greenhouse Gas Management Organization (TGO), which gave us a clear understanding of how the system works. In addition, we set the greenhouse gas emission target into two stages:

1) To become carbon neutral in 2030

2) To become net zero in 2050.

Despite a high uncertainty on stringency of regulation, CPALL believes that achieving these goals will enable CPALL to avoid costs to a certain extent and even earn revenue from emissions trading. These goals are embedded in the "7 Go Green" sustainable development strategy, which is one of the five pillars of CP ALL's corporate strategy and provides financial incentives for executives.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations
Stakeholder expectations
Stress test investments

Scope(s) covered

Scope 1
Scope 2

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Static

Indicate how you expect the price to change over time

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

1,639.17

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

1,639.17

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Operations
Risk management
Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

CPALL established an internal carbon price in order to evaluate financial impact that might occurs if our emission pathway progresses through various scenarios and use the result as a feedback to drive investments on internal emission reduction projects i.e. efficiency improvement and renewable expansion. The scenarios included are Business-As-Usual (BAU), Nationally Determined Contribution (NDC), 1.5 Degree Scenario (1.5C) and Net Zero 2030. The emission surplus that needs to be offset in order to align with national regulation and our net zero 2030 goal are monetized using the Voluntary Emission Reduction (VER), a prospective conservative price presumed for Thailand, at 1,639.17 THB/tCO2e. Also, CPALL is currently using MACC curve to identify the feasible investment projects at a specific carbon price with appropriate payback period.

The financial impact estimation emerged from the implementation of internal carbon price was used to inform the Net Zero Carbon 2030 target setting that resulted in target approval. The internal carbon price was also used to support the discussion with business unit managers in order to promote efficiency improvement and low carbon investment projects as well as to drive changes in internal behaviors. To illustrate, it was integrated as a part of feasibility analysis to facilitate investments on low carbon projects within the company, giving a clearer picture of the traditionally unaccounted cost of carbon that CP ALL might not be aware of and making certain low carbon projects more viable to invest in in long-term perspective i.e. the improvement of HVAC and refrigeration system.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Run a campaign to encourage innovation to reduce climate impacts on products and services

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

% of supplier-related Scope 3 emissions as reported in C6.5

100

Rationale for the coverage of your engagement

"CPALL has engaged with 100% of packaging producer for products that is under CPALL control
to shift their packaging to recyclable packaging. This was driven by CPALL's 2025 goal in 7 Go Green strategy: Green Packaging; to convert 100% of the utilized plastic packaging in private brand to be reusable, or recyclable, or compostable by 2025. This initiative contributed to the reduction of scope 3: Purchased goods and services and End-of-life treatment of sold products."

Impact of engagement, including measures of success

"Impact of engagement:
- A project to reduce plastic use by redesigning packaging that uses the optimal thickness of plastic for rice cups, cold dessert cups, and full salad trays led to 48.46 tonnes of plastic reduction
- Reduced plastic usage by using label-printed top seal films instead of putting label stickers on thick plastic covers by 17.8 million pieces
- Reduced GHG emissions 89.63 tCO2e

Success measure:
100% plastic packaging used to contain products under the Company's control (Private Brand) must be reusable, recyclable, or compostable by 2025."

Comment

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Run a campaign to encourage innovation to reduce climate impacts on products and services

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

% of supplier-related Scope 3 emissions as reported in C6.5

100

Rationale for the coverage of your engagement

"CPALL is committed to be a sustainable business that is environmentally responsible. One focus area of CPALL is to mitigate impacts from plastic waste and promote circular economy. CPALL launched an initiative to create an environmental-friendly packaging by engaging with all (100%) of current bag packaging producers and pallet wrapping film producers. This initiative contributed to the reduction of scope 3: Purchased goods and services."

Impact of engagement, including measures of success

"Impact of engagement:
The initiative engaged in a partnership with pallet wrapping film suppliers CPALL has gathered plastic waste from distribution centers nationwide, specifically pallet wrapping film, to recycle and transform it into handle bags for utilization in 7-Eleven stores. These handle bags, measuring 37 microns in thickness, are designed to be durable and reusable. In 2022, CPALL reduced plastic waste from pallet wrapping film by 761.05 tonnes and 1,121.29 of GHG emissions.

Success measure:
- CPALL set a target for 2022 to ensure that recyclable packaging is actually recycled in 774 tonnes."

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing
Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

100

Please explain the rationale for selecting this group of customers and scope of engagement

"All of CPALL stores are promoting the reduction of single use plastic. Therefore, CPALL considers 100% of our customers as our participating target group. Their choice to
avoid or not avoid using single-use plastic items can affect our scope 3: Purchased goods and services and End-of-life treatment of sold products"

Impact of engagement, including measures of success

"Impact of engagement:
Large amount of plastic waste are the results of single-use plastics used by our customers across the country. CPALL launched a campaign to encourage customers to reduce the use of single-use plastic. CPALL considers the number of single-use plastic items and blastic bags avoided as our success measure.
In 2022, CPALL has successfully;
1. Reduced plastic packaging materials and non-plastic usage from packaging research and development by 1,814.51 tonnes
2. Reduced the use of plastic bags and single-use plastic by 24,695.81 tonnes
3. Recycled post-consumer packaging by the Company by 2,701.40 tonnes
4. Reduced GHG emissions by 258,777.08 tCO2e Equivalent to the plantation of 6,018,071 trees

Success Measure:
CPALL set a target to reduce 22,820 tonnes of single-use plastic items in 2022, the target was achieved."

Type of engagement & Details of engagement

Education/information sharing
Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number

72.8

% of customer - related Scope 3 emissions as reported in C6.5

100

Please explain the rationale for selecting this group of customers and scope of engagement

"CPALL considers 72.8% of active social media users per the total population of Thailand as our participating group. Their choice to
avoid or not avoiding using single-use plastic items can affect our scope 3: Purchased

goods and services and End-of-life treatment of sold products"

Impact of engagement, including measures of success

"Impact of engagement:
CPALL launched a free-food waste campaign to encourage customers about food waste through Facebook page ""Thai Society without Food Waste"". CPALL also create a Facebook group ""Eat without Food Waste"" to be a channel to promote knowledge of reducing the amount of food waste and food waste management. CPALL considers the number of followers and group members on the Facebook platform as our success measure.
In 2022, CPALL successfully gained 28,096 followers on its Facebook page and has 1,046 group members.

Success Measure:
CPALL is expected to increase the number of followers and group members annually."

Type of engagement & Details of engagement

Collaboration & innovation
Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

100

Please explain the rationale for selecting this group of customers and scope of engagement

CPALL has introduced a new channel for receiving receipts, abbreviated tax invoices, and full tax invoices through the 7–Eleven application. This ongoing initiative demonstrates CPALL's commitment to continuous improvement in supporting digital lifestyles and enhancing customer convenience. The service has been available since its launch on 26 November 2020 and remains accessible to customers to date.

Impact of engagement, including measures of success

Impact of Engagement:
CPALL has introduced a new channel for receiving receipts, abbreviated tax invoices, and full tax invoices through the 7–Eleven application. This ongoing initiative demonstrates CPALL's commitment to continuous improvement in supporting digital lifestyles and enhancing customer convenience. The service has been available since its launch on 26 November 2020 and still remains accessible to customers.
In 2022, CPALL successfully
- Reduced Receipts and abbreviated tax Invoices 504,076,497 receipts
- Reduced 4706,331 full tax invoices

- Reduced GHG emissions by 3,401.74 tCO2e

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

CPALL has consistently shown our dedication to minimizing the environmental impacts of our products, with a focus on single-use plastic items. We have launched the campaigns and cooperate with other partners to promote the use of eco-design packaging, sustainable waste management, reduce GHG emissions associated with the production of plastic bags.

CPALL cooperate between entrepreneur to reduce plastic waste in coffee shops through sorting and encouraging stores to direct wastes to reycycling processes or through effective reuse in the name of "Green Coffee Shop".

Furthermore, CPALL made a joint announcement with the Ministry of Natural Resources and Environment, expressing their shared intentions to minimize waste generated from plastic cups and single-use plastic straws. Coffee shops and bakery houses within the CPALL umbrella consists of 4 brands:

- ALL café adopts biodegradable packaging, including paper cups, to reduce single-use plastic consumption. Plastic straws are replaced with drinking lids, stirrers are made from wood and recycled materials, and plastic bags are sourced from durable materials for reuse.

- Kudsan Bakery & Coffee exclusively utilizes 100% biodegradable packaging for all beverages, encompassing both hot and cold drinks. Their in-store packaging comprises paper-based items such as cups, sleeves, baking paper, and straws, with stirrers made from wood-based materials, among other sustainable choices.

- Bellinee's Bake & Brew offers paper carry bags, paper snack bags, paper cup for hot beverages, and a beautifully designed Bellini denim bag capable of reuse.

- MuanChon Coffee employs eco-friendly packaging, featuring bio cup and biodegradable tissue paper. Their shop interior showcases decor crafted from bio-based materials like cassava and coffee grounds.

In addition, CPALL had partnered with a Low Emission Support Scheme: LESS by the Ministry of Natural Resources and Environment and Thailand Greenhouse Gas Management Organization to launch a tree-planting initiative aimed at sequestrating our GHG emissions. In 2022, CPALL successfully sank 71.837 totally of carbon in tress.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization’s purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization’s purchasing process and the compliance mechanisms in place.

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

"Supplier of CPALL must comply with environmental laws and regulations, supporting preventative measures against environmental issues, promoting environmentally friendly technology, enhancing efficiency of energy and water consumption at operation sites. This includes refuse collection, waste collection and other environmental management system relating to efficient business operations. There must be control measures or mitigation actions of operation-induced environmental impacts to communities in the vicinity of operation site, such as biodiversity, to air, soil, water and forests"

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment

Grievance mechanism/Whistleblowing hotline

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

Please see
CPALL Environmental Policy Announcement ,Document Page No. 2, PDF Page No. 2 as opened by Chrome, under Topic: 4) Procedure, No.4
https://www.cpall.co.th/wp-content/uploads/2020/06/05_CPAll-Environmental-Policy_Eng_Edit27.5.62.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

At CPALL, the Sustainability and Corporate Governance Committee is responsible for overseeing all CPALL sustainability activities, including external engagement on climate change, with the Sustainable Development Sub-committee in charge of implementing projects and activities in accordance with the committee's strategic directions.
All activities and decisions that may involve policy influences will be assessed by the Corporate Governance and Sustainability Committee prior to implementation by the Sub-committee.
Internally, CPALL engages risk champions from all functions and business divisions by organizing knowledge-sharing sessions and seminars on climate change risks and opportunities to convey the company's strategy. This manner, we can make sure that activities that influence policy directly or indirectly are in line with our overall climate change strategy.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

"The Company supports the joint objective of fostering, managing and preserving a pollution-free environment through joining forces with the private sector and coordination with the Department of Environmental Quality Promotion and the Pollution Control Department Ministry of Natural Resources and Environment in initiating and collaborating
on single-use of plastic bags, single-use plastics, waste sorting and other projects related to environmental issues, in addition to participating in the Public Private Partnership Plastic (PPP Plastic) team."

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Circular economy

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

Thailand

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

"CPALL working team is part of a team, which was appointed by the Plastic Waste Management Committee, focuses on the development and utilization of plastic wastes to
drive efforts in preventing and resolving plastic waste issues in Thailand and achieve concrete of results under the concept ""Circular Economy""."

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

No, we have not evaluated

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

CP ALL conducts business according to sustainable development approach with consideration to stakeholders in all dimensions. The principle of BCG Model is implemented, utilizing 3 critical components, as follow: 1) use the resource efficiently with the support of technology (B-Bioeconomy), 2) promote circular economy, ensuring resources are brought back for re-use (C-Circular Economy), and 3) create innovation and enable social conditions for minimum environmental impacts, for business plan development (G-Green Economy) under the 7 Go Green strategy framework. With the collaborative support of partners in project implementation resulting in tangible results and scale-ups. By embracing and supporting this policy, we can enhance the success of our plan to reduce single-use plastics and implement waste sorting initiatives, along with other projects aimed at addressing environmental issues.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

"CPALL's Thon Kla Rai Tang project is supporting the waste management ecosystem in Thailand entails the establishment of a complete waste management ecosystem from upstream to downstream, participation from all stakeholders groups, including

knowledge providers and waste-sorting groups
responsible for materials delivery and data recording"

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Circular economy

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

Thailand

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

CP ALL Public Company Limited, in collaboration with schools under the Foundation for Education Future (CONNEXT ED) and supported by the Company, has successfully continued the Ton Kla Rai Tang project for the third consecutive year. This initiative focuses on promoting sustainable waste management practices and instilling social responsibility in the youth by engaging them in waste separation at the community level. Through Ton Kla Rai Tang, waste generation is minimized as biodegradable materials are separated and recyclable materials are removed, leaving only non-utilizable waste. The project has also established partnerships with merchants and school vendors to decease selling items that contribute to waste, such as straws, plates, and single-use glasses. Additionally, the integration of waste management curriculum generates income for schools and communities through reuse, recycling, and organic material management. The project has expanded significantly, with over 503 schools within the Bangkok Metropolitan Area (BMA) participating in 2022. Future plans aim to involve all schools within the CONNEXT ED foundation sponsored by the Company, advancing from "Ton Kla Rai Tang" to "Chumchon Rai Tang" to enhance community waste management efforts.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

"Through the Ton Kla Rai Tang project, the focus on sustainable waste management and waste separation at the source contributes to minimizing waste generation and promoting responsible waste disposal practices. By involving the youth and instilling social responsibility, the project aims to create a generation that is environmentally conscious, which complements our plan's vision of fostering a sustainable society.

Additionally, the collaboration with partners, including schools, merchants, and the broader community, highlights the power of collective action in driving positive environmental change. The policy's approach to discouraging the sale of single-use items and promoting recycling and resource recovery further aligns with our plan's objectives of reducing our ecological footprint and adopting circular economy principles. The scalability of the project, with over 503 schools participating and plans for further expansion, demonstrates its potential for widespread impact, which resonates with our plan's ambition to scale up sustainable practices and solutions for a greener future.
"

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

Global Compact Network Thailand (GCNT)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

"GCNT is a local network in Thailand for United Nation Global Compact which objective is to take action on Sustainable Development Goals (SDGs). Therefore GCNT position on climate change is aligned with SDG goal 7: ""Ensure access to affordable, reliable, sustainable and modern energy for all"" and SDG goal 13: ""Take urgent action to combat climate change and its impacts"""

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Thai Retailer Association

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Thai Retailer Association's current position is to reduce the cost of alternative plastic packaging which is in line with CPALL position .

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

159,051

Describe the aim of your organization's funding

"CPALL supported the Thai Retailers Association's implementation of the national plastic program which aims to promote policies and economic mechanisms to lower the cost of alternative plastic items through the use of economies of scale on bio-based plastics. By lowering reliance on fossil-based raw resources, preventing environmental contamination from plastic waste, and eliminating GHG emissions from plastic packaging manufacturing, the implementation of the aforementioned policy would result in

large net benefits. CPALL also supported qualified persons to participate as the board of the Thai Chamber of Commerce and Board of Trade of Thailand to share their perspectives and offer advice on how to support joint participation between retail partners and government agencies in order to promote environmentally friendly retailing in

Thailand."

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding

UNGC

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

666,672

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

"CPALL Support UNGC mission of mobilizing a global movement of sustainable companies and stakeholders to create the world we want.
As a participant of the UN Global Compact, we integrated the Global Compact principles as part of our strategy, culture and day-to-day operations of the company, and to engaging in collaborative projects which advance the development goals of the United Nations, particularly the Sustainable Development Goals."

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In voluntary sustainability report

Status

Complete

Attach the document

CP-ALL-SD-2022.pdf

CP-ALL-SD-2022.pdf

Page/Section reference

"CPALL Sustainability Report 2022
Download: https://www.cpall.co.th/wp-content/uploads/2023/03/CP-ALL-SD-2022.pdf
Governance - Document page 2-5, 24-26
Strategy - Document page 48-50
Risk & Opportunities - Document page 45-47
Emission Figures - Document page 42-45, 230-231
Emission targets - Document page 41
Other metrics (i.e. energy consumption, food waste and loss, plastic waste reduction, water withdrawal) - Document page 228-233"

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify
(i.e. energy consumption, food waste and loss, plastic waste reduction, water withdrawal)

Comment

Publication

In mainstream reports

Status

Complete

Attach the document

CPALL AR 2022.pdf

Page/Section reference

"CPLL Annual Report 2022 (56-1 One Report)
Governance - Document page 132, 145-146
Strategy - Document page 71-72, 74-77
Risk & Opportunities - Document page 64-66
Emissions figures - Document page 77
Emission targets - Document page 72"

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

Publication

Other, please specify
Greenhouse Gases Analysis Report And Reduction Targets 2020-2030 (Issue:4)

Status

Complete

Attach the document

GHG-Emissions-Scenario-CP-ALL.pdf

Page/Section reference

"Greenhouse Gases Analysis Report and GHG Emission Reduction Target 2020-2030 (Issue: 4)
Governance - PDF page 4
Strategy - PDF page 20
Risks & Opportunities - PDF page 7-11
Emission figures - PDF page 5-7
Emission target - PDF page 19"

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	UN Global Compact World Business Council for Sustainable Development (WBCSD)	CPALL actively support sustainability as members of both the United Nations Global Compact (UNGC) and the Global Compact Network Thailand (GCNT). Our director's role as GCNT's chairman reflects our commitment to driving impactful sustainability initiatives in Thailand and globally. Together, we strive to create a better, more sustainable future, promoting responsible business practices and advancing the Sustainable Development Goals (SDGs). CPALL committed to communicate on our progress in sustainability efforts. By regularly sharing updates through our Communication on Progress (COP) reports, we ensure transparency and accountability in our sustainability journey. CPALL is active in the WBCSD membership through Charoen Pokphand Group, who joined the WBCSD since 2015. All-related policies and activities aligned with WBCSD are deployed to all subsidiaries which is included CP ALL.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	Board of director are responsible for overseeing biodiversity issue together with other sustainability topics. The board oversees, ensures and monitors the progress of the activities of the various Sub-Committees established by the Sustainability and Corporate Governance Committee , and gives recommendations and support as necessary. The Sustainability and Corporate Governance Committee which consists of

		executive management (chaired by a Senior Vice President in Sustainable Development with CEO positioned as an adviser.) has a direct supervision over biodiversity policy, through the Sustainable Development Sub-Committee. The board is also responsible for approving the biodiversity and natural resources policy which was promulgated as a guideline covering all areas of business operations and activities, as well as working with first-tier business partners within the supply chain.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to Net Positive Gain Commitment to No Net Loss Adoption of the mitigation hierarchy approach Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Commitment to no conversion of High Conservation Value areas	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

IBAT – Integrated Biodiversity Assessment Tool

Other, please specify

WWF, BESTCAT

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

"According to WWF Nature related Risk filter for Food retailing Industry and the location-specificity of the company's direct operations and value chain, the biodiversity related risks are evaluated through the potential significant impacts and dependencies across our business in prioritized locations. CPALL uses of location-specificity in biodiversity risk assessment in prioritized 316 production sites, which covers Own operation sites of manufacturing facilities , Makro stores, Lotus's stores and distribution center that is located out of local community areas, which might have impacts on natural capital through business operations, Adjacent areas of own operation sites, which is in between 0 and 10 km to landscapes, seascapes, and watersheds critical to biodiversity. Including Upstream activities of manufacturing facilities which are relate to the initial stages of goods production, and Downstream activities of distribution center which is related to delivering our goods to the end user.

The identification of potential biodiversity related risks is categorized into 3 factors as follow; 1) Global Species Richness Impact 2) Threatened Species Impact 3) Soil and Water Dependency. According to Biodiversity Risk Assessment Tools (IBAT/BESTCAT), CPALL defined the database score for all metrics beyond the Preliminary Biodiversity Metric Assessment. As the result of 2022, CPALL have a critical risks of Threatened Species, Global Species Richness, and the Water Availability & Soil quality in some areas of operation and business activities with scored greater than 95 in total 52 sites with fully implemented 100% of the company management plan to those all critical risk areas"

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

IBAT – Integrated Biodiversity Assessment Tool

Other, please specify

WWF,BESTCAT

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

"According to WWF Nature related Risk filter for Food retailing Industry and the location-specificity of the company's direct operations and value chain, the biodiversity related risks are evaluated through the potential significant impacts and dependencies across our business in prioritized locations. CPALL uses of location-specificity in biodiversity

risk assessment in prioritized 316 production sites, which covers own operation sites of manufacturing facilities , Makro stores, Lotus's stores and distribution center that is located out of local community areas, which might have impacts on natural capital through business operations, Adjacent areas of own operation sites, which is in between 0 and 10 km to landscapes, seascapes, and watersheds critical to biodiversity. Including Upstream activities of manufacturing facilities which are relate to the initial stages of goods production, and Downstream activities of distribution center which is related to delivering our goods to the end user.

The identification of potential biodiversity related risks is categorized into 3 factors as follow; 1) Global Species Richness Impact 2) Threatened Species Impact 3) Soil and Water Dependency. According to Biodiversity Risk Assessment Tools (IBAT/BESTCAT), CPALL defined the database score for all metrics beyond the Preliminary Biodiversity Metric Assessment. As the result of 2022, CPALL have a critical risks of Threatened Species, Global Species Richness, and the Water Availability & Soil quality in some areas of operation and business activities with scored greater than 95 in total 52 sites with fully implemented 100% of the company management plan to those all critical risk areas"

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

Thailand

Name of the biodiversity-sensitive area

Gulf of Thailand, Andaman Sea, and Surat Thani

Proximity

Up to 70 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

CPALL's operation in the Gulf of Thailand, Andaman Sea, and Surat Thani Province consists of Lotus retail stores, Distribution centers, and Makro. The Lotus and Makro

activities involving sourcing products from suppliers around Gulf of Thailand, which can potentially have negatively affect biodiversity. For our CPALL's Distribution centers, our activities involve around transportation, warehousing, and logistics. While these activities are essential for the movement of goods from manufacturers or suppliers to the retail stores, and also have the potential to cause habitat destruction and pollution. Additionally, the development of infrastructure, such as roads, and warehouses can result in habitat fragmentation and disruption of wildlife, and sealife migrating patterns.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Operational controls
Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

"The activities of stores and distribution centers of CPALL can have a profound impact on the biodiversity of the Gulf of Thailand. Unsustainable sourcing practices, such as overfishing and destructive fishing methods, as well as the extraction of raw materials, contribute to habitat degradation and loss. Transportation emissions and habitat fragmentation disrupt ecosystems and species migration patterns. Improper waste management, particularly plastic pollution, poses a significant threat to marine life.
Mitigation measures:
CPALL in collaboration with local authorities dedicated to conserving and restoring coastal ecosystems, particularly in mangrove areas, which serve as nurseries and habitats for marine life. In 2022, CPALL planted 200 seedlings and released 1,000 blue swimming crabs, aiming to preserve marine life, including beach cleanups in partnership with the local community, contributing to the improvement of the scenic environment. Additionally, CPRAM Co., Ltd., along with research and development centers, has implemented the Sustainable Blue Swimming Crab Project for 11 consecutive years. This project promotes blue swimming crab conservation in the Gulf of Thailand, Andaman Sea, and Surat Thani Province while serving as a case study for sustainable supply chain management. By breeding and releasing young crabs, the project strengthens food security and minimizes the negative impact of business activities on ecosystems. Over 300,000 young blue crabs were released in 2022, totaling 1,000,000 specimens, ensuring the sustainability of the crab population. The collaborative efforts underscore the significance of collective action for achieving sustainable conservation and restoration goals, ultimately fostering a sustainable future for Surat Thani Province."

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water management Education & awareness Livelihood, economic & other incentives

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Impacts on biodiversity Details on biodiversity indicators Risks and opportunities Biodiversity strategy	CPALL Sustainability Report 2022 Docuent Page 166-175 https://www.cpall.co.th/wp-content/uploads/2023/03/CP-ALL-SD-2022.pdf
In mainstream financial reports	Governance Biodiversity strategy	CPALL Annual Report 2022 Governance Document Page 179 Strategy Document Page 74-76 https://www.cpall.co.th/wp-content/uploads/2023/03/CP-ALL-ENG-AW-ALL-15-03-66-Low-res.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

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C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer and Chairman of Sustainability and Corporate Governance Committee	Chief Executive Officer (CEO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms