



SUSTAINABILITY REPORT 2024

Charoen Pokphand Produces Co., Ltd.
Charoen Pokphand Agriculture Co.,Ltd.
and companies in Crop Integration Business.
Charoen Pokphand Group.



CROP INTEGRATION BUSINESS

SUSTAINABILITY REPORT 2024

CROP INTRGRATION BUSINESS

TABLE OF CONTENTS

SECTION 1



INTRODUCTION

Message from the leader of Crop Integration Business

Message from the Vice-Chairman
Crop Integration Crop Integration
and Service 5

Message from the CEO 6
Crop Integration Business Group

Summary of key performance

Summary of key performance 7

Performance Results of the 15
Sustainability Goals 9

Awards and Recognitions 11

Dow Jones Sustainability Index 14

ABOUT CROP INTEGRATION BUSINESS

Business base of
Crop Integration Business 15

Vision & Mission 18

C.P. Six Core Values 19

Upstream business
sustainability strategy 20

SECTION 2



SUSTAINABILITY MANAGEMENT

SUSTAINABILITY MANAGEMENT

Sustainability Strategy Framework 24

Sustainability Action Concept 25

Materiality assessment results 30

Sustainability Development Structures 31

MATERIALITY ASSESSMENT

Materiality Assessment Process 32

Results of the assessment of
significant sustainability issues 38

CPP Materiality Assessment 40

About this report 41

Communication Channels 43

SECTION 3



HEART

LIVING RIGHT

Corporate Governance	46
Human Rights & Labor Practices	59
Education & Inequality Reduction	74
Leadership & Human Capital Development	80
Cyber Security and Data Protection	93

SECTION 4

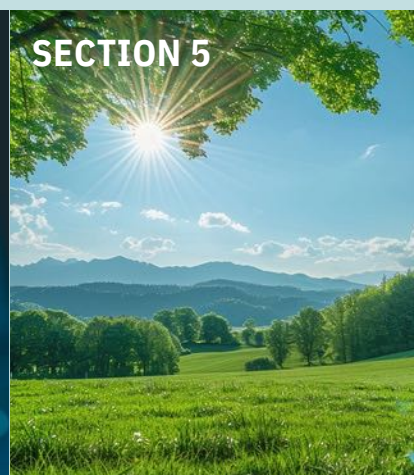


HEALTH

LIVING WELL

Social Impact & Economic Contribution	101
Health and Well-Being	112
Occupational Health & Safety	116
Innovation Management	125
Stakeholder Engagement	136

SECTION 5

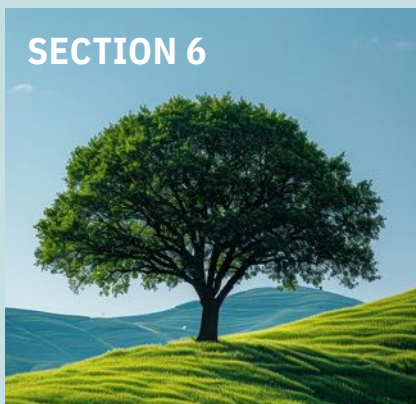


HOME

LIVING TOGETHER

Climate Resilience	152
Circular Economy	162
Water stewardship	167
Ecosystem & Biodiversity	173
Responsible Supply Chain Management	180

SECTION 6



APPENDIX

Companies within the Sustainability Reporting Scope	186
Sustainability Performance 2021-2023	187
GRI Content Index	195
Independent Assurance Statement	

MESSAGE FROM VICE CHAIRMAN CROP INTEGRATION, RICE, TRANSPORTATION AND SERVICE BUSINESS INNOVATIVE ORGANIZATION

“Innovation development **isn’t just a matter of policy but should be conscious mind of every employ**”

Our vision is to become an organization that fosters innovation, creating economic, social and environmental benefits for the entire world. Charoen Pokphand Produce Co., Ltd. and companies in the Crop Integration Business Group are focus on creating a culture of exchanging knowledge along with encouraging employees to create innovations. To step towards sustainable business growth in terms of economy, society, and environment.

ENVIRONMENT

“It is our **responsibility to strike the right balance between development and the conservation of our natural resources while respecting the rights of all of our stakeholdersur**”

CharoenPokphandProduceCo., Ltd.and companies in the Crop Integration Business Group are constantly seeking ways to share knowledge with and build the capabilities of the communities we impact while also ensuring we do all we can to help ecosystems and biodiversity flourish. This will help ensure that the natural resources, on which our business depends, remain sustainable and abundant.

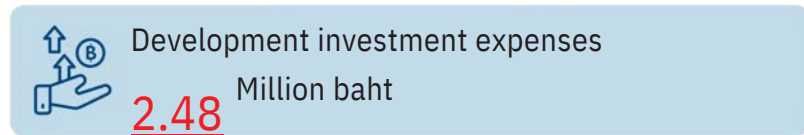
Mr.Prasit Damrongchietanon



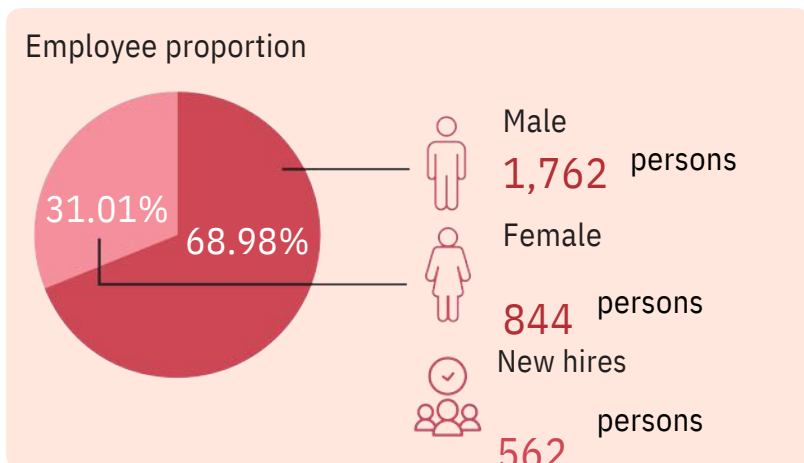
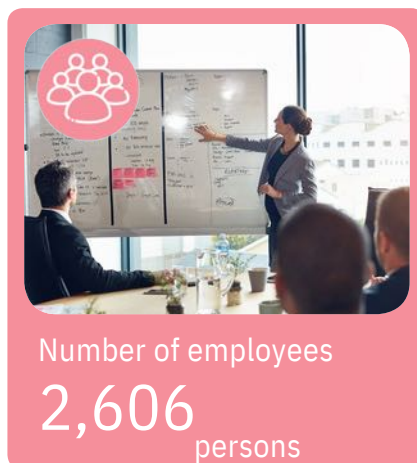
SUMMARY OF KEY PERFORMANCE IN 2024

GRI 102-7

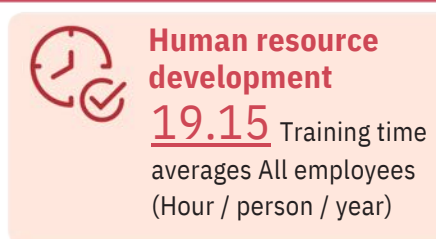
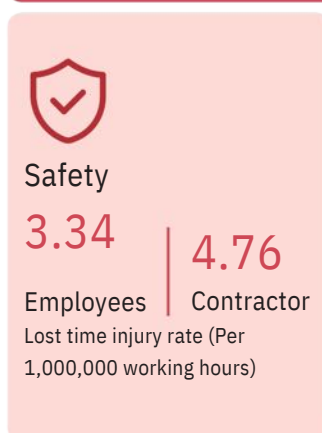
ECONOMIC GROWTH



HEART : LIVING RIGHT



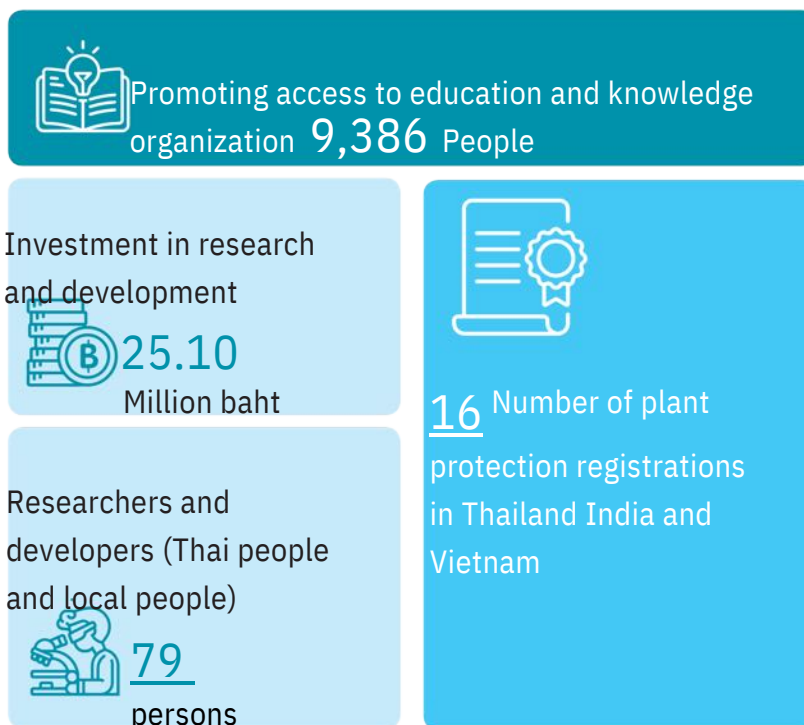
100% Employees and leaders trained in sustainability, safety



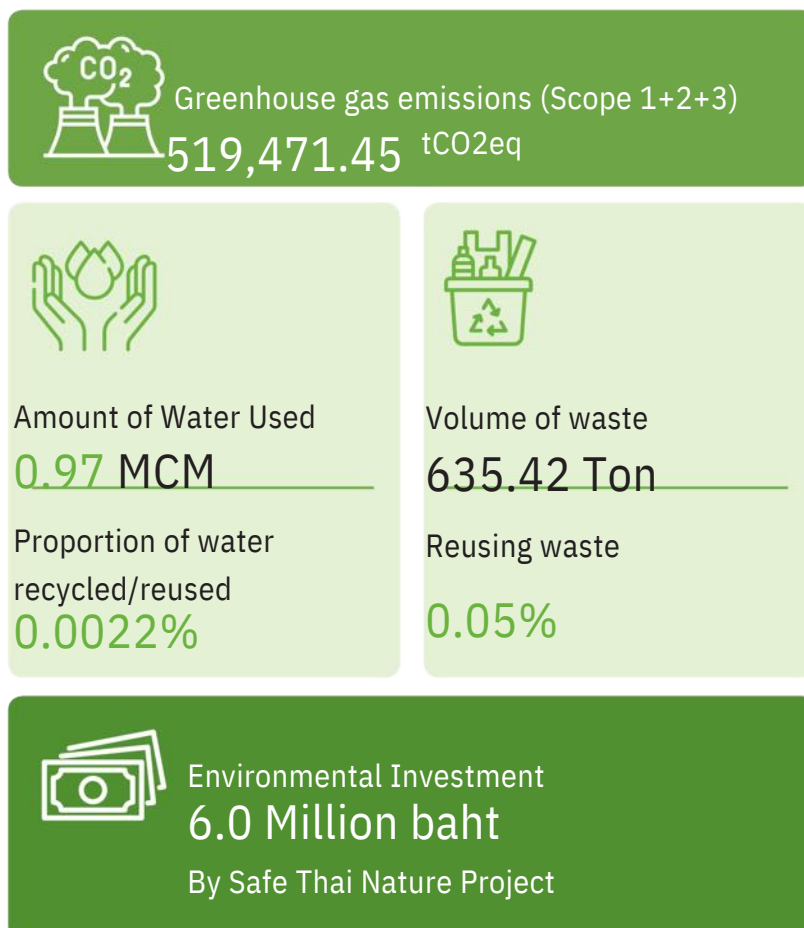
Announcement of the use of ethics in Operate the business of the group
“Code of Conduct of the Group, our practice”

Evaluate and identify key human rights issues. At the chain level 4 Issues

HEALTH : LIVING WELL



HOME : LIVING TOGETHER



MESSAGE FROM CHIEF EXECUTIVE OFFICER CROP INTEGRATION BUSINESS.

HAVE THE KNOWLEDGE TO LEARN NEW THINGS.

Include the Charoen Pokphand Group just in case, don't forget the words "3 benefits" in every country that they invest in. which is good that the success of various businesses The important thing with responsibility and accountability to the questions that the surrounding social community grows together.

Crop Integration Business which operates upstream of the production sector and will be a part that makes farmers earn and bring growth because it is considered various technologies to increase production efficiency to be transferred to farmers. At the same time, employees are encouraged to participate in creating new innovations. to become a learning organization and business growth in terms of economy, society, and environment in a sustainable manner.

"Everything around us can be innovative. Start with interest and action.

Don't let fear makes us dare not think or do something different If you try it and you get an error reviewed and made improvements. Our company is ready to support employees to participate in creating new things that are beneficial to the organization and society."

REWARD YOU LAND BY TAKING CARE OF THE ENVIRONMENT

Our company places importance on participation in conservation. Rehabilitation of natural resources and the environment in collaboration with the agency and network partners in many areas Continue to take care of important watershed forests. as well as encouraging employees to jointly take care of and planting perennials in the organization's area in the event "Planting forests in the house" to increase green space for the country because of participation in nature conservation considered as one of the goals to repay the land. that the integrated plant business intends to operate.

Mr. Sumeth Pinyosnit

PERFORMANCE RESULTS OF THE 15 SUSTAINABILITY GOALS 2024

HEART LIVINGRIGHT

100%



CORPORATE GOVERNANCE Percentage of Business assessed on CG practices. (Ethisphere)

100%



HUMAN RIGHTS & LABOR PRACTICES
Percentage of Business with Human Rights Impact Assessment.

9.55%



EDUCATION & INEQUALITY REDUCTION
Support **9,386** children, youths, and adults will gain access to education and necessary skills development. Goals **100,000** people.

100%



LEADERSHIP & HUMAN CAPITAL DEVELOPMENT
Percentage of Employees Engaged in Learning and Initiatives.

100%



CYBER SECURITY & DATA PROTECTION
Percentage of Business with certified international standard.

Health Living Well

0.84%



HEALTH & WELL-BEING
Sales from products and services by **B2B2C** and **B2C**

40.05%



SOCIAL IMPACT AND ECONOMIC CONTRIBUTION
Improved employment prospects and quality of life for **34,725** farmers and vulnerable groups. Goals **100,000** people



OCCUPATIONAL HEALTH & SAFETY

Zero Accident **3.34** no. per 1,000,000 working hours

32%



INNOVATION MANAGEMENT

16 registered patents and petty patents from **50** targets.

82%



STAKEHOLDER ENGAGEMENT engagement score of multi-stakeholder perception survey.

Goals **80%**

Home

Living Together

89.1%



CLIMATE RESILIENCE

Climate resilience emission quantity **89.18%** Greenhouse gases per unit of income increased. Compared to the base year 2020

90%



CIRCULAR ECONOMY

90% of all plastic packaging are recyclable, reusable or compostable.

98%



WATER STEWARDSHIP

98.25% reduction in water withdrawal per unit revenue compared to baseline year 2020

100%



ECOSYSTEM AND BIODIVERSITY PROTECTION

100% Protected and restored terrestrial ecosystems by Safe Thai Nature Project.

73.91%



RESPONSIBLE SUPPLY CHAIN MANAGEMENT

Sustainability audit with **17** high-risk supplier from **23** supplier.

AWARDS AND STANDARDS (CPP)

Certification of passing business governance standards.

In the first year, Charoen Pokphand Produce Co.,Ltd. received a plaque and certificate of passing corporate governance standards. And received a special award from BCG in 3 areas:

Bioeconomy

Green
economy

Economic
overview

Safety Health and Environment Management-Outstanding Model

Establishment Award Occupational safety and working environment



Seed Processing
Plant Soi 19

National Level
23rd years



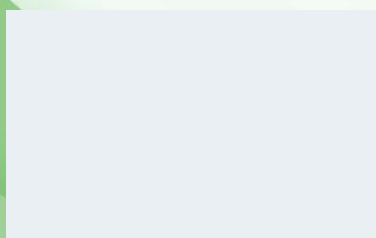
Seed Processing Plant Soi 12

National Level
18th years



Organic Fertilizer Plant

National Level
9th years



Chemical Fertilizer Packing and Mixing plant
National Level 3th years

Zero Accident Campaign Award (Zero Accident Campaign Activity)



Chemical Fertilizer Packing
and Mixing plant



3nd years Beginning Level

CSR

Corporate Social Responsibility (CSR)
CSR-DIW Award Chemical Fertilizer
Packing and Mixing plant



4nd years Beginning Level

Protection standard award and Solve drug problems (TSRI)



Seed Processing Plant Soi 19



12nd years Beginning Level

Seed Processing Plant Soi 12



12nd years Beginning Level

Organic Fertilizer Plant



7th years Beginning Level

Chemical Fertilizer Packing and Mixing
Plant



4th years Beginning Level



International Standard Systems and Certification

ISO 9001: 2015 (Quality Management)

1. Seed Processing Plant Soi 19
2. Seed Processing Plant Soi 12
3. Organic Fertilizer Plant
4. Chemical Fertilizer mixing and packing plant

ISO 14001: 2015 (Environmental Management)

1. Seed Processing Plant Soi 19 Seed Processing Plant Soi 12

AWARDS AND STANDARDS (CPA&CPS)



Safety, occupational health
National Outstanding Model Business
Establishment Award



Zero Accident Campaign Award
Campaign activity to reduce work
accident statistics to zero



Standards and certification systems

- ISO 9001
- ISO 45001
- ISO 14001
- GHPs

Outstanding Establishment Award for Labor Relations and Welfare
National Labor

DOW JONES SUSTAINABILITY INDEX (DJSI)

PokphandGroupProduces Co.,Ltd. join the Dow JonesSustainability Index membership Industry Leader of the Food & Staples Retailing industry for the first time with a 34- score assessment, no.68 in the world, with details as follows :



2024 CSA weights overview



Governance & Economic	Environmental	Social
Corporate Governance 15 Materiality 65 Risk & Crisis Management 11 Business Ethics 65 Policy Influence 0 Supply Chain Management 52 Tax Strategy 0 Info. Security/ Cybersecurity Innovation Management 20 31	Environmental Reporting 100 Environmental Policy & Management Systems Operational Eco-Efficiency 95 48 Biodiversity 26 Climate Strategy 17 Food Loss & Waste Genetically Modified Organism 39 0 Packaging 6 Sustainable Agricultural Practices 0 Water Related Risks 24	Social Reporting 100 Labor Practice Indicators 46 48 Living Wage 6 27 Human Capital Development 27 Talent Attraction & Retention 16 Corporate Citizenship & Philanthropy 25 Occupational Health & Safety Health & Nutrition Customer Relationship Management 70 12 12

BUSINESS BASE OF CROP INTEGRATION BUSINESS

GRI 102-1, 102-2, 102-3, 102-4, 102-5, 102-6, 102-16, 102-45



Number of employees
2,606 People



4 countries
(Thailand, Myanmar, Vietnam, India)
(Information : 31 Dec. 2024)



Corn Farmers
900,000 People
Number of farmers in the
business base country

The 11 countries doing business are Thailand, Vietnam, Lao PDR, Cambodia, Myanmar, Philippines, India, Nepal, Sri Lanka, Bangladesh and Pakistan.

CROP INTEGRATION BUSINESS

MAIN BUSINESS

From the fact that Charoen Pokphand Group operates an Integrated Agricultural Business and Animal Feed Production for domestic and international, corn being one of the crucial raw materials due to its high protein content. Therefore, to support the production shortfall of corn with stable and good quality for raising animals, Crop Integration Business plays an important role in the upstream production consisting of R&D of corn hybrids to be suitable to climate change and cultivation behavior of growers as well as seed production without contamination through controlled seed production facilities to produce corn hybrid seeds that meet the quality requirement of growers. In addition, the company provides and transfers knowledge about cultivation technology, know how to apply fertilizer to increase production or adding organic fertilizer to improve the soil fertility to member farmers. Last but the most crucial factor is water resources management and irrigation to enable all year round planting which will result in increasing income and farmers' standard of living according to CP's Three Benefits Principle : Farmers, Countries and Organization.

MAIN COMPANY

Charoen Pokphand Produce Co., Ltd.
Charoen Pokphand Seed Co., Ltd.
Charoen Pokphand Agriculture Co., Ltd.  Thailand

C.P. Seeds (Vietnam) Co., Ltd.  Vietnam

CPP Fertilizer Co., Ltd.
CPP Myat Min Agro Co., Ltd.  Myanmar

Charoen Plantation Co., Ltd.  Cambodia

Charoen Pokphand Produce (Lao) Co., Ltd.  Lao PDR

Charoen Pokphand Seeds (India) Pvt., Ltd.  India

ECONOMIC DIMENSION



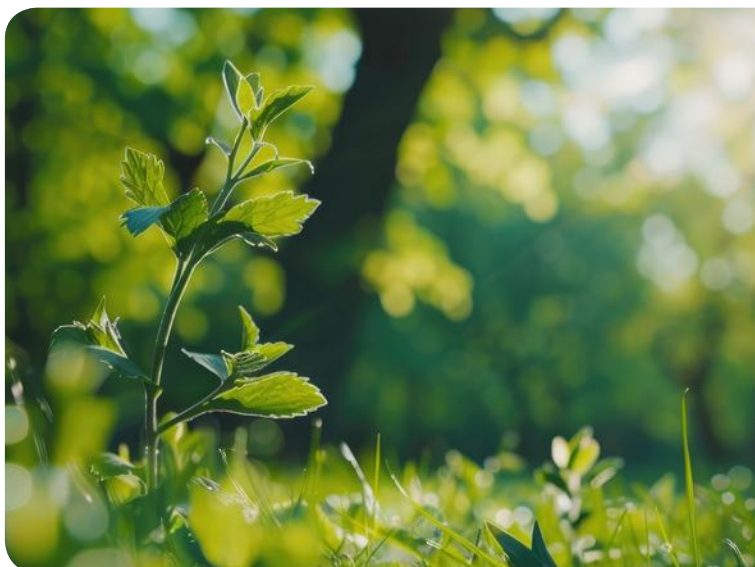
ECONOMIC DIMENSION

-  Governance and Business Ethics
-  Customer Relationship Management
-  Health & Well-Being
-  Supply Chain Management
-  Risk Management



SOCIAL DIMENSION

-  Social Impact on Community
-  Human Rights
-  Occupational Health and Safety
-  Human Capital Development
-  Talent Attraction and Retention



ENVIRONMENTAL DIMENSION

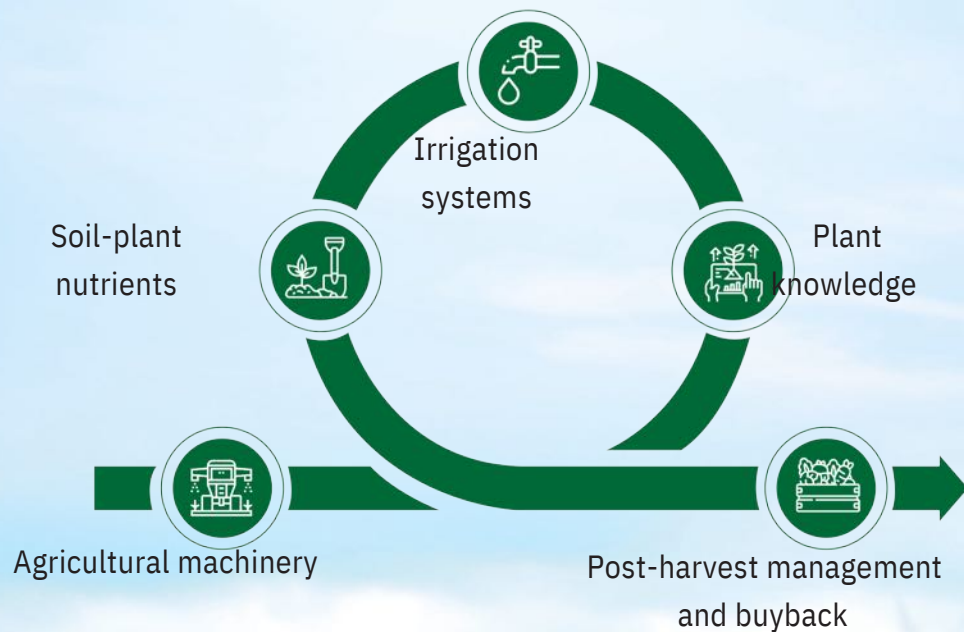
-  Operational Eco-Efficiency
-  Ecosystem and Biodiversity
-  Raw Material Sourcing

VISION

Leader in integrated agriculture
in sustainable irrigation areas.

MISSION

A leader in integrated agriculture
by managing the supply chain shorter
and directly to consumers. Using technology
in 5 areas of excellence



SIX CORE VALUES

1



THREE BENEFITS

We are committed to doing business responsibly, and focus on sustainable benefits. In every country that invests, there are benefits to the people who invest and benefits to the organization.

2



SPEED WITH QUALITY

We work hard to achieve our goals. By thinking quickly, acting quickly and achieving quality results according to the standards set by the company.

3



SIMPLIFICATION

We are committed to performing tasks that are beneficial to the organization. Reduce redundant steps and improve work to be modern which employees can actually put into practice, quickly and efficiently.

4



ACCEPT CHANGE

We embrace change and adapt to changing situations. It is not in the same state just because it is something that has been done before. By learning and never stopping to seek new opportunities. We are also committed to improving to meet all the needs of farmers, partners and the nation.

5



INNOVATE

We are dedicated to continuous innovation and business development to become “Innovative organization”. Create the best products and services for farmers and our customers.

6



INTEGRITY

We adhere to morality and ethics. Work with honesty towards yourself, colleagues and consumers. There is a traceability system to build confidence in the organization and brand.

Upstream business sustainability strategy



Upstream agribusiness is the starting point of the agricultural production supply chain and plays a crucial role in establishing a solid foundation for further production and processing. However, it is fraught with challenges, including environmental, technological, and rapidly changing consumer behavior.

Sustainability is therefore a necessary strategy to foster long-term stability for farmers, producers, entrepreneurs, and communities.

The company is committed to operating a sustainable upstream agricultural business based on economic, social, and environmental responsibility. We prioritize reducing the impacts of our business operations and aim to create sustainable benefits for the nation and society.





In 2024, the Sustainable Development Goals (SDGs) will continue to consist of 15 core goals, with special emphasis on three key areas:

1. Organizations achieving net-zero greenhouse gas emissions
2. Organizations achieving zero waste and zero waste
3. Organizations reducing social inequality



In addition, our organization is committed to operating sustainably beyond compliance with the rules, regulations, and standards of the countries in which we operate. This is achieved by adhering to international sustainability principles, such as the United Nations Global Compact and the United Nations Sustainable Development Goals (UN SDGs).



SUSTAINABILITY MANAGEMENT



CropIntegration Business, CharoenPokphand Group believes that in addition to delivering value through quality products and services, and meets the needs of customers and consumers Businesses will be able to operate sustainably. Must be based on social responsibility. and the environment according to the Sufficiency Economy Philosophy

This is the origin of conducting business by adhering to the philosophy of 3 benefits that focuses on creating benefits for the nation. society and companies as always Including applying the C.P. Excellence guidelines.



Our organization is committed to operating sustainably, going beyond complying with the rules, regulations and standards of the countries in which we operate. By following international principles of sustainability such as the UN Global Compact, United Nations Principles on business operations and human rights (UN Guiding Principles on Business and Human Rights: UNGP) and the Sustainable Development Goals of the United Nations (UN Sustainable Development Goals: UN SDGs)



**SUSTAINABILITY
STRATEGY**



**SUSTAINABILITY
GOVERNANCE**



**MATERIALITY
ASSESSMENT**



ABOUT THIS REPORT

SUSTAINABILITY STRATEGY FRAMEWORK 2030



To be a leading tech and innovation conglomerate, providing food for body and mind that creates shared value and brings health and well-being for all.

THREE BENEFITS PRINCIPLE



Sufficiency Economy Philosophy



C.P. Excellence Management Approach



The 10 UNGC Principles 17 UN SDGs & UNGP



Regulations and Standards

HEART: LIVING RIGHT



CORPORATE GOVERNANCE



HUMAN RIGHTS & LABOR PRACTICES



EDUCATION & INEQUALITY REDUCTION



LEADERSHIP & HUMAN CAPITAL DEVELOPMENT



CYBER SECURITY & DATA PROTECTION

HEALTH: LIVING WELL



HEALTH & WELL-BEING



SOCIAL IMPACT & ECONOMIC CONTRIBUTION



INNOVATION



STAKEHOLDER ENGAGEMENT



OCCUPATIONAL HEALTH & SAFETY*

HOME: LIVING TOGETHER



CLIMATE RESILIENCE



WASTE VALUE CREATION*



WATER STEWARDSHIP



ECOSYSTEM & BIODIVERSITY PROTECTION



RESPONSIBLE SUPPLY CHAIN MANAGEMENT

Collaboration, Capacity Building, Attitudes and Sustainability Culture

Enabled by Partnerships, Capability, and Culture of Sustainability

In 2016, Crop Integration Business adopt the Strategies and Sustainable development goals of the Charoen Pokphand Group to create a sustainable way of working under the 3Hs framework ; HEART – Committed to a sustainable business HEALTH – Committed to a sustainable society HOME – Committed to a sustainable environment. CP Group's sustainability strategy consists of 4 issues, which are an important basis for CP Group's sustainable business operations, namely the 3-Benefits Philosophy, which aims to create benefits for the nation, society, and the company.

Our organization places importance on conducting business based on the principles of good governance. and can be verified Including being responsible for society and the environment in a sustainable way. For the highest benefit of all stakeholders. Crop Integration receive sustainability strategies and goals 2030, increasing from the CP Group's goals in 3 issues.



Cyber Security & Data Protection



Occupational Health & Safety



Waste Value Creation

SUSTAINABILITY ACTION CONCEPT



CORPORATE GOVERNANCE



Goal 2024

100% of Crop Integration Business get a recognized evaluation of Corporate Governance Operations (Ethisphere)

Goal 2030

100% of Crop Integration Business get a recognized evaluation of Corporate Governance Operations (Ethisphere)



HUMAN RIGHTS AND LABOR PRACTICES



Goal 2024

100% Crop Integration Business where human rights impacts from activities of high-risk organizations and direct suppliers are regularly assessed

Goal 2030

100% of Crop Integration Business where human rights impacts from activities of high-risk organizations and direct suppliers are regularly assessed



LEADERSHIP & HUMAN CAPITAL



Goal 2024

100% Leaders and employees in Crop Integration Business through training to develop knowledge and understanding of sustainability.

Goal 2030

100% Employees receive training and participate in sustainability activities or projects annually. sustainability



EDUCATION & INEQUALITY REDUCTION



Goal 2024

Supporting **9,386** children, youth and adults to have the opportunity to access education and developing the necessary skills from the goal of **100,000** people

Goal 2030

Support children, youth and adults to have the opportunity to access education and developing the necessary skills from the goal of **100,000** people



CYBER SECURITY & DATA PROTECTION



Goal 2024

100% Certified Cyber Security Standards

Goal 2030

100% of Crop Integration Business certified to international cyber security and data protection standards.



GOOD HEALTH & WELL-BEING



Goal 2024

0.84% of sales come from **B2B2C and B2C**
promote health and products and services that wellness

Goal 2030

Sales generated from **B2B2C and B2C** products and services that promote health and wellness



SOCIAL IMPACT & ECONOMIC CONTRIBUTION



Goal 2024

34.72% Promote occupations and quality of life for farmers and vulnerable groups **34,725** out of the target of **100,000**

Goal 2030

Number of farmers, small entrepreneurs vulnerable groups and others throughout the supply chain that has been supported to generate income for all **100,000**



OCCUPATIONAL HEALTH & SAFETY



Goal 2024

The lost time accident rate was **2.17** cases/1,000,000. working hours

Goal 2030

Lost time accident rate is zero.



INNOVATION



Goal 2024

Number of registered patents and petty patents **16** out of **50** targets

Goal 2030

There are a total of **50** registered patents and petty patents.



STAKEHOLDER ENGAGEMENT



Goal 2024

The survey found that Crop Integrated Business received **82%** stakeholder engagement score from the target **80%**

Goal 2030

80% of multi-stakeholder engagement surveys score positively



CLIMATE RESILIENCE



Goal 2024

The amount of greenhouse gas emissions has increased. **17.96%** per revenue unit compared to the base year 2020

Goal 2030

100% of direct and indirect greenhouse gas emissions
(Scope1 and Scope2) net zero.



CIRCULAR ECONOMY



Goal 2024

N/A

Goal 2030

All plastic packaging used is more than **90%** recyclable, reusable or compostable.



WATER STEWARDSHIP



Goal 2024

Reduced water consumption **66.79%** per revenue unit from the target of **30%** compared to the base year 2020

Goal 2030

Reduce water consumption by **30%** per revenue unit. compared to the base year 2020



ECOSYSTEMS AND BIODIVERSITY PROTECTION



Goal 2024

1 project, Safe Thai Nature Project done in conjunction with external organizations

Goal 2030

Number of projects with relevant international partners to manage and monitor biodiversity in business operations.



RESPONSIBLE SUPPLY CHAIN MANAGEMENT



Goal 2024

73.91% of businesses with a traceability process of the **23** first-tier business partners, **17** were audited for sustainability.

Goal 2030

100% of high-risk raw materials are traceable and high-risk suppliers audited.

MATERIALITY ASSESSMENT RESULTS OF CROP INTEGRATION BUSINESS

Material Issue	Topic	Business Line			
		Agricultural Integration Business	Seed Business	Fertilizer Business	Crop Integration Business
Corporate Governance	Governance and Business Ethics	●	●	●	●
	Risk and Crisis Management	●	●	●	●
	Cyber Security & Data Protection	●	●	●	●
Human Rights and Labor Practices	Labor Practices and Human Rights (Excluding Occupational Health & Safety)	●	●	●	●
	Safety, occupational health and working environment	●	●	●	●
Leadership & Human Capital Development	Human Resource Management	●	●	●	●
Stakeholder Engagement Social Impact	Stakeholder Engagement	●	●	●	●
	Customer Relationship Management	●	●	●	●
	Corporate Citizenship and Philanthropy (excluding education activities)	●	●	●	●
	Social Impacts from Operations, Products, and Services	●	●	●	●
Health & Well-being	Health & Well-being	●	●	●	●
	Animal Welfare	●	●	●	●
Education	Social Inclusion in Education	●	●	●	●
Innovation	Innovation Management	●	●	●	●
Climate Change	Climate Change Impact	●	●	●	●
	Energy Management	●	●	●	●
	Effluent and Waste Management	●	●	●	●
	Resource Efficiency	●	●	●	●
Water Stewardship	Water Management	●	●	●	●
Ecosystem & Biodiversity Protection	Raw Material Sourcing / Biodiversity and Ecosystems	●	●	●	●
	Packaging	●	●	●	●
Supply Chain	Management Responsible Supply Chain Management	●	●	●	●

● No Impact

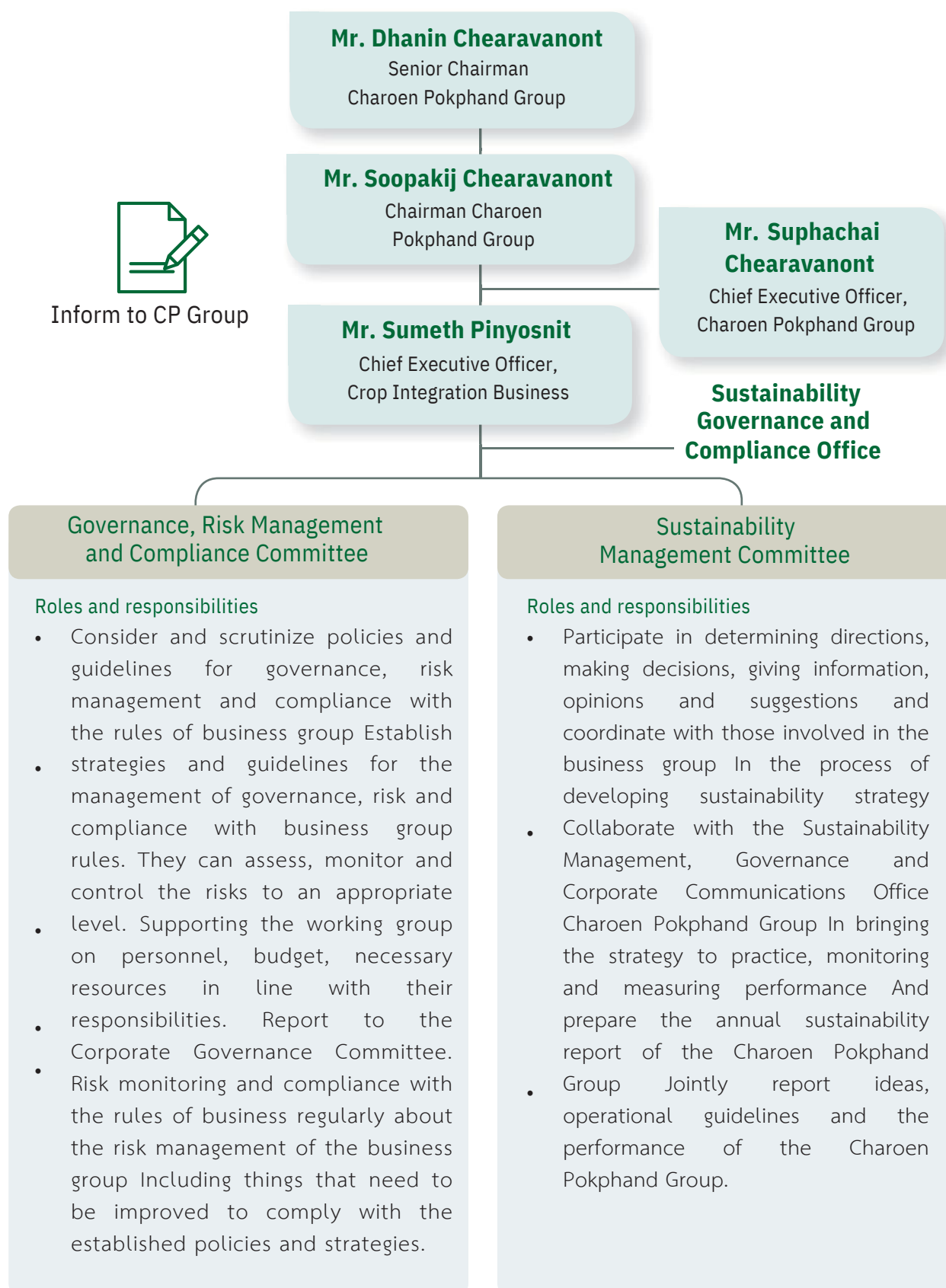
● Little impact

● Middle Impact

● High Impact

● Very High Impact

SUSTAINABILITY DEVELOPMENT STRUCTURES



MATERIALITY ASSESSMENT PROCESS

GRI 102-2, 102-15, 102-32, 102-46, 102-47, 102-54, 103-1



Global Reporting Initiative Standards (GRI)



SUSTAINABILITY STRATEGY 2030

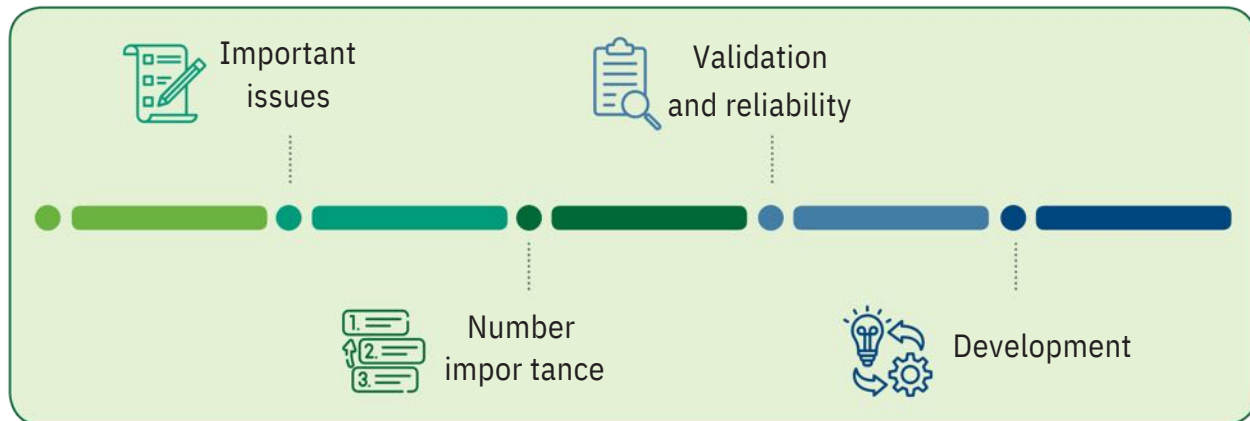


ASSESSMENT OF KEY SUSTAINABILITY ISSUES

INDUSTRY FOCUSED	INTERNAL FOCUSED	EXTERNAL FOCUSED	FUTURE FOCUSED
Assessing key business issues by taking business-related factors and other companies in the same industry to consider	Assessing key business issues by taking into account the main factors related to the internal operations of the business.	Assessing key business issues by taking into account the issues of interest of stakeholders	Assessing key business issues by bringing up issues of interest to relevant industry leaders and the perspective of investors to consider

Crop Integration Business determine the content and quality of this report. On the basis of the organization's operations and important issues that affect the economy, society and the environment. Under the perspective of stakeholders both inside and outside the organization To be one of the channels for communication for stakeholders to be informed of our commitment and operating results according to the company's strategic sustainability framework. The company uses international sustainability reporting GRI Sustainability Reporting Standards, Core option, as a framework for preparing the report. By considering both internal and external factors related to operations. To evaluate important sustainability issues

Assessment of sustainability issues under the 10 key principles of the GRI Standards, which includes stakeholder participation, Considering the context of sustainability, Assessment of important sustainability issues, completeness of information, as well as verifying the quality of reports by carrying out work to check the accuracy of disclosed information, balance of operating results. Comparable data to show historical performance trends, data reliability and reporting timeliness to inform stakeholder decision-making. There are processes and procedures for evaluating important sustainability issues as follows:



STEPS TO IDENTIFY KEY ISSUE

Important issues



Information and analysis of important sustainability issues related to Charoen Pokphand Group and Crop Integration Business

The steps for identifying important issues include

- Sustainability workshop in 2016 shared between executives Including collecting information from trading partners to consider. After that, it is reviewed every year, once a year.
- Results of the review of significant issues for 2021 of the Charoen Pokphand Group and Crop Integration Business.
- Compare sustainability issues of Crop Integrated Business with the same business : Sustainable Development Goals, United Nations Global Compact, World Business Committee for the Environment (WBCSD), Dow Jones Sustainability Index.
- Stakeholder groups from survey data of Charoen Pokphand Group's trading partners and CSR, total 14 groups.
- Prepare important issues of the subsidiaries that has prepared a sustainability report and organized a forum to listen to opinions with additional stakeholders. From the questionnaire survey

Prioritization



- Meeting of the Sustainability Management Committee to consider information on important issues regarding sustainability. Separated by stakeholder group
- Survey opinions of employees, executives and stakeholder representatives through an online system. Consider important information From meetings and surveys of stakeholders' opinions Follow this step •••••

Weighting values for business groups.

Weight of each stakeholder group

Calculate the importance score to stakeholders.

Calculate the importance score for business operations

Materiality Matrix

Verifying accuracy and reliability



Verify the preparation of sustainability reports according to GRI standards to complete all 4 aspects. The steps for verifying accuracy include:

- Interview external stakeholders to sustainability issues and other ideas to develop sustainability reports.
- The management team considers and approves significant issues.

Verify and certify the accuracy of sustainability reporting by an independent agency.

Continuous Development



Listen to opinions in order to develop future sustainability reports. To be able to meet the expectations of stakeholders At the same time, there are also many contact channels open.

OBJECTIVES OF THE SURVEY OF STAKEHOLDERS' OPINIONS.



Performance
15 Sustainability Goals



Assess the impact
Sustainability issues



Assess the impact
Sustainability issues

Stakeholder Perception Survey and assess sustainability impacts (online system)

Crop Integration Business has assessed stakeholder satisfaction in various areas through a survey and satisfaction measurement from the CP Group, particularly in the area of ESG (Environment, Social and Governance). In 2024, overall satisfaction was found to be 82%.

General Information

General Information

Section 1 General Information

2 questions

1. age

2. sex

Section 2 Performance results 15 important goals of Charoen Pokphand Group

15 questions

Performance level according to the sustainability goals of Crop Integration Business

Section 3 Assessment of Company Sustainability Issues

10 questions

Stakeholders were asked to select 5 issues of interest from 23 issues.

What is your opinion on the impact of the company's operations on that issue?

3.1 Assess the severity of the impact

3.2 Assess the likelihood of impacts

Section 4 Communication: Listening and responding to stakeholders.

3 questions

4.1 Efficiency in communicating with stakeholders both inside and outside the organization.

4.2 Listening to the opinions of stakeholders

4.3 Respond to the needs and expectations of stakeholders

Section 5 Overall Opinions

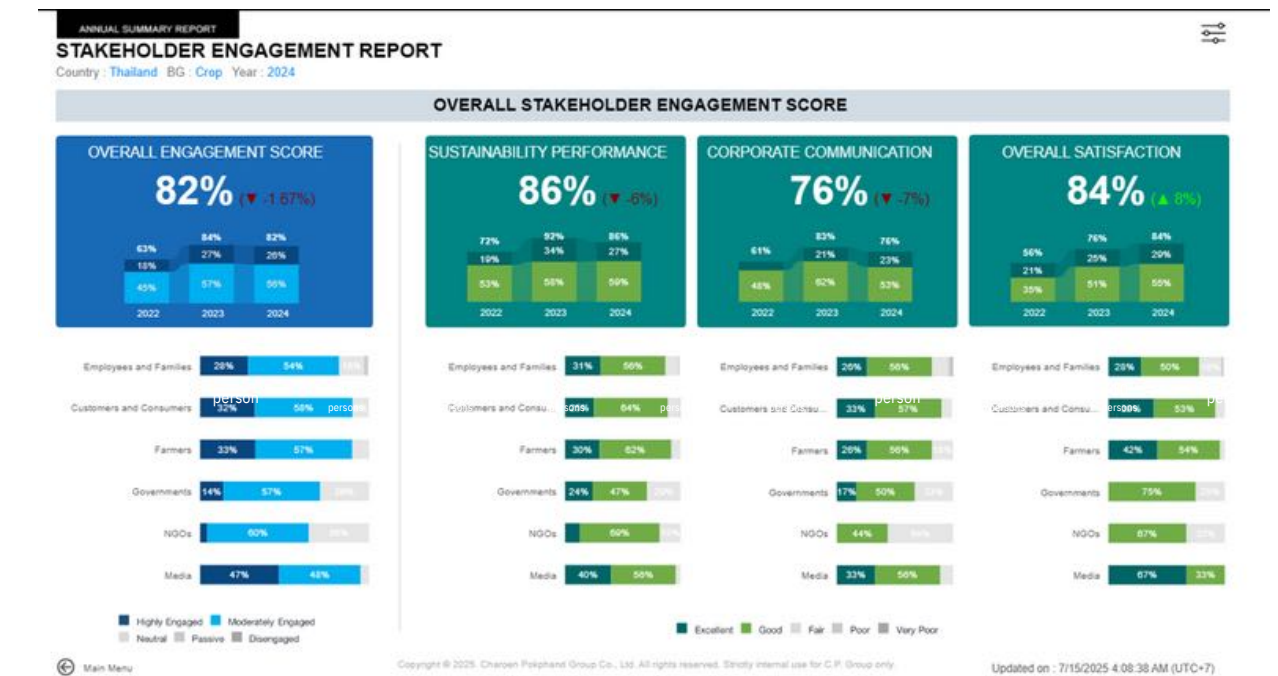
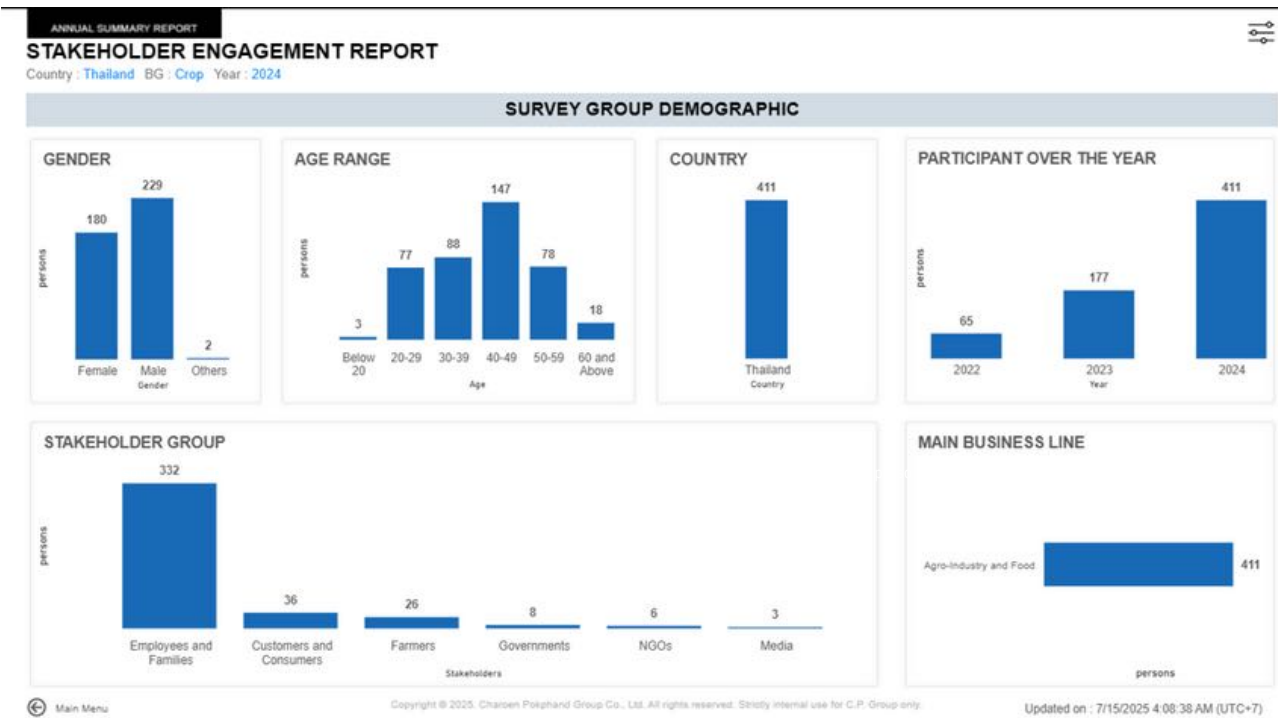
1 questions

5.1 Overall satisfaction with the company

RESULTS OF THE ASSESSMENT OF SIGNIFICANT SUSTAINABILITY ISSUES

STAKEHOLDER ENGAGEMENTREPORTYEAR2024

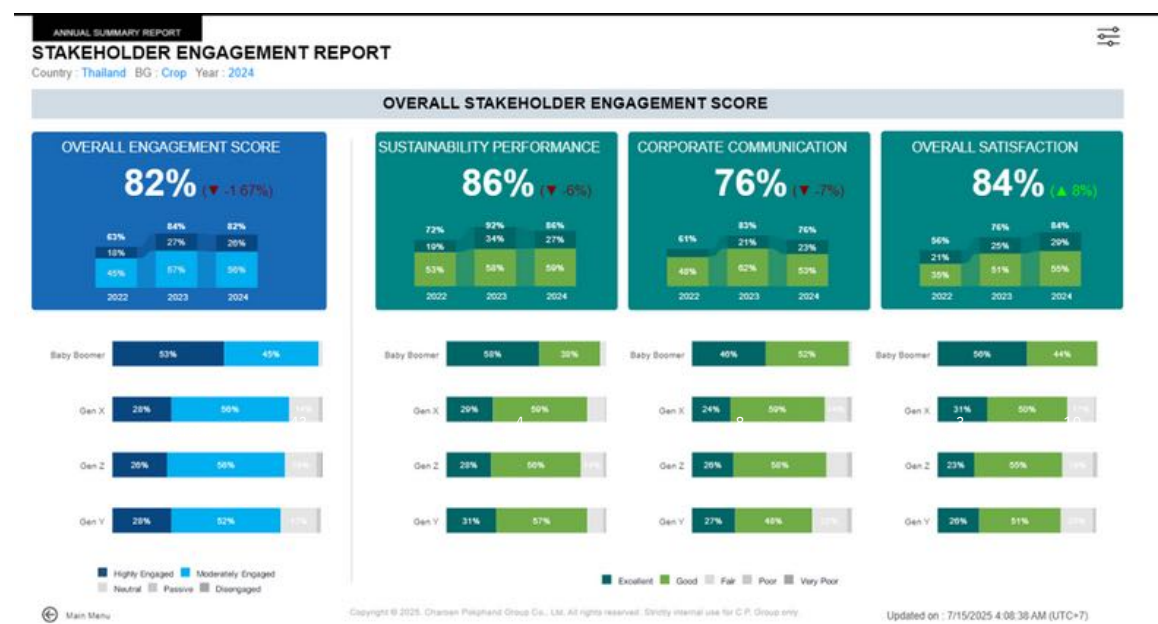
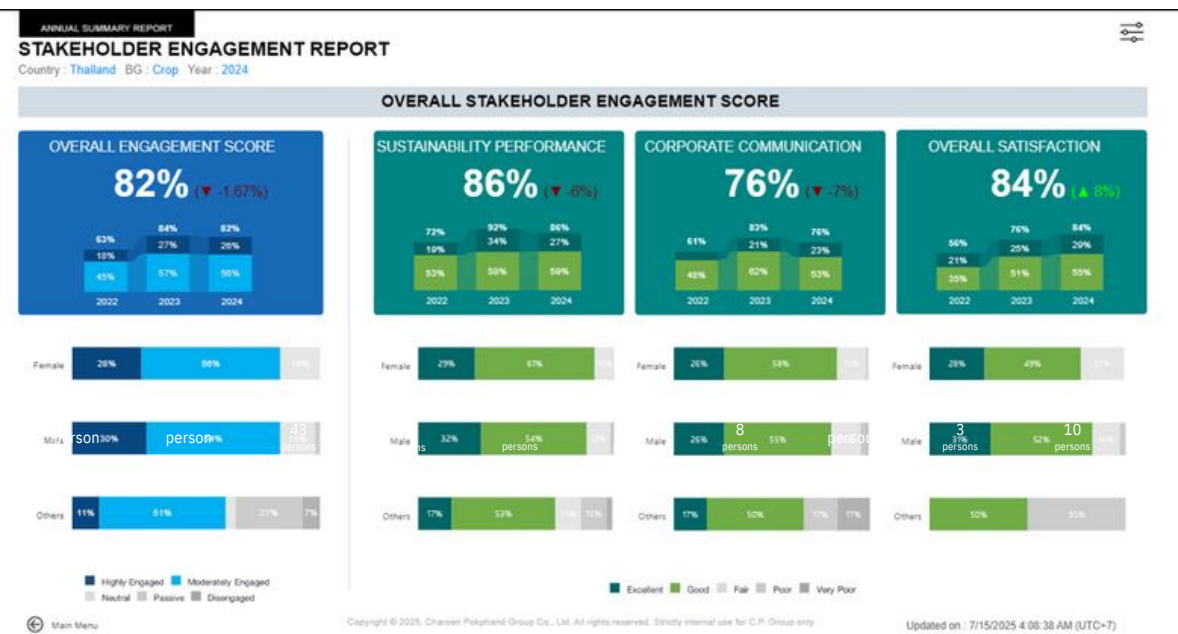
Crop Integration Business.



RESULTS OF THE ASSESSMENT OF SIGNIFICANT SUSTAINABILITY ISSUES

STAKEHOLDER ENGAGEMENTREPORTYEAR2024

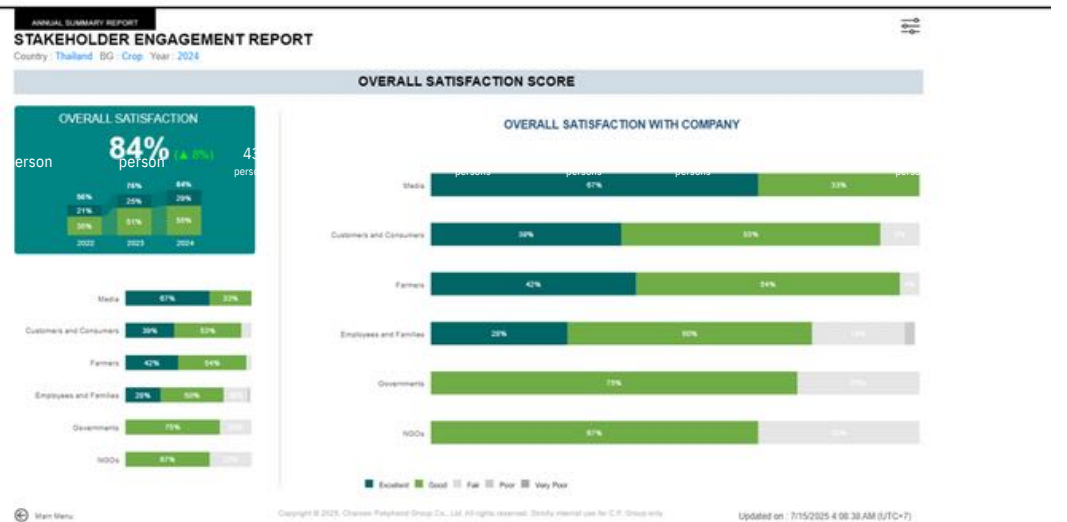
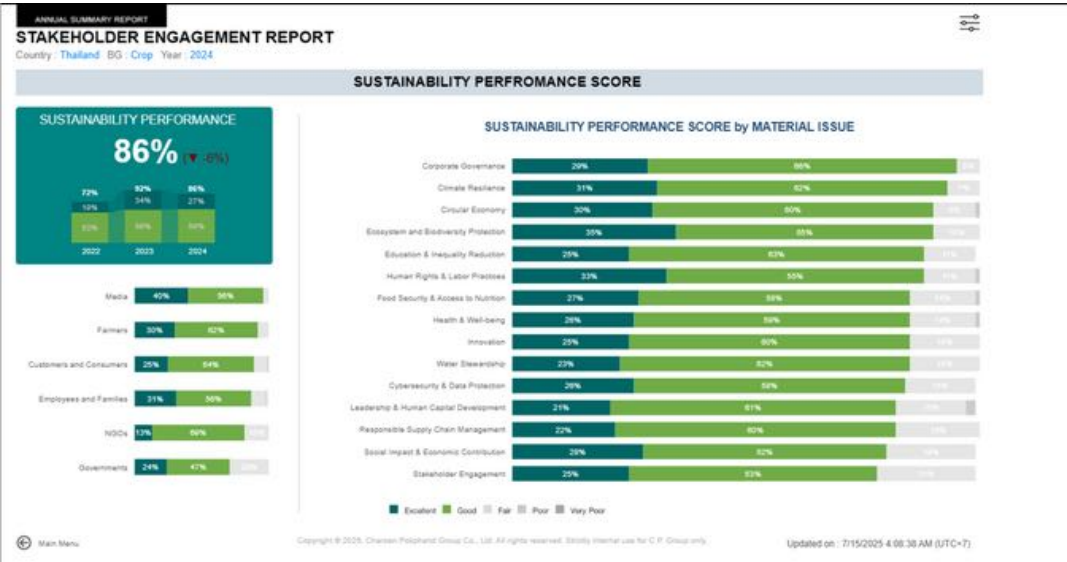
Crop Integration Business.



RESULTS OF THE ASSESSMENT OF SIGNIFICANT SUSTAINABILITY ISSUES

STAKEHOLDER ENGAGEMENTREPORTYEAR2024

Crop Integration Business.



SCOPE OF ASSESSMENT OF MATERIAL ISSUES.

Sustainability Issues	Related GRIs	Scope										
		Inside Organization	Outside Organization									
		Employee	Customers / Consumers	Community & Society	Partners	Shareholders / Investors	Media / Online media	Government Agency	Supplier	Competitor	NGOs	Creditor / Bank
Topic HEART economy												
Corporate Governance	102-11, 102-12, 102-13, 102-18, 102-22, 102-24, 102-30, 102-35, 102-38, 103-1, 103-2, 103-3, 205-1, 205-2, 205-3, 406-1	●			●	●			●	●		●
Human Rights and Labor Practices	102-41, 103-1, 103-2, 103-3, 401-2, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-9, 403-10, 405-1, 405-2, 412-1	●	●	●	●							
Education	103-1,103-2,103-3,203-2	●		●				●				
Leadership & Human Capital Development	103-1, 103-2, 103-3, 401-1, 404-1, 404-2, 404-3	●			●				●			
Cyber Security and Data Protection	102-19, 102-20, 103-1, 103- 2, 103-3, 418-1	●	●				●					
Topic HEALTH society												
Good health & Well-being	103-1, 103-2, 103-3, 417-1	●	●									
Social Impact	103-1, 103-2, 103-3, 201-1, 413-1	●		●	●			●			●	
Occupational health & Safety	103-1, 103-2, 103-3, 403-9, 403-10	●	●	●								
Innovation	103-1, 103-2, 103-3	●	●	●	●			●	●			
Stakeholder Engagement	103-1, 103-2, 103-3, 102-40, 102-41, 102-42, 102-43, 102-44	●	●	●	●	●	●	●	●	●	●	●
Topic HOME environment												
Climate change Management	103-1, 103-2, 103-3, 302-1, 302-3, 302-4, 305-1, 305-2, 305-4	●			●			●	●			
Circular Economy	103-1, 103-2, 103-3, 306-1, 306-2, 306-3, 306-4, 306-5	●	●	●	●			●	●			
Water Stewardship	103-1, 103-2, 103-3, 303-1, 303-2, 303-3, 303-4, 303-5	●		●								
Ecosystem & Biodiversity Protection	103-1, 103-2, 103-3, 304-1, 304-2	●		●	●				●			
Responsible Supply Chain	103-1, 103-2, 103-3, 204-1, 308-1, /414-1	●	●		●				●			

ABOUT THIS REPORT



SUSTAINABILITY REPORTING Crop

Integration Business has prepared the 2024 Sustainability Report, 4 edition, which was published to the public on October 1, 2025



OPERATION SCOPE This report presents the overall performance of companies in the Crop Integration Business covering 4 production base countries. from 1 January to 31 December 2024



THIRD PARTY CERTIFICATION This report

has been assessed and verified for credibility by LRQA (Thailand) Co., Ltd., an internationally recognized independent certification body. For the reviewed data, it includes : GRI 101, GRI 102, GRI 102-16, GRI 102-17, GRI302-1, GRI 303-3, GRI 305-1, GRI 305-2, GRI 306-3, GRI 306-4, GRI 306-5, GRI 403-9 and GRI 403-10



PURPOSE OF THIS REPORT This report is

prepared to communicate the commitment to conduct business towards sustainability in terms of economy, society and environment.



REPORT SCOPE The Company has prepared

this Sustainability Report. Complies with Global Reporting Initiatives (GRI) standards and discloses information in accordance with Core Option guidelines.



OPERATION PROGRESS REPORT The

company has continuously presented progress in implementing the principles of the United Nations Global Compact since 2015. Since 2019, the company has raised the level of transparency into the progress report according to the principles of the United Nations Global Compact. 21 United Nations



UNITED NATIONS SUSTAINABILITY DEVELOPMENT GOALS

The Company is committed to operating in accordance with the 17 Sustainable Development Goals (SDGs) of the United Nations.



COMPANIES IN THE SCOPE OF THE REPORT

Human resources performance covered all companies in the Crop Integration Business Group (100%), while energy, water, waste, air and safety performance covered all of the company's four production countries. Charoen Pokphand Produce Co., Ltd. but does not include Charoen Pokphand Seed Co., Ltd. and Charoen Pokphand Agriculture Co., Ltd. due to a merger.



CONTACT US

Sustainability Governance and Compliance Office (SGC),
Fortune Tower 23rd floor 1 Ratchadaphisek Road,
Din Daeng, Bangkok 10400
Phone : +66 (0) 2764 7000
E-mail : sgc.cpp@cptg.co.th
<https://sgc.cptg.co.th>



CONTACT US

Crop Integration Business, Charoen Pokphand Group places importance on creating participation with stakeholders. Including listening to comments, suggestions, and criticisms in order to develop the business group's operating processes. To have better efficiency and be able to respond directly to the needs of stakeholders. By the business group Various and comprehensive communication channels have been arranged. So that every group of stakeholders can communicate with the business group. conveniently and quickly

Office

Sustainability Governance and
Compliance Office (SGC) ,



Fortune Tower 23rd floor 1 Ratchada-
phisek Road, Din Daeng, Bangkok 10400



Phone : +66 (0) 2764-7000



E-mail : sgc.cpp@cptg.co.th

Website

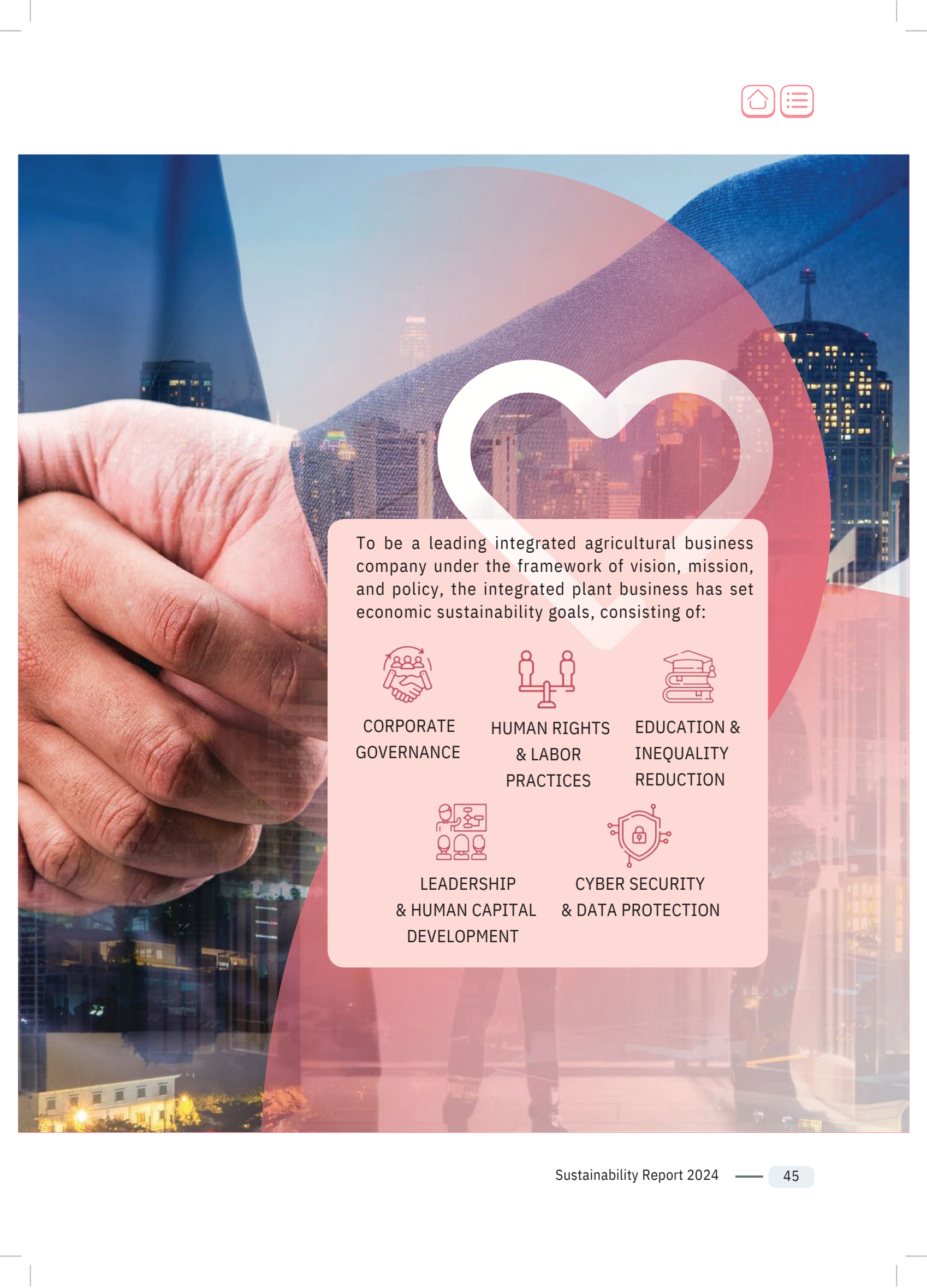


<https://sgc.cptg.co.th/>

HEART



CropIntegration Business, Charoen Pokphand Group realizes the importance of economic sustainability. Therefore, the business has been operated under the concept of Organizational growth from the perspective of a stable, long-term economy. There is a planning process and set clear goals that you want to achieve. As well as having an efficient work process that supports risks that occur. To develop new innovative products that leads to sustainability accepted by customers. Embedded in the activities of people in the organization, conveying the message to the organization's brand and products.



To be a leading integrated agricultural business company under the framework of vision, mission, and policy, the integrated plant business has set economic sustainability goals, consisting of:



CORPORATE
GOVERNANCE



HUMAN RIGHTS
& LABOR
PRACTICES



EDUCATION &
INEQUALITY
REDUCTION



LEADERSHIP
& HUMAN CAPITAL
DEVELOPMENT



CYBER SECURITY
& DATA PROTECTION



CORPORATE GOVERNANCE

GRI102-12, 102-13, 102-16, 102-17, 102-18, 102-19,
103-1, 103-2, 103-3, 205-2, 205-3

OPPORTUNITIES

Crop Integration Business confidence that good corporate governance It is an important factor for business operations and enhancing competitiveness. as well as leading the organization to sustainable growth in addition, it adds value to partners and stakeholders in the long term. Good corporate governance Demonstrates the existence of an efficient, transparent, and verifiable management system. Build trust among stakeholders in the value chain All of this requires commitment and cooperation from employees at all levels. With a committee and senior executives clearly promote and support corporate governance.

CHALLENGES

The challenge is creating understanding and communicating to 100% of employees to see the importance of good corporate governance. Leading to the creation of a responsible business culture. and practices are based on the same standards.

SUPPORTING THE SDGs



SDG 12

Responsible Consumption and Production **SDG 16**



Peace, Justice, and Strong Institutions

Substantially reduce corruption and bribery in all their forms.

16.5

Ensure responsive, inclusive, participatory,

16.5

and representative decision-making at all levels.

16.B

Promote and enforce non-discriminatory laws and policies for sustainable development



Goal 2030

Businesses implement a corporate governance impact scoring assessment

KEY OPERATING RESULTS IN 2024

CORPORATE GOVERNANCE



businesses implement a corporate governance impact scoring assessment

100%



CORPORATE GOVERNANCE POLICY

There is an announcement system and monitor compliance with the policy.



RISK MANAGEMENT

There is a system (ERM and E&C Risk).



COMPLIANCE

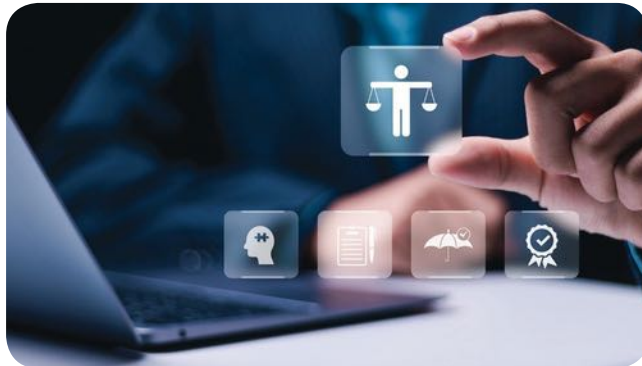
Follow up and report results and take disciplinary action against rules violations.



GRIEVANCES & WHISTLEBLOWING

There is a process for receiving complaints and Whistle-blowing of the business group.

CODE OF CONDUCT



Crop Integration Business aiming to raise awareness and instilling a sense of responsibility for work according to the standards of good conduct as well as being transparent and verifiable for directors, executives and employees at all levels a course on business ethics has been included in the orientation of new employees. Along with continually organizing training courses to refresh knowledge on business ethics. along with an ethical knowledge test and practice on an annual basis.

Has also prepared a code of conduct for business partners. and encourage business partners to realize the importance and comply with so that the supply chain management takes place in a concrete way and business.

CODE OF CONDUCT

Important things

thatCharoenPokphand Group employees must adhere to as guidelines for their work for the sustainability of the organization.



#6CoreValues

#Integrity

#Morality and honesty

Learning and testing

E- Learning 100%



Total



2,606 persons

Tested&Passe



2,606 persons



100%

CORPORATE GOVERNANCE

MANAGEMENT APPROACH



Our business believes that governance good business, risk management and compliance with relevant regulations and laws (Governance, Risk Management and Compliance - GRC) GRC is the cornerstone of the organization's sustainable success and confidence in management and stakeholders.



Compliance Policy



Risk Management Policy



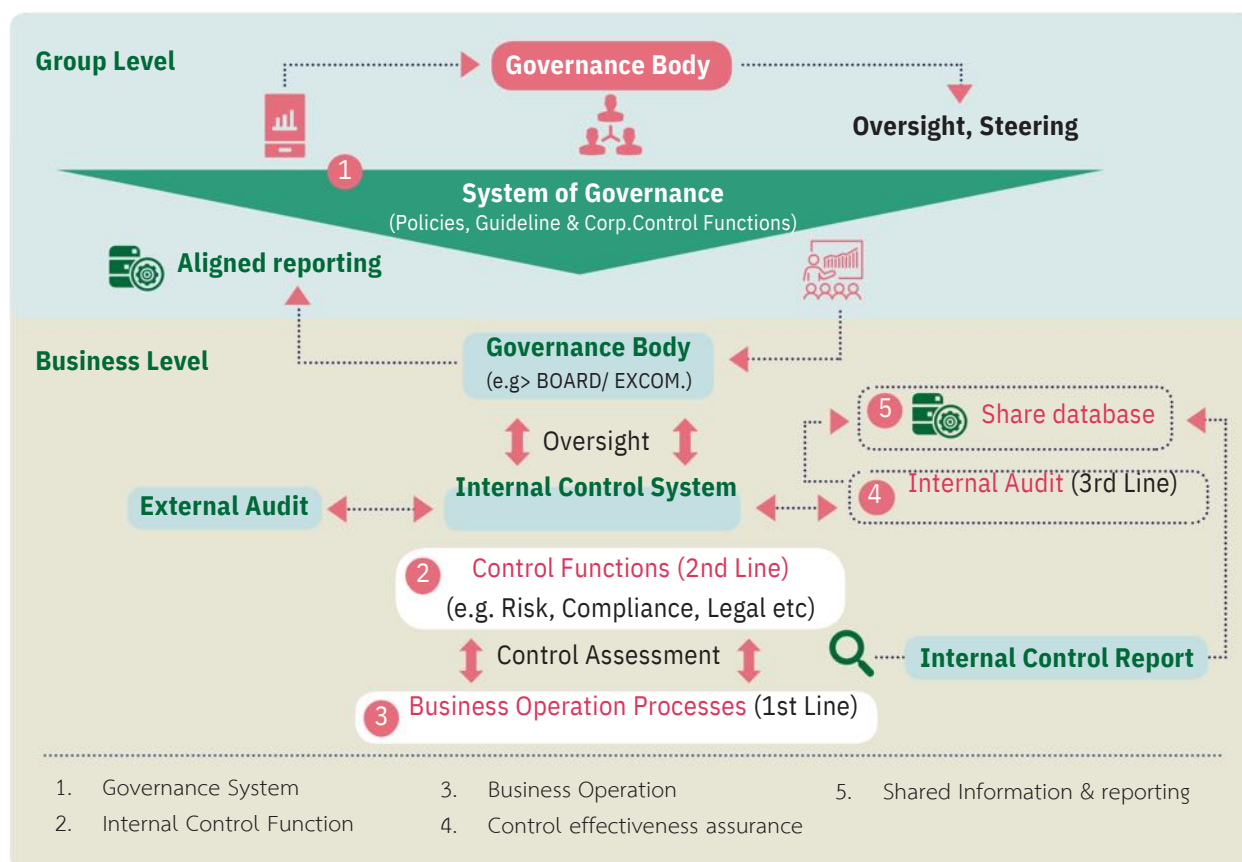
Human Rights Policy
& Labor Practices



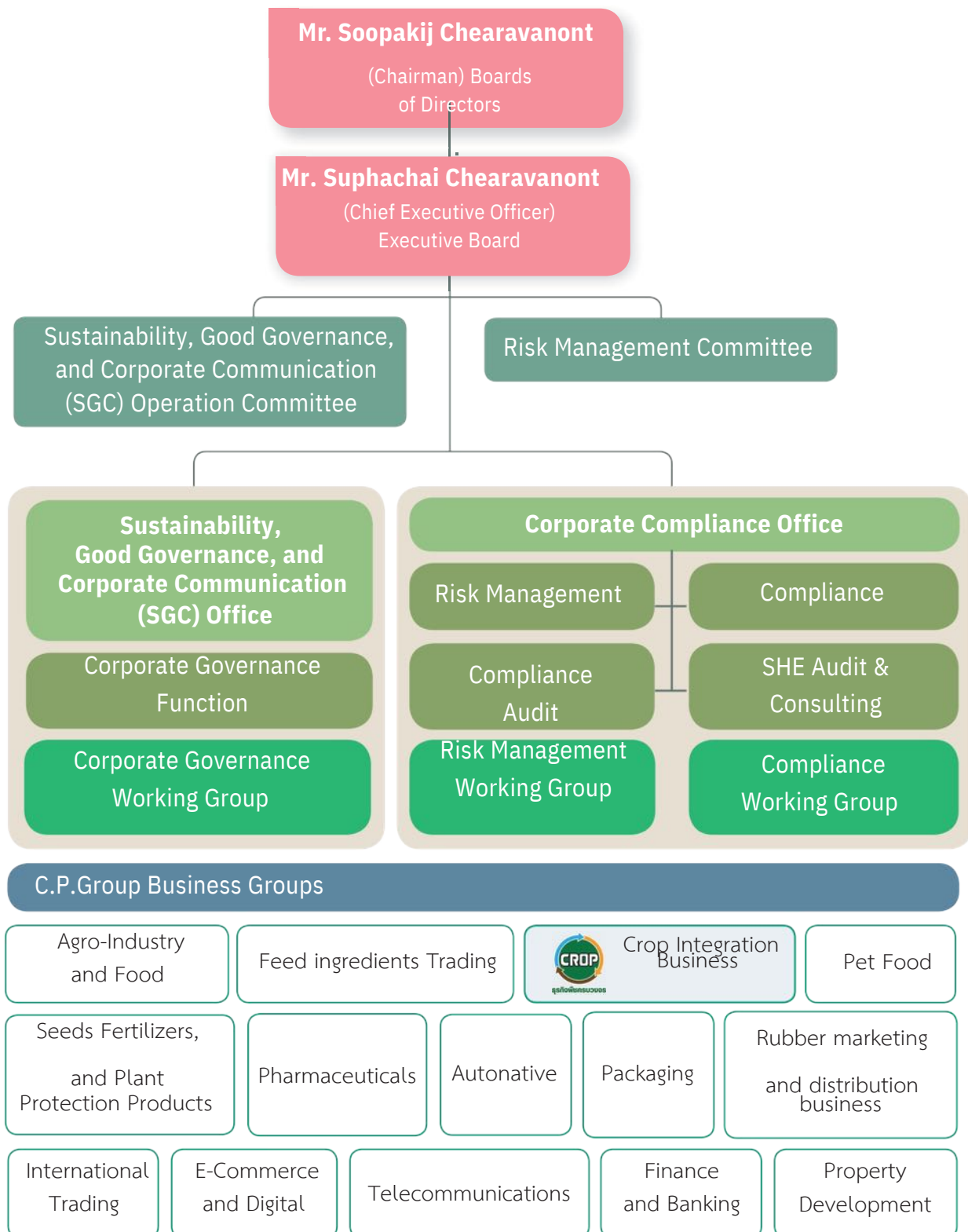
Occupational safety,
health and working
environment policy

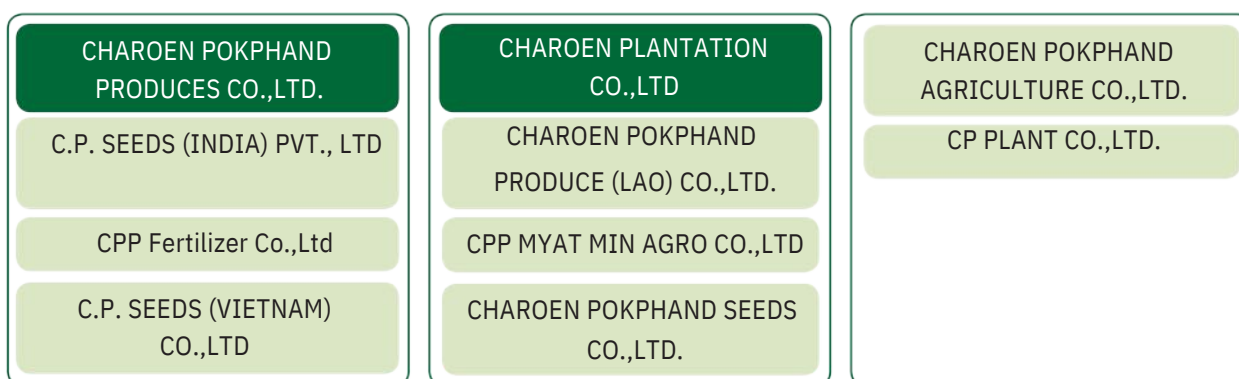
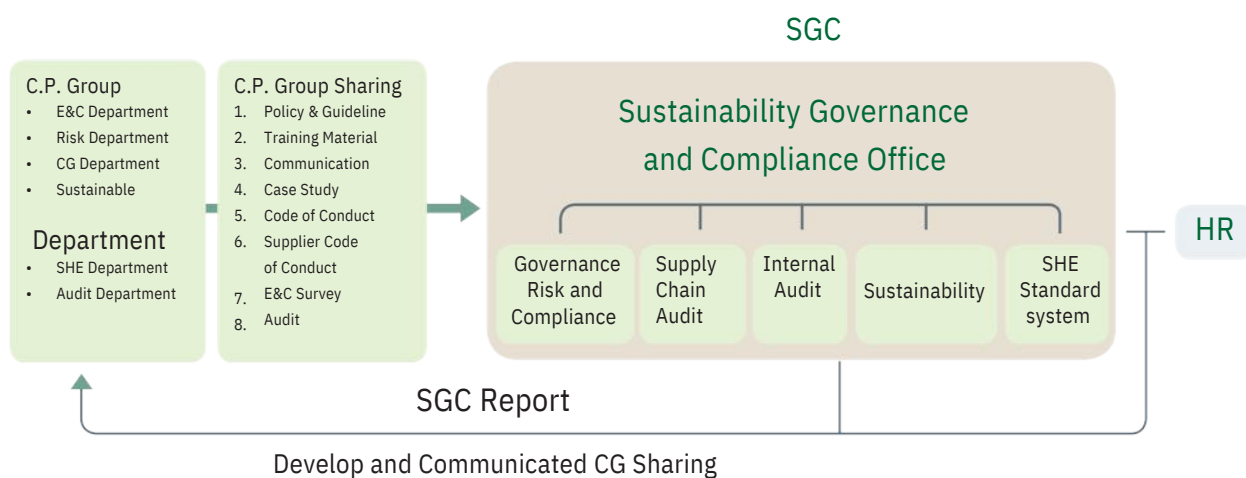


Responsible Supply Chain
Management Policy



CORPORATE GOVERNANCE MANAGEMENT STRUCTURE

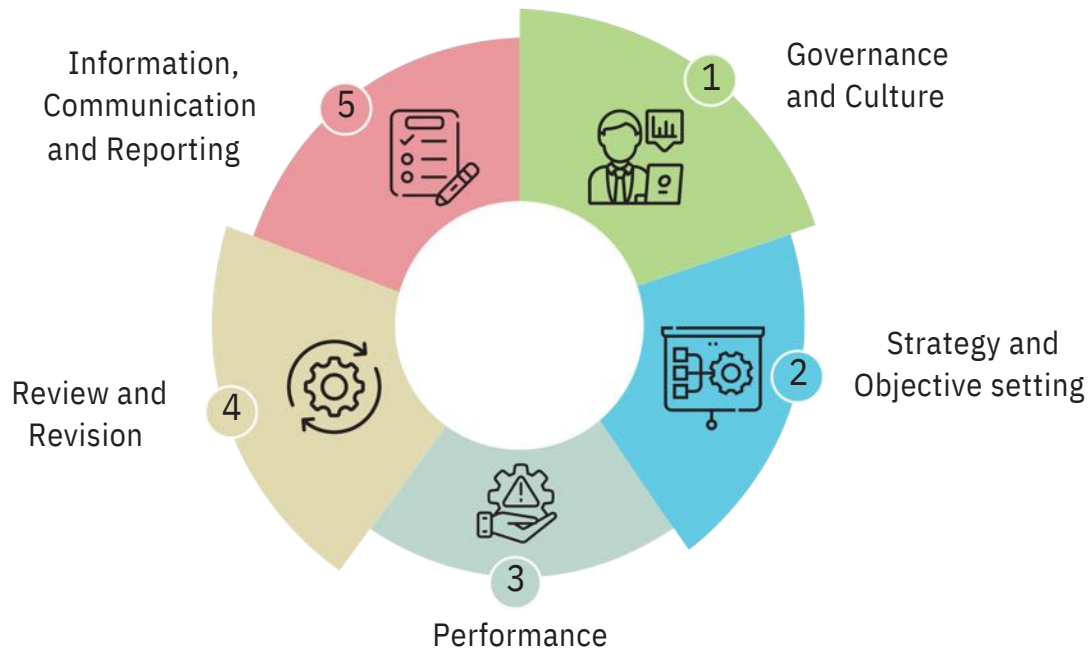




RISK MANAGEMENT

(GRI 102-11, 102-15, 102-20, 102-29,102-30,103-1,103-2)

SUSTAINABILITY DEVELOPMENT ISSUES

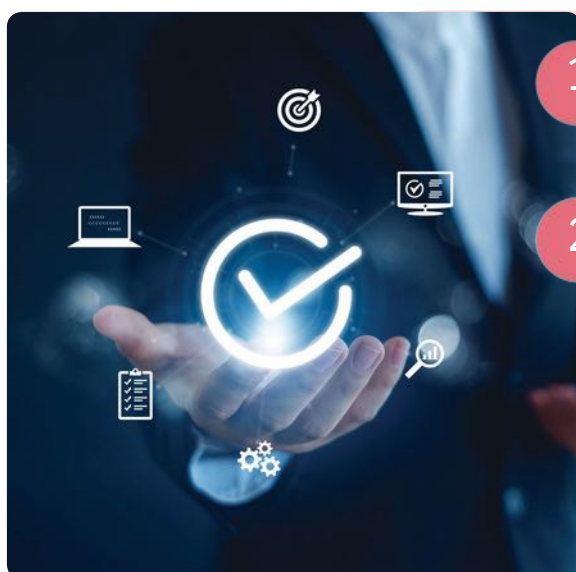


Crop Integration Business has supervised risk management and compliance through the Corporate Governance, Risk and Compliance Committee. (GRC) with continuous review and monitoring. Including reporting results to the C.P. Group's Risk Management Committee, having a risk management framework used as a common standard within In line with internationally accepted management principles (COSO - Enterprise Risk Management 2017). It is also committed to managing risks by making a risk management plan that will lead to a crisis event and communicate the awareness risk awareness to executive and management levels (Risk Owners)

GRC Committee identifying risk from each unit in the CPP, prepared risk mitigation measures and control risks report and monitor risk management results from all departments as well as communicate the process in every step to executives and employees for acknowledgment And review the risks twice a year, including training to create a culture of organizational risk management for employees on an ongoing basis. In addition, CPP has proactively planned for potential critical conditions and prevent the potential impact of business interruption through Business Continuity Management (Business Continuity Plan: BCP), which is consistent with the business continuity policy Governance and Culture

COMPLIANCE MANAGEMENT

Now, changes are happening rapidly in terms of laws, rules, regulations and standards, which has significantly increased the concentration. Charoen Pokphand Produce Co., Ltd. and companies in Crop Integration Business Group are required to regularly evaluate their performance. To manage issues that are inconsistent with corporate and international directions as well as preparing for operations in 2 areas as follows :



- 1 Announcement of Conflicts of Interest (COI) policies and guidelines which covers all companies in CPP both in Thailand and Overseas
- 2 Establishment of the management structure of the Compliance Department responsible for overseeing compliance with policies and guidelines as well as to find ways to develop and improve for more efficient implementation Including reporting on the performance according to the policies, practices and regulations.

Building capacity in the organization

In addition to developing responses to assessment results, CPP plans to achieve compliance governance objectives effectively within company. This will be accomplished through projects such as the Compliance Ecosystem, collaboration among C.P. Group companies to prepare for the inclusion of compliance governance into operational processes in a systematic way, where integration will be encouraged between each unit. CPP's efforts in this area have received the 'Tone at the top' and the support of executives from Group companies, who have mandated that there be a "Compliance Network". That will take on a coordinating role in this Network to liaise with C.P. Group and create awareness, oversee compliance, and establish a system to report performance data to executives. In 2020, C.P. Group organized workshops on compliance governance for management and relevant employees.

These workshops helped build their knowledge and understanding of how to operate according to compliance governance guidelines. C.P. Group also arranged trainings on the topics of Compliance & Compliance Audit, Ethical Audit, and Control Self-Assessment Introduction.



Risk assessment report

Crop Intigration Business and companies in the business group have prepared risk management reports according to international standards such as COSO and NIST. The Risk Management Committee is responsible for overseeing and determining the organization's risk management strategy, including communicating to create awareness among employees in the organization and preparing risk management reports to enable the organization to achieve its goals effectively, reduce the possibility of loss, and build confidence among stakeholders.

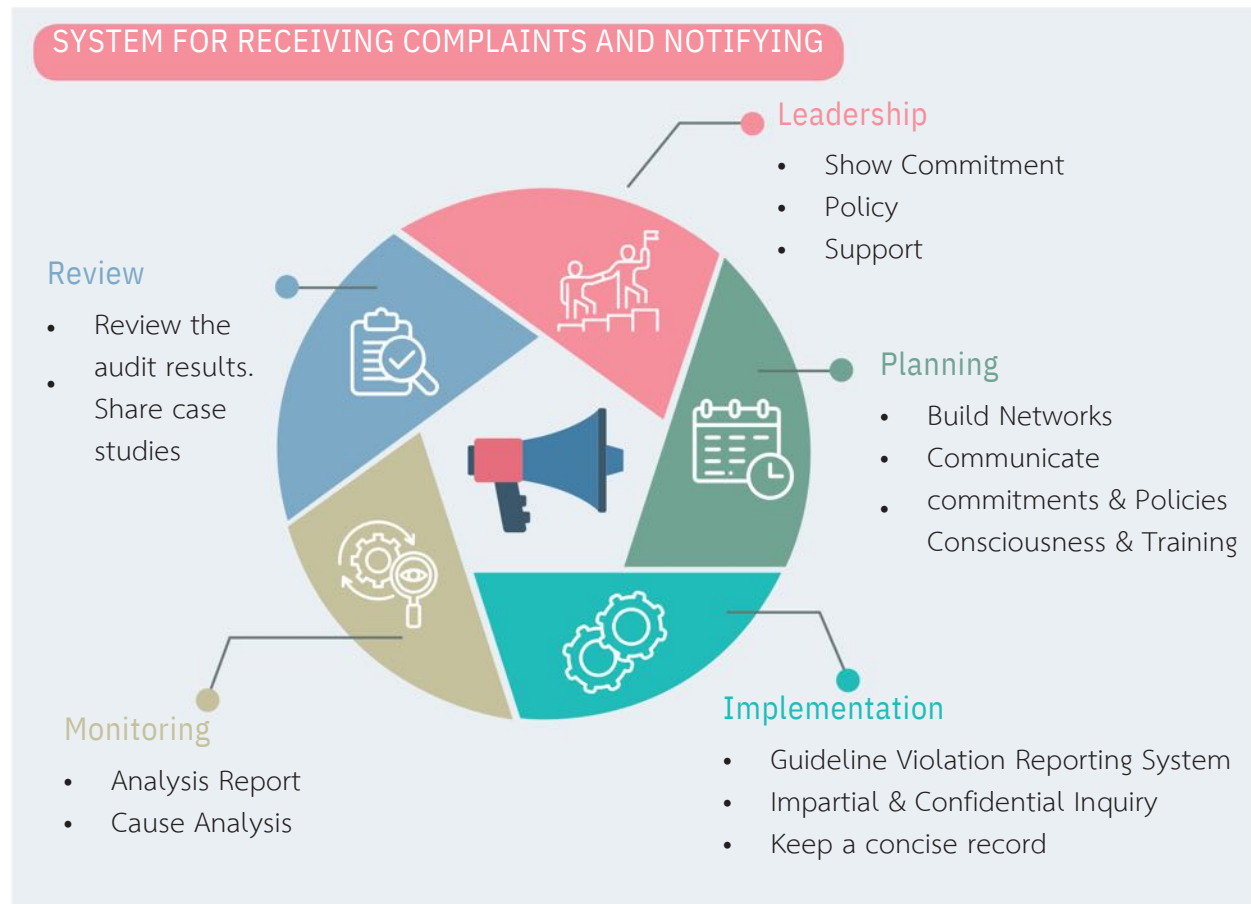


Table showing the status of important risks

Risk No.	Risk Name	Description, Evidence & Root Cause	Risk Category	Likelihood Score	Impact Score	Risk Level	Risk Owner	Mitigating/Control Actions required	Control Progress update	Risk Trend
1	Fluctuations of exchange rates	The risk arising from exchange rate fluctuations affects international trade, financial transactions and the financial performance of multinational companies.	Marketing Risk	5	5	25	Laos business district	- Sell some products in THB. - Open more bank accounts to exchange more THB. - Pay for products within the month of import.	Continued follow	reduce
2	Lack of customer credit screening	This is due to inadequate or incomplete credit screening processes for customer payments prior to loan approval, or to expansion of the area by providing factor loans without screening farmers. This is due to expansion of the area by providing factor loans without screening farmers.		4	5	20	Agricultural factor trade and plant trade	Improve credit screening measures before granting loans, such as setting minimum criteria that customers must pass before applying for loans, setting conditions for loan extensions that customers must have a good debt repayment history.	Continued follow	Constant

WHISTLE BLOWING SYSTEM

Crop Integration Business has created channels for reporting clues and receiving complaints in order to listen to opinions. Various suggestions or complaints both from executives Employees at all levels and affected third parties or behavior that risks business ethics and dishonesty. It is also a tool for tracking and monitoring business operations and a resource used to improve management and services to be tighter and more efficient.



Receiving complaints and report clues

Crop IntegrationBusiness createdchannels for reporting clues and receiving complaints in order to listen to opinions. Various suggestions or complaints both from executives Employees at all levels and affected third parties or behavior that risks business ethics and dishonesty or behavior that is considered fraud, corruption, and misconduct of personnel of the business group.

To prevent damage that will occur to stakeholders. and is a database for monitoring and improving service management of the business group to be more efficient. Provide channels for reporting clues and a process for receiving complaints according to international standards. As well as issuing policies and guidelines regarding reporting clues and receiving complaints.

Complaints in 2024



Complaints
11 cases

Inside **9 cases**

Partners **2 cases**

Complaint management was completed within 30 days, totaling **7 cases.**



Complaint issues

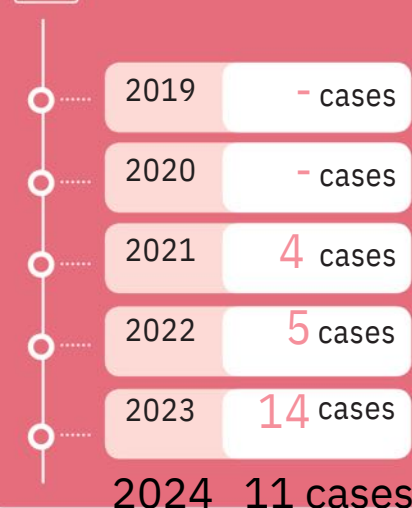
Corruption **5 cases**

Conflict of Interest
Conflict of Interest **3 cases**

Others **6 cases**



Complaint stats



CASE STUDY

RECEIVED A CERTIFICATE
CERTIFY ANTI-CORRUPTION
STANDARD

FROM CAC



In 2024, Charoen Pokphand Produces Co.,Ltd. received a certificate of certification for anti-corruption standards from the Thailand Private Sector Collective Action Against Corruption (CAC). Organization of cooperation between the private sector in Thailand The main goal is to promote and support the fight against corruption in the Thai business sector.

The Anti-Corruption Standards Certificate from CAC confirms the company's commitment to strictly comply with anti-corruption standards. Including the intention to conduct business according to the business ethics of the Charoen Pokphand Group. Building confidence among customers and business partners To continue creating a better society and economy

CASE STUDY Anti-corruption activities

ICrop Integration Businesses join forces to combat corruption, demonstrating their commitment to transparent business operations and adherence to good governance. Executives and fellow employees in the business group have joined forces to combat corruption under the "Stop Cheating Transparently" campaign, demonstrating their commitment to transparent business operations and adherence to good governance on the occasion of "Anti-Corruption Day 2024."

This year, the Anti-Corruption Organization of Thailand (ACT) is organizing both online and offline activities under the theme "Transparent Fraud: ESG...G Like We're There, We Can't See It," which aligns with the company's corporate governance policy, which aims to conduct business responsibly, ethically, transparently, and with accountability.



CASE STUDY CPP receives anti-corruption certification from CAC



On July 12, 2024, Mr. Sayan Hongsa, Chief Operating Officer of Charoen Pokphand Produce Co., Ltd. (CPP), received a certificate of anti-corruption standards at the CAC National Conference 2024 at the Nikko Hotel Sukhumvit, Bangkok.

The event was organized by the Thailand Private Sector Collective Action Against Corruption (CAC) to support the Thai private sector in conducting business with transparency, combating corruption in the business sector, and strictly adhering to anti-corruption policies.

The certificate is an honorary recognition given to companies that have been certified by the CAC in 2024. It demonstrates the company's commitment to strictly adhering to anti-corruption standards, reflecting its commitment to ethical business practices and adherence to the code of conduct.

The certification is a testament to the organization's efforts to prevent and combat corruption at all levels, helping to build trust with customers and business partners, contributing to a better society and economy.





HUMAN RIGHTS AND LABOR PRACTICES

GRI 103-1, 103-2, 103-3, 406-1, 408-1, 409-1,
411-1, 412-1

OPPORTUNITIES

Crop Integration Business focuses on promoting the human rights of the foundation of grayness, rights, freedom and equality of ideas. Acts that can not be offensive and must respect the Local laws of each country in order to comply with the way of life, traditions, culture and the practice of good Governance. By avoiding involvement in all forms of human rights violations.

CHALLENGES

The challenge in our company is the expectation of equal treatment in the labor force of companies, partners or other stakeholders of the supply chain in all dimensions related to human rights. This includes periodic human rights risk assessments.



Goal 2030

Businesses that regularly assess the human rights impacts of their activities and their high-risk direct suppliers.

SUPPORTING THE SDGs



SDG 3

Good Health and Well-Being



SDG 5

Gender Equality

End all forms of discrimination against

5.1

all women and girls everywhere



SDG 8

Decent Work and Economic Growth

Achieve full and productive employment and decent work for

8.5

8.7

Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor

8.8

Protect labor rights and promote safe and secure working environments for all workers, including migrant workers



SDG 10

Reduced Inequalities

Ensure equal opportunity and reduce inequalities of outcome

10.3

10.7

Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies

KEY OPERATING RESULTS IN 2024

Human Rights



Human rights impacts from the activities of high-risk organizations and direct suppliers are regularly assessed.

100%



Declare commitment to respect human rights

According to the United Nations Guiding Principles on Business and Human Rights



Female Executive

20.45% Total proportion of female executives

11.43% proportion of female executives at senior level and above



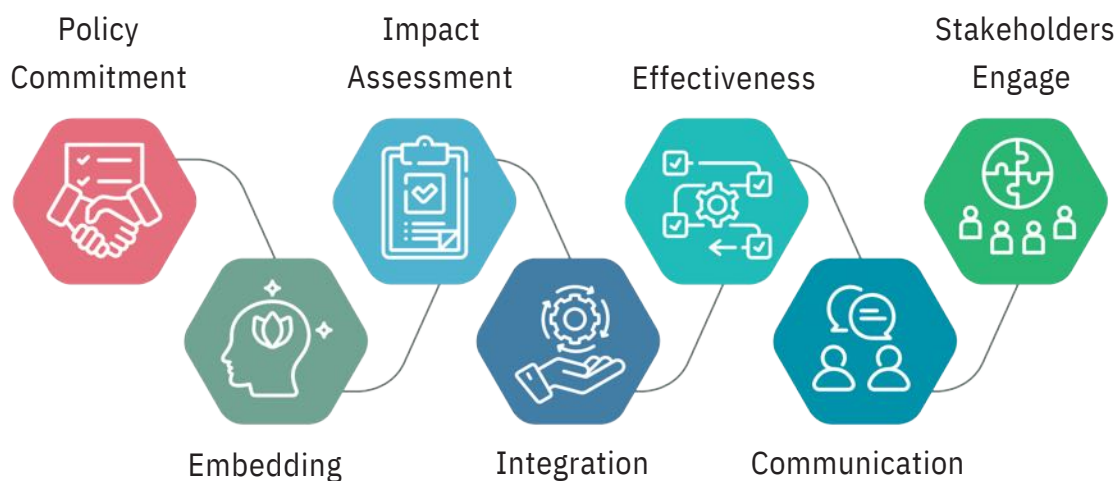
Disabled Staff

1.03% of employees are disabled.
13 persons accounting for 1.03 %

MANAGEMENT APPROACH

Crop Integration Business conduct business by adhering to the philosophy of 3 benefits (benefit to the country, people and the company) and operating with fairness. It is assumed that the personnel is a valuable resource of the organization. The company therefore provides opportunities for everyone to show their talents and be open to advancement opportunities. Create equality for everyone in every country, in which the company has invested. Along with developing everyone to have knowledge and skills to work. There is respect for each other's rights and duties. Appreciate the gratitude of your own boss, and subordinates to create value for everyone in the organization.

Our company is part of the global community. Therefore, it is of great importance to maintain a philosophy and good practice in taking care of personnel within the organization, as well as striving to expand the scope of operations in respect of human rights. The dignity and equality of all people including customers and partners, and everyone in the supply chain. According to international guidelines, which include the Universal Declaration of Human Rights (UDHR) of the United Nations (United Nation) and the Declaration on the Principles and Fundamental Rights at Work of the International Labor Organization. Country (International Labor Organization: ILO) to practice in order to prevent violations, or create human rights impacts both in community and social organizations from the operation of the business, the human rights policy has been established, and labor practices as follows :



Policy Commitment



- Announce Human Rights and Labor Practices Policy
- Announce Code of Conduct
- In the process of developing specific policies, such as a Migrant Workers Employment Policy

Embedding



- Conduct awareness training on human rights, encompassing employees at all levels
- In the process of developing e-learning curriculum to more efficiently educate employees

Impact Assessment



- Assess the severity of human rights risk issues. Cover current activities and that might happen
- Identify key human rights risks of businesses in the countries they invest in.

Integration



- Integrated risk assessment and the normal work processes of the organization
- Develop and communicate guidelines such as responsible supply chain management.

Effectiveness



- set up key indicators human rights
- Monitoring the progress of human rights actions

Communication



- Report on the progress of implementing Human Rights Due Diligence in the Sustainability Report.

Stakeholders Engage



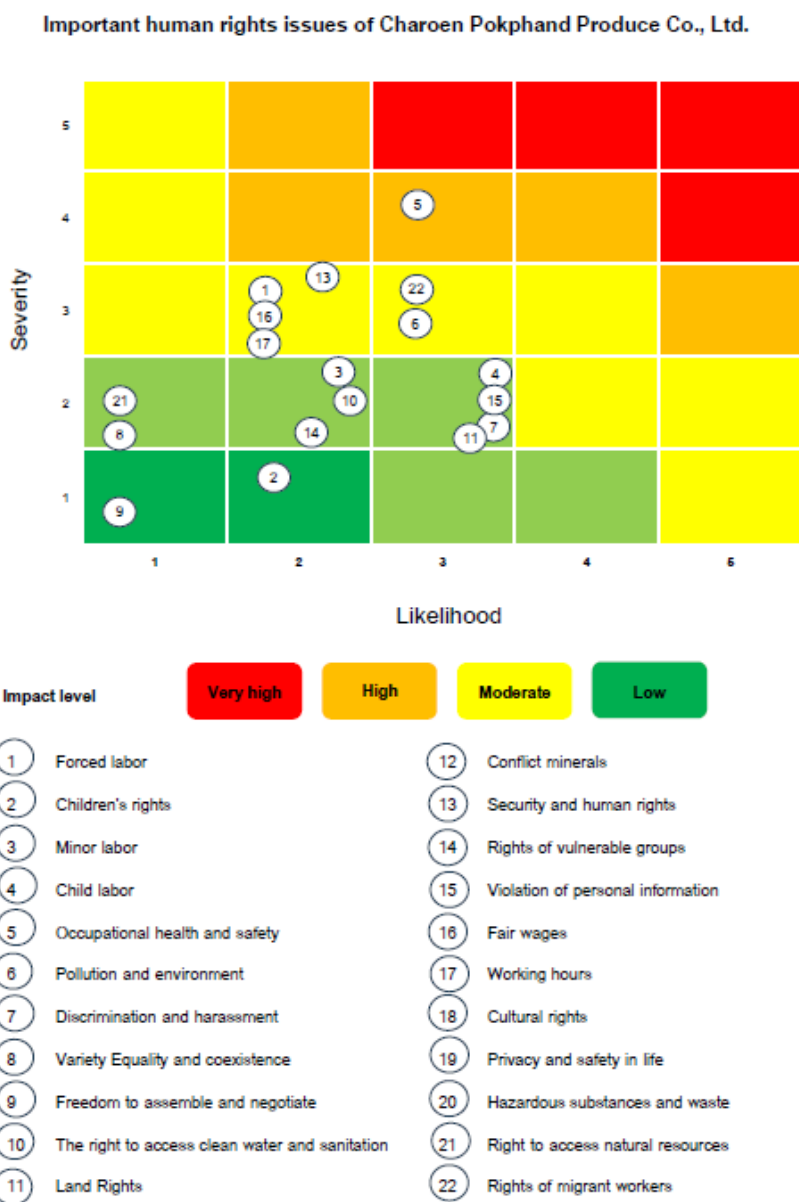
- Meet and survey needs and expectations of stakeholder groups
- Become a member Network Association UNGC Thailand by 2021 Remedies and Complaints
- Establish a channel for making complaints (Whistleblowing)



Important human rights issues of Charoen Pokphand Produce Co., Ltd

Crop Intigration Business and companies in the business group its subsidiaries respect human dignity and equality by adhering to international human rights principles, such as the United Nations Declaration of Human Rights and the UNGPs, to ensure responsible business practices for all stakeholders. The goal is to foster a corporate culture that embraces Diversity, Equity, and Inclusion (DEI) based on equality in welfare, promotion, and development, and the prevention of all forms of discrimination.

The company has therefore prepared a human rights report to demonstrate transparency in its business practices that respect human rights throughout its supply chain. At the same time, it has also gathered stakeholder feedback to improve and expand the scope of human rights promotion. This report is prepared in accordance with international standards, such as the UN Guiding Principles Reporting Framework (UNGPRF).



Human Rights Impact Assessment Categorized by Rights-holders

Human Rights Issues	IMPACTED GROUP				
	Employees	Workers/ Contractors	Partners	Communities	Customers
1. Forced labor	N/A			N/A	N/A
2. Children's rights				N/A	N/A
3. Minor labor				N/A	N/A
4. Child labor	N/A			N/A	N/A
5. Occupational health and safety				N/A	N/A
6. Pollution and environment	N/A	N/A			N/A
7. Discrimination and harassment				N/A	N/A
8. Variety Equality and coexistence				N/A	N/A
9. Freedom to assemble and negotiate				N/A	N/A
10. The right to access clean water and sanitation	N/A	N/A		N/A	N/A
11. Land Rights	N/A	N/A			N/A
12. Conflict minerals	N/A	N/A	N/A	N/A	N/A
13. Security and human rights		N/A	N/A	N/A	N/A
14. Rights of vulnerable groups				N/A	N/A
15. Violation of personal information				N/A	N/A
16. Fair wages				N/A	N/A
17. Working hours				N/A	N/A
18. Cultural rights	N/A	N/A	N/A	N/A	N/A
19. Privacy and safety in life	N/A	N/A	N/A	N/A	N/A
20. Hazardous substances and waste	N/A	N/A	N/A	N/A	N/A
21. Right to access natural resources	N/A	N/A	N/A		N/A
22. Rights of migrant workers	N/A			N/A	N/A

Impact level

Very high

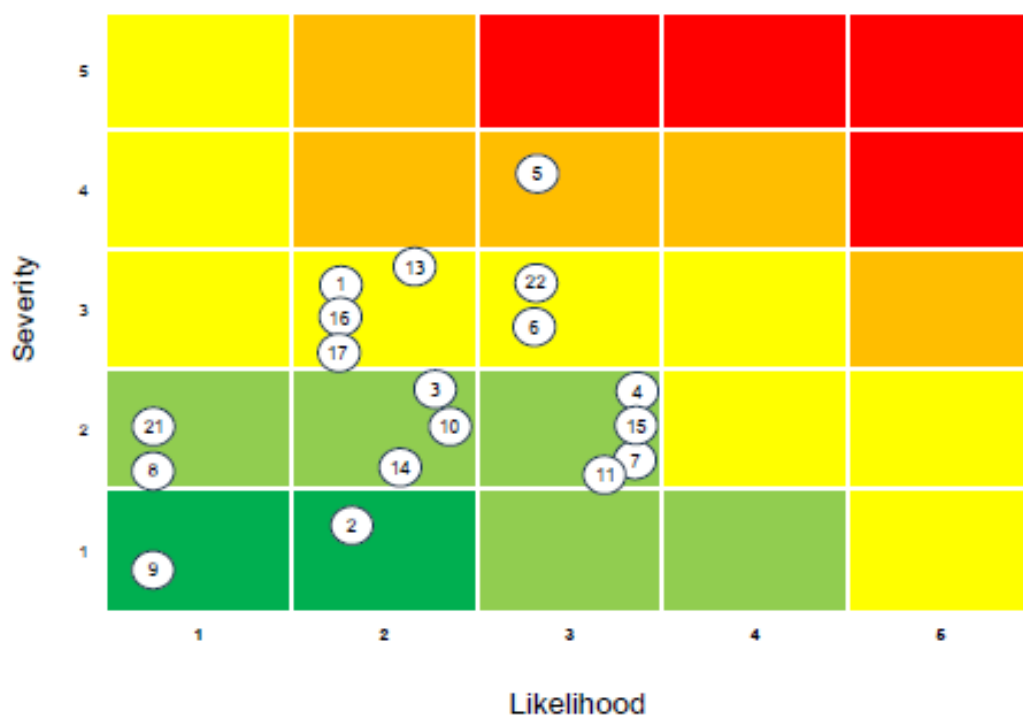
High

Moderate

Low

Vary Low

key human rights issues for Charoen Pokphand Produce Co., Ltd.
and companies in the Rice business, transport and services



Impact level	Very high	High	Moderate	Low
1	Forced labor			
2	Children's rights			
3	Minor labor			
4	Child labor			
5	Occupational health and safety			
6	Pollution and environment			
7	Discrimination and harassment			
8	Variety Equality and coexistence			
9	Freedom to assemble and negotiate			
10	The right to access clean water and sanitation			
11	Land Rights			
12	Conflict minerals			
13	Security and human rights			
14	Rights of vulnerable groups			
15	Violation of personal information			
16	Fair wages			
17	Working hours			
18	Cultural rights			
19	Privacy and safety in life			
20	Hazardous substances and waste			
21	Right to access natural resources			
22	Rights of migrant workers			

HRDD Assessment Dashboard



HRDD Assessment FACT Finding Rating Summary

Fact-Finding Rating		Section & Num of Question							
		S.1 (5)	S.2 (3)	S.3 (3)	S.4 (1)	S.5 (2)	S.6 (1)	S.7 (1)	S.8 (5)
	Unsatisfactory Fails to meet expectations with serious deficiencies. 01	0	0	0	0	0	0	0	0
	Needs Improvement Falls short of expectations in multiple areas. 02	0	0	0	0	0	0	0	0
	Satisfactory Meet basic expectations but has noticeable areas for improvement. 03	0	0	0	0	0	0	1	1
	Good Meets expectations with minor improvements needed. 04	1	0	0	0	0	0	0	1
	Outstanding Exceeds expectation with no significant areas for improvement. 05	4	3	3	1	2	1	1	4
Total Question		5	3	3	1	2	1	1	5
		21							

HRDD Assessment Result Summary

Section	No observation	Opportunity for Improvement	Need to Improve	Total
1. Policy and Commitment	4	1	0	5
2. Embedment	3	0	0	3
3. Impact Assessment	3	0	0	3
4. Integrating and Acting	1	0	0	1
5. Tracking Performance	2	0	0	2
6. Communicating Performance	1	0	0	1
7. Engaging Stakeholders	1	0	0	1
8. Remediation and Grievance Mechanism	4	1	0	5
Total	19	2	0	21

Need to Improve & Opportunity for Improvement

Section	Question Detail	Fact-Finding Description	Recommendation
1. Policy and Commitment	Policies are announced to (1) employees, (2) business partners, and (3) the public through appropriate and sufficient channels such as the website. The term "business partners" covers suppliers, vendors, contractors (including contract employees, both corporate entities and individuals), and sub-contractors.	CPCRT (RICE, CROP) has implemented five human rights policies and related sub-policies in alignment with the Group level policies. These policies have been communicated to employees through classroom-based training sessions and the posting of information on internal bulletin boards. For business partners, the Supplier Code of Conduct (SCoC) has been communicated via email and during the annual partner meetings. Additionally, the Group's policies and the SCoC are published on the official website: https://sgc.cptg.co.th/. However, the classroom-based human rights policy training for employees has not yet been fully completed, as the process is still ongoing. CPCRT plans to align with the Group's Policy Tracking System starting in the third quarter of 2025..	The responsible unit may implement additional measures such as: 1. Accelerate the completion of classroom-based human rights policy training to ensure 100% employee coverage within the specified timeframe. This includes implementing the Group's Policy Tracking system as planned, to ensure all employees have a consistent understanding of human rights and can perform their duties in alignment with the organization's policies. 2. Consider introducing alternative training channels, such as e-learning modules or instructional videos, to improve accessibility, reduce limitations related to time and location, and support the ongoing training of new employees. 3. Establish a mechanism for monitoring and reporting training progress to the business group's executives, enabling systematic evaluation of implementation status and consideration of additional support where necessary.

Need to Improve & Opportunity for Improvement

Section	Question Detail	Fact-Finding Description	Recommendation
8. Remediation and Grievance Mechanism	In the past year, how many complaints were related to human rights and labor practices? What were the issues, and what were the remediation processes?"	Based on the assessment, CPCRT has demonstrated appropriate practices in handling complaints. This includes Maintaining a complaint tracking register Conducting investigations to identify root causes Developing tailored corrective solutions for each case Creating lesson learned documentation from complaint management Implementing preventive measures and awareness building initiatives to avoid recurrence In addition, there are defined timelines and procedures for informing complainants of outcomes, both at the business group policy level and within the company's internal regulations. However, it was found that there is still no defined "framework or principle for remediation" that is clearly established both at the business group level and the corporate group level. This would be used as a guideline for assessing and selecting appropriate remediation approaches, tracking outcomes, and evaluating the adequacy of remedies provided to individuals impacted by complaints, especially in human rights matters. The absence of such a guideline may result in inconsistencies in implementation among companies within a business group and across business groups at the corporate level.	CPCRT should establish a framework or guiding principles for remedying individuals affected by human rights violations or complaints. This should serve as a standard practice across the business group and may include the following key elements: Forms of Remedy: Both monetary and non-monetary measures Assessment Criteria: Aligned with the nature of the harm and the rights violated Follow-up Mechanism: A system for monitoring and evaluating the outcome of the remedy Transparency: Clear communication of results to complainants with documented explanations It is recommended that the corporate central unit consider developing a group-wide remedy framework. This would serve as a shared reference for all affiliated companies, aiming to ensure consistency and a unified standard in human rights and governance practices.

HUMAN RIGHTS PERFORMANCE



OCCUPATIONAL HEALTH

Approach

Occupational Health and Safety Policy Zero Accident Target Organize trainings for executives and employees of all levels to help them understand the importance of good governance throughout the supply chain. Safety assessment project of business group level Automotive management

Results

Our organization recognizes and places importance on cooperation to drive safety work.

In 2024 Lost time injury rate

Employees : 3.34 no. per 1,000,000 working hours (5 people) Number of employee working hours:

1,842,441 hours

Contractor : 4.76 no. per 1,000,000 working hours (1 people)



FORCED LABOR AND FOREIGN WORKER

DISCRIMINATION

Humanrights and labor practices Policy and Guideline Operate according to labor standards to provide workers with equal protection Assessment of compliance with labor laws, certified by Thai Labor Standards Responsible Supply Chain Management Policy and encouraging key business partners to self-assess their sustainability

Results

Established operating and governance standards on foreign workers Ethical Recruitment



Approach

Codeof Conduct

Training to educate employees about rights, equality and coexistence practices.

Results

Communicated through an e-learning system to every employee in all business groups to raise awareness and verify Employed 13 people with disabilities in the business group



ENVIRONMENTAL IMPACT

Approach

- Policy and Target on Environmental Management
- Environmental Plan
- Raising awareness and environmental knowledge
- Surveys to identify community opinion and concerns

Results

- Performed according to policy and standards
- Developed action plans to respond to community concerns
- No environment-related grievances reported

CARING EMPLOYEES

MANAGEMENT APPROACH

“People are the souls that bring the organization to life”

Crop Integration Business respect and appreciate the values of all people in the organization. Cultivate and develop to be a good person which will be a role model for those around them at work, family and society overall lead to love ties to the countries, communities and lastly the company according to the three benefits, with guidelines Operations as follows



Building a working society

- Attention to ability and Assign valuable and challenging tasks.
- Make people in the CPP understand their roles, treat colleagues with respect understand the difference Respect and build good relationships with each other in the team.
- Support for the creation of interest-based clubs to create good relationship
- Encourage people in CPP to be considerate, caring, and caring each other both at work and outside of work, including sharing knowledge, experience, etc. to those who need it. appropriately, creating a feeling of belonging to one family.



Mind and soul care

- Promote morality in the mind.
- Promote a mindfulness.
- Promote Gratitude

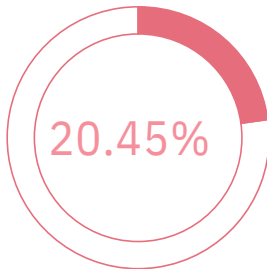


Building stability in life

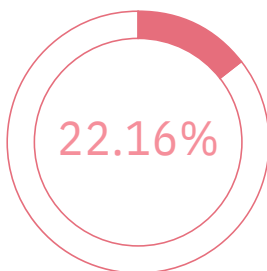
- Encourage employees to have good physical and mental health
- Encourage employees to use “Rationality, Moderation, Immunity, use of knowledge Virtue couple” to create stability in life and family.
- Extending the way of building security in life to the family and community of people in the CPP.

Empowerment of female employees

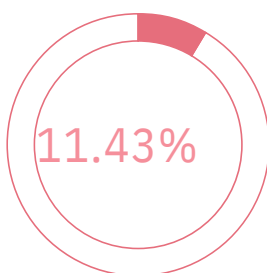
PROMOTING THE POTENTIAL OF FEMALE EMPLOYEES, 2023



Total proportion of female executives

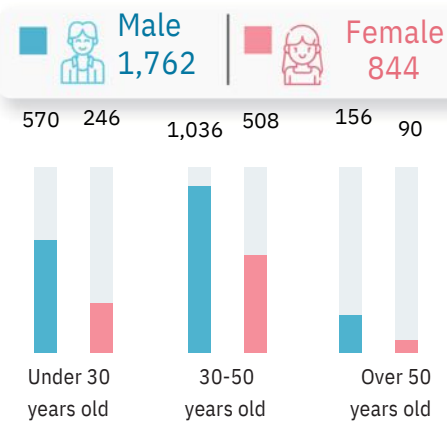
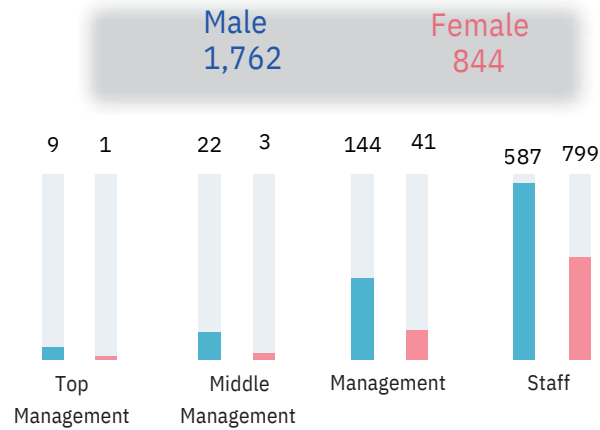


Proportion of female executives

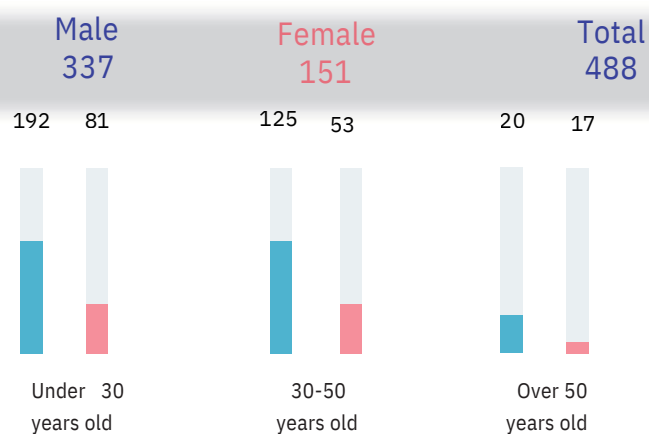


Proportion of female executives at senior levels and above

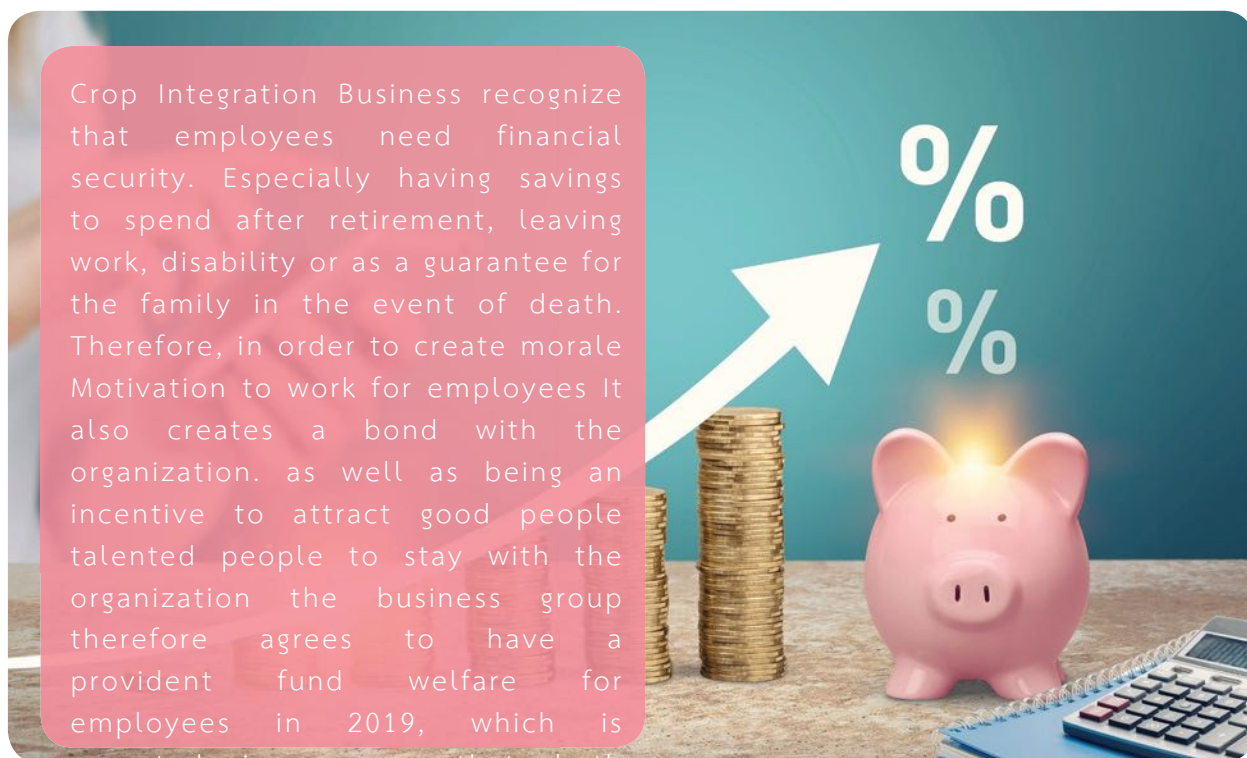
DIVERSITY OF EMPLOYEES



EMPLOYEE TURNOVER: 488 PEOPLE

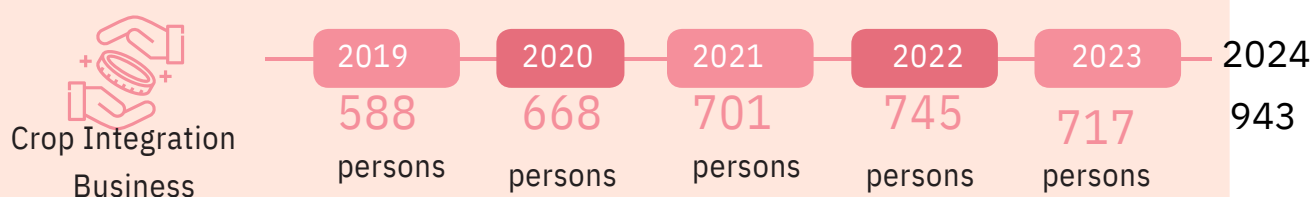


PROVIDENT FUND



Employees will pay contributions to the fund in proportion appropriate to themselves by deducting from the salary account and the company contributes part of the money to the fund with the fund management committee Supervise the operations of the selection and management of asset management companies. and various funds to provide information for decision-making for employees on an ongoing basis as well.

Number of employees participating in the provident fund





EDUCATION & INEQUALITY REDUCTION

| GRI 103-1, 103-2, 103-3, 201-1, 413-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business believe that innovation and technology It is an important basis for changing the educational model. including upgrading necessary skills It is very important to working in the present era. Therefore, we strive to be an example organization that can adapt to the changes that occur. Including bringing innovation and various technologies are used to reduce inequality.

Our organization also supports the development of basic education structures. and upgrading learning styles that can occur continuously at every age. Using innovation for education

Goal 2030

supported through educational support, lifelong learning, and upskilling

SUPPORTING THE SDGs



SDG 4

Quality Education

Eliminate gender disparities in education

4.3

Substantially expand globally the number of scholarships available to developing countries

4.B

SDG 8 Decent Work and

Economic Growth

Substantially reduce the proportion of youth not in employment, education or training



8.6

SDG 9 Industry, Innovation and

Infrastructure

Significantly increase access to



9.C

information and communications technology

KEY OPERATING RESULTS IN 2024 Education



Number of children, youth and adults are encouraged to access education and develop necessary skills.

9,386 persons



Number of scholarships sponsored

359 scholarships



Numer of school receives support for education and sustainability.
1 school

EDUCATION MANAGEMENT

MANAGEMENT APPROACH

Crop Integration Business believes that building an inclusive culture for education and creating opportunities for knowledge access involves developing the potential of Thai youths and adults of all ages. This will prepare them to tackle various challenges, reduce inequalities, and increase Thailand's competitiveness. CPP adheres to five key strategies in our effort to sustainably enhance the quality of education management in Thailand, in accordance with global megatrends. These are: transparency; market mechanisms and an inclusive culture; developing high quality principals and teachers; creating value and a child-centric curriculum; and providing access to basic digital education infrastructure.

Our company is committed in supporting the UN Sustainable Development Goals (UNSDGs), and has developed an implementation plan for UNSDGs alignment with targets that focuses on eliminating inequalities in education, providing opportunities and expanding access, and improving the capabilities of students and teachers to improve the quality of life for all.

EDUCATION DEVELOPMENT FRAMEWORK



CASE STUDY National Children's Day 2024

Crop Integration Business recognizes the importance of children and youth and has organized National Children's Day activities for the 18th consecutive year to promote children and youth, who will be a key force in the country's future development. In 2024, under the theme "Youth Loves the Environment," the event aimed to instill environmental conservation awareness among youth through the creation of a learning base. Activities included training on waste separation, drawing and painting, essay writing, and quiz competitions to enhance children's skills and knowledge. The event also provided stationery packets, school supplies, snacks, and electrical appliances to children and youth across 64 areas in 24 provinces. Over 8,500 children and youth participated in the event.



CASE STUDY National Children's Day, Bangkok 2024

Mr. Chadchart Sittipunt, Governor of Bangkok (BMA), visited the Khao Tra Chat booth and led a team of CSR SPIRIT volunteers to serve 1,000 plates of "Khao Kai Jiew" (fried egg rice) to the children and parents attending the event.

The booth also featured a lucky draw activity for the children to participate in. The atmosphere at the Khao Tra Chat booth was lively and fun, attracting many children and parents. The event, themed "Youth Leaders for the Environment," aimed to instill environmental awareness in youth, emphasizing the importance of children and youth as a key force for national development in the future.



CASE STUDY Nam Jai Nee Jark Pee soo Nong Project 18th year.

Crop Integration, rice, transportation, and services business operates on the basis of social and environmental responsibility, in line with Sustainable Development Goal (SDG) Goal 4: Developing Quality Education. The business is committed to promoting educational opportunities and equality, supporting students around its facilities (factories, farms, farm pros, and sales areas) nationwide who demonstrate good conduct and volunteerism but lack financial resources and are at risk of dropping out of the education system. This initiative aims to reduce educational inequality through fundraising by executives and employees, providing scholarships to young people, providing access to quality education. Furthermore, it encourages executives and employee volunteers, under the CSR SPIRIT initiative, to engage with communities in social contributions, in line with the Charoen Pokphand Group's 3 Benefits philosophy.

In 2024, the business extended educational opportunities through fundraising by executives and employees to provide scholarships of 2,000 baht each to 213 students in 29 schools in 16 provinces surrounding its facilities and sales areas. Along with providing consumer goods and organizing CSR Day activities for the school, such as lunch activities, agricultural equipment support activities, and knowledge-sharing activities, etc.



CASE STUDY Connex ED

Crop Integration Business is implementing a sustainable education development project in collaboration with the CONNEXT ED Foundation. The project targets Soi 26 School, Sai 4 Left, Phatthana Nikhom District, Lopburi Province. The project, which focuses on developing English teaching methods in collaboration with teachers and new leaders (School Partners), has been implemented using an Active Learning approach since 2020.

In the 2025 academic year, the program will develop and improve teaching methods through an English Day Camp, an English learning base to prepare students and foster positive attitudes towards learning English. The program will also include an online English teaching tour, where volunteers from Charoen Pokphand Group executives and employees will serve as volunteer teachers. The program will teach seven lessons based on the Basic Education Core Curriculum.





LEADERSHIP AND HUMAN CAPITAL DEVELOPMENT

GRI102-41,102-43, 102-44, 103-1, 103-2,103-3,
401-1, 401-2, 404-1, 404-2, 404-3, 405-1

OPPORTUNITIES

Crop Integration Business committed to developing integrated business by elevating business operations from B2B to B2C (C means farmers) in order to reach farmers, listen to problems, use information to develop various products, and use modern technology increases production potential. and conveyed to farmers Because farmers can be compared to “life partners” that the company must take close care of. and will move forward together in a sustainable way.

Our organization defines mission, vision, direction and strategy to develop potential. and increasing the capabilities of “personnel”. In addition, it is important to prepare personnel to cope with changes effectively.

AND CHALLENGES

The challenge is Creating engagement and participation for employees at all levels To maintain talented personnel to stay with the organization and support the new generation of leaders learn and grow with the company.

SUPPORTING THE SDGs



SDG 4

Quality Education

Increase the number of youth and adults who have relevant financial skills

4.4

Ensure that all learners acquire the knowledge and skills needed to promote sustainable development and global citizenship

4.7



SDG 5 Gender Equality

Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making.

5.5



SDG 17 Partnership for the Goals

Enhance cooperation and access to science, technology and innovation, and enhance knowledge sharing

17.6



Goal 2030

Employees engaged in sustainability training and initiatives.

KEY OPERATING RESULTS IN 2024

Leadership and human resource development



Leader and staff

100% Trained to develop knowledge and understanding in sustainability and business ethics



Employee training hours

37.06 hours/person/year



Employee training costs

16.44 Million baht

HUMAN RESOURCES MANAGEMENT

MANAGEMENT APPROACH

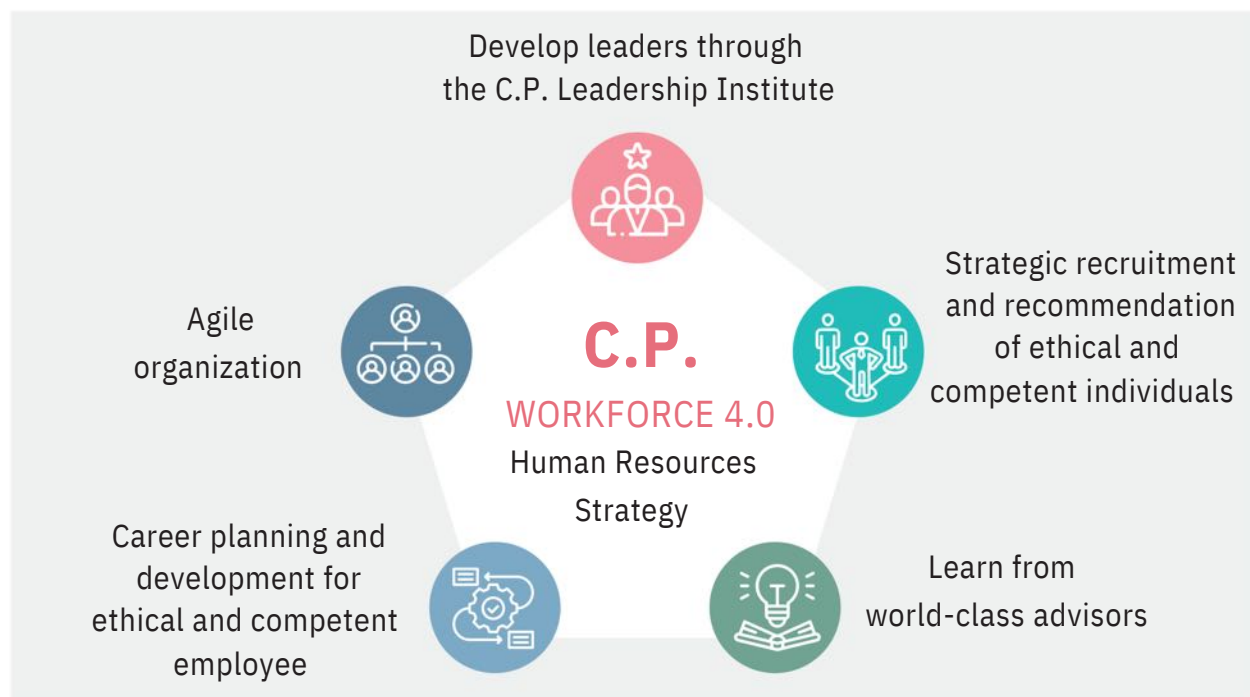
Crop Integration Business believes that our people are the most valuable asset - they are the driving force behind the achievement of our aspirations. This is especially the case today, as CPP is committed to growing its business and expanding investments globally. There now arises the

challenge of creating “New Generation Leaders”

who will carry forward the organization’s values, while preparing and developing over 300,000 employees across our diverse businesses with the necessary knowledge and skills, and mindsets to embrace and adapt to changes, as well as to reinforce positive experiences for our employees to be proud for taking a part in CPP’s success.



Central to this is CPP “Workforce 4.0” Human Resources Strategy, which is guided by the 6 Core Values, digital information, and technology. The strategy consists of five core pillars, and focuses on developing up a new generation of leaders through real-life learning experiences, with the CPLI being central to these efforts. It also focuses on creating a human resources management ecosystem to promote recruitment of ethical and competent individuals, learning from various world-class advisors, career planning and development, and transforming to an ‘agile’ organization to enhance the Group’s adaptability to business changes and changes prompted by generational gaps.



LEADERSHIP DEVELOPMENT TRAINING

Development through Leadership Development Courses

Human resources development at C.P. Group aims to develop leaders at all levels. With Charoen Pokphand Leadership Institute (CPLI) at the center, courses are designed to suit the qualifications of all participants. All courses are developed based on real-life applications, focusing on learning through practicing by implementing cross-business and cross-function projects. The projects reinforce trainees to enhance business problem-solving skill and learn from experiencing actual impacts.

OPERATIONAL PROGRAM

STRATEGIC PROGRAM

COURSE OVERVIEW

The first training course for the Group's 'Young Talents' in Thailand and overseas, which aims to build well-equipped leaders according to the Group's leadership model.

A leadership development course for employees with proven leadership potentials focuses on business development and integrated management within the scope of their responsibilities, aiming to generate profit and revenue for the sustainable business growth.

The course focuses on enhancing and sustainably developing C.P. Group through the formulation of strategic projects that execute C.P. Group's vision.

A development course for leaders at the operational level is designed to help them manage strategic operational projects. It focuses on reforming processes for efficiency and quality, stimulating cross functional actions, and maximizing resources used.

PARTICIPANT QUALIFICATIONS

New graduates and young talents from business groups

Graduates of the FLP Program and employees from business groups

Managing directors and mid-level executives

Top-level executives

PROJECT SUPPORTS

CEO and CEO-1



CEO and CEO-1



CEO and CEO-1



CEO and Group Chairman

CASE STUDY

LEADER DEVELOPMENT Program 2024

Crop Integration Business supports the creation of new leaders by sending new employees to attend the CP Future Leader Program or Tao Kae Noi Project of the Charoen Pokphand Leadership Institute, which is a program that allows participants to learn and develop themselves through real business operations for a period of 6 months.

Create leaders who are well-rounded in the Group's style, capable, good people, disciplined in self-management, and able to use their own and their team's potential to the greatest benefit.

FLP	PLP	LDP
66 persons	79 persons	3 persons

18 participating projects.

1. Domestic Vegetable Trade
2. International Trade, Imported Fruit
3. International Trade, Exported Fruit
4. International Trade, Exported Fruit (Overseas)
5. International Trade, Exported Fruit (Retail)
6. International Trade, Exported Fruit (Wholesale)
7. Carbon Credits
8. Domestic Fruit Business Development Project
9. Vegetable Business
10. Nakhon Luang Vegetable Business
11. Integrated Rice Supply Chain Management, Upper Northern Region
12. Integrated Upstream Supply Chain Management, Suphan Buri-Chainat Provinces
13. Upstream Supply Chain Management, White Rice, Kamphaeng Phet Province
14. Upstream Supply Chain Management, Corn, Nakhon Ratchasima Province
15. Promote Integrated Rice Business
16. Domestic Fruit and Vegetables
17. Develop and Promote Integrated Upstream Rubber Businesses
18. Integrated Upstream Learning Center





CASE STUDY TOWN HALL 2024 : We are One



In 2024, Crops Integration, Rice, Transport and Services business held the CPCRT Town Hall 2024 event in a hybrid format, both at the Nakhon Luang plant in Phra Nakhon Si Ayutthaya Province and online. The event aimed to communicate the organization's vision, goals, and key directions to employees nationwide under the theme "We Are One," reflecting the unified drive for stable and sustainable growth across various business lines.

The event was attended by senior executives from all business lines, led by Mr. Prasit Damrongchitanon, Vice Chairman of the Integrated Crops, Rice, Transportation, and Services business, who delivered the opening speech and shared the organization's core vision to foster shared understanding among employees and inspire them to move forward together.



The event also saw the honor of other executives sharing key business directions and strategies, including Mr. Sumet Pinyosanit, Chief Executive Officer, Integrated Crops Business; Mr. Thiti Luchintanont, Chief Operating Officer, Rice Business; Mr. Chana Laowirakul, Chief Executive Officer, Transportation and Services Business; Mr. Adisak Pramuanmitra, Chief Operating Officer, Charoen Pokphand Engineering Co., Ltd.; Ms. Natchachanok Na Takuatung, Chief Executive Officer, Fruit and Vegetable Business; and Ms. Tachaya Phuangprasri, Senior Director of Human Resources.

The event also featured the CSR SPIRIT Reward ceremony, honoring employees who have dedicated themselves to contributing to society, the nation, and the organization. This reflects the six core values of Charoen Pokphand Group, which are deeply embedded in the minds of all employees.

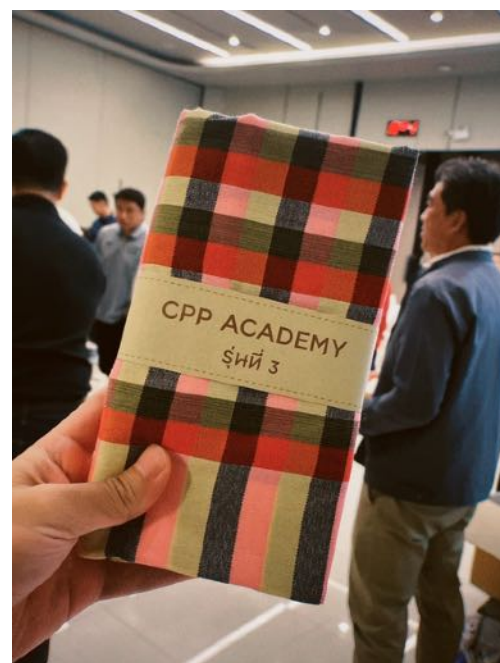
This gathering of executives from all business lines embodies the motto "We Are One," embodying the crucial role and shared direction, with the shared goal of creating a strong, sustainable, and hopeful corporate future.



CASE STUDY Nakhon Luang Academy

Developing agricultural business executives and upstream personnel by establishing an academy to develop business management skills for entrepreneurs and growers with excellence in five areas, guided by six core values.

This project utilizes real-world business challenges and practical fieldwork. The project has been in operation since 2023 and currently employs 80 personnel.



CASE STUDY : CPP Myanmar Academy

Creating professional growers, developing large-scale agriculture toward sustainability and carbon credits. CPP Myanmar Academy was established with the vision of elevating Myanmar's agricultural sector by creating a new generation of "farmers" equipped with knowledge, skills, and practical skills. The program emphasizes modern large-scale farming concepts, ready to drive large-scale agriculture with modern technology and environmental awareness. The first pilot program is open to 10 participants, emphasizing key qualifications such as a bachelor's degree or a passion for agriculture, entrepreneurial spirit, attention to detail, teamwork skills, and candidates from target areas with potential for combined farming.

Intensive, hands-on learning throughout the year.

The training program will run for a full year (October 2024–October 2025) and cover over 200 acres of demonstration land. Participants will learn both theory and practice, from seed production. Field management, plant care, and harvesting and post-harvest management.

Main crops covered:

Corn (main crop),

Rice,

Beans,

Covering both seed production and grain production.



Course

1. Seed Production for Rice, Corn, and Beans Grain Production for Rice, Corn, and Beans Seed Technology Quality Inspection & Assurance

2. CPP Crop Protection Pest & Disease Management Soil Sampling & Analysis Soil Series and Soil Improvement in Myanmar

3. Agriculture Machinery Farm Pro Application Drip & Rain Spray Irrigation Systems Equipment Design & Budget Planning

4. Application of Organic & Chemical Fertilizer

5. Post-Harvest Management Data-Driven Accounting: Cost, Profit & Return

6. Communication, Negotiation & Persuasion

7. Climate Change & Greenhouse Gas Agriculture Land Management (ALM)

Methane Reduction in Rice Fields : AWD (Alternate Wetting and Drying)

DRS (Dry-Seeded Rice System) Aerobic Rice



Approach to a Carbon Credit Project

A key highlight of this project is the integration of greenhouse gas emission reduction approaches into crop production, particularly in rice fields. This initiative will utilize agricultural techniques that support carbon credit projects, such as Alternate Wetting and Drying (AWD) water management to reduce methane generation in rice fields, drip irrigation to reduce water use and increase nutrient efficiency, and the use of organic fertilizers and appropriate nutrient management to reduce nitrous oxide emissions. These approaches aim to create a crop production model that can be developed into a Carbon Credit project at the farm and national levels.



The outcome goes beyond knowledge: hands-on practice, creating real people, transforming the future. The CPP Myanmar Academy not only produces personnel with comprehensive agricultural skills, but also develops a new generation of leaders who understand communities and farmers and can apply their knowledge to sustainable development in their own fields.

At the same time, the company has acquired personnel with a deep understanding of the agricultural sector, who can communicate credibly with farmers, and are ready to contribute to the country's green economy through future carbon credit projects. This is a significant step for CPP to truly invest in "people" for the future of Myanmar agriculture

CASE STUDY : CPP Myanmar held a training program called "Zero Burn, Zero Waste Train the Trainer" to develop the potential of farmer leaders to help drive the organization towards becoming a carbon-neutral organization.

Dr. Sadudee Suphanphai, Deputy Managing Director of the Sustainability, Governance, and Regulatory Affairs Office of the Integrated Crop Business of Charoen Pokphand Group, along with executives, staff, and farmer members of FarmPro, reiterated the "Zero Burn, Zero Waste" initiative for the second year. This initiative aims to promote FarmPro in Myanmar, providing integrated agricultural services to farmer members. This initiative aims to elevate the farming profession to meet market-required standards, ensuring high-quality produce that improves the quality of life and well-being of farmer members. A team of academics, experts, and professors from Rajamangala University of Technology Lanna were invited to share their knowledge and expertise, utilizing sound and appropriate academic principles. This time, training was provided to Myanmar farmer group leaders, members, and staff. The training was divided into seven topics:

- Conservation Tillage
- Appropriate Fertilizer
- Alternative Wet and Dry Activities
- Biomass Utilization
- Biomass Stove Activities
- Solar Cell Water Pump Assembly and Testing
- Farm Sustainable Assessment Standard



This training will develop personnel to expand knowledge and understanding, extending to farmer leaders who will serve as trainers and further extending the results to over 7,000 farmer members of the FarmPro business and farmers in various areas of Myanmar. This will enable them to practice environmentally friendly agriculture, reduce potential direct and indirect impacts on greenhouse gas emissions, and reduce waste in agricultural processes. This will also reduce carbon emissions, leading to the goal of becoming a carbon neutral organization by 2030.

CASE STUDY : **Stakeholder Consultation meeting for “Myanmar Carbon Program of Rice-field for Greenhouse gas reduction in areas of the Central and Northern”**

Crop Integration, Rice, Transport and services business in Myanmar held a stakeholder consultation for the Rice Carbon Credit Project to explain the project's goals and details and to gather stakeholder feedback.

The project proposed water management methods for rice fields, including alternate wetting and drying (AWD), direct-seeded rice (DSR), and aerobic rice cultivation. These methods reduce waterlogging, reduce methane emissions, increase water efficiency, increase yields, and save costs. Furthermore, the project promotes sustainable rice production practices, such as conservation tillage, appropriate fertilizer use, and non-burning agricultural waste management.

The project aims to implement three areas: Mandalay, Naypyidaw, and Ayeyarwady, using the Gold Standard carbon credit certification model, which focuses on social, economic, and environmental benefits, in line with supporting the UN's Sustainable Development Goals.

The project has received significant interest and feedback from stakeholders who attended the meeting, which can be used to improve and prepare for future project implementation.



CASE STUDY : Carbon Project Train the Trainer

Crop Integration, Rice, Transport and services business in Myanmar, organized training for 132 farmer members and Farmpro staff from its branches in Bago, Naypyidaw, Mandalay, and Ayeyarwady Regions. The training included theoretical insights and a field trip to the Bawni Farm Learning Center, a model farm where sustainable agriculture practices are practiced and greenhouse gas emissions are reduced.

The Carbon Project training, held at Bawni Farm, Bago State, Myanmar, from August 26 to September 5, 2024, focused on carbon credit project implementation in Myanmar. The training provided foundational knowledge to farmer members and Farmpro staff, covering the origins and impacts of greenhouse gas emissions and climate change. These factors, in addition to impacting daily life, directly impact agricultural practices. This has led the company to commit to implementing projects to reduce greenhouse gas emissions in line with the Carbon Net Zero policy of the group and the UN. This approach utilizes international certification methods, such as Gold Standard or Verra. The project also aligns its operations with the Sustainable Development Goals (SDGs) across all dimensions, including social, economic, and environmental dimensions. Farmers also learned about sustainable farming practices. By also using the criteria of the Farm Sustainable Assessment (FSA) standards.

There are two main approaches to implementing carbon projects:

1. Greenhouse gas emission reduction. Recommended approaches include water management in rice fields, including alternating wetting and drying (AWD), direct-seeded rice (DSR), and aerobic rice cultivation. This approach reduces waterlogging, reduces methane emissions, improves water use efficiency, increases yields, and saves costs.

2. Soil Carbon Sequestration: Recommended methods include agricultural land management to enable soil carbon sequestration. Examples include conservation tillage, appropriate fertilizer use, increased use of organic or chemical fertilizers, agricultural waste management without burning and then plowing into the field or reusing it for other purposes, crop rotation, and cover crops. These methods are also in line with sustainable agricultural practices.

The company aims for this training to lay the foundation and build understanding among member farmers and Farmpro staff, enabling them to collaborate with the company to successfully implement carbon projects in Myanmar in the future.



A digital graphic with a dark blue background featuring binary code (0s and 1s) and glowing circuit patterns. In the center is a large, glowing blue shield with a white padlock icon. To the right of the shield is a red circular icon containing a white padlock and circuit symbols. The right side of the image is a solid red vertical bar.

CYBER SECURITY AND DATA PROTECTION

| GRI 103-1, 103-2, 103-3, 410-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business commitment to operations includes technologies, processes, and practices designed to protect networks, devices, programs and data from attacks or intentional unauthorized access.

To protect business assets from all threats of cyberattacks, including securing personal information of employees and customers. The goal is to have the business group be certified in accordance with international cybersecurity and data protection standards.

SUPPORTING THE SDGs



SDG 16

Peace, Justice, and Strong Institutions

16.7

Ensure responsive, inclusive, participatory and representative decision-making at all levels



Goal 2030

Businesses certified on international standard of data security and data privacy

KEY OPERATING RESULTS IN 2024

Cyber Security and Data Protection



Cybersecurity Training : of all employees have been trained or raise cybersecurity wareness.

100%



Risk Assessment Cyber Security : the company's access channels have been assessed for cybersecurity risks

100%

CYBER SECURITY & DATA PROTECTION

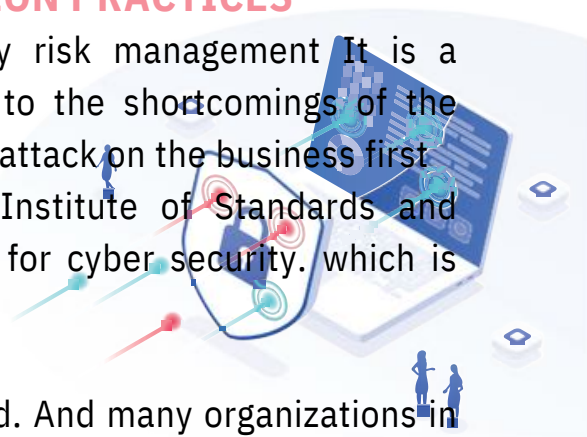
Security Operations and Cyber Security It is important for every organization. Whether it is the public or private sector To prevent data loss violation of privacy or being attacked by someone who does not wish well Our company has a systematic management approach in this area. By considering the nature of the business and the needs of customers.

MANAGEMENT GUIDELINES ARE FOLLOWS

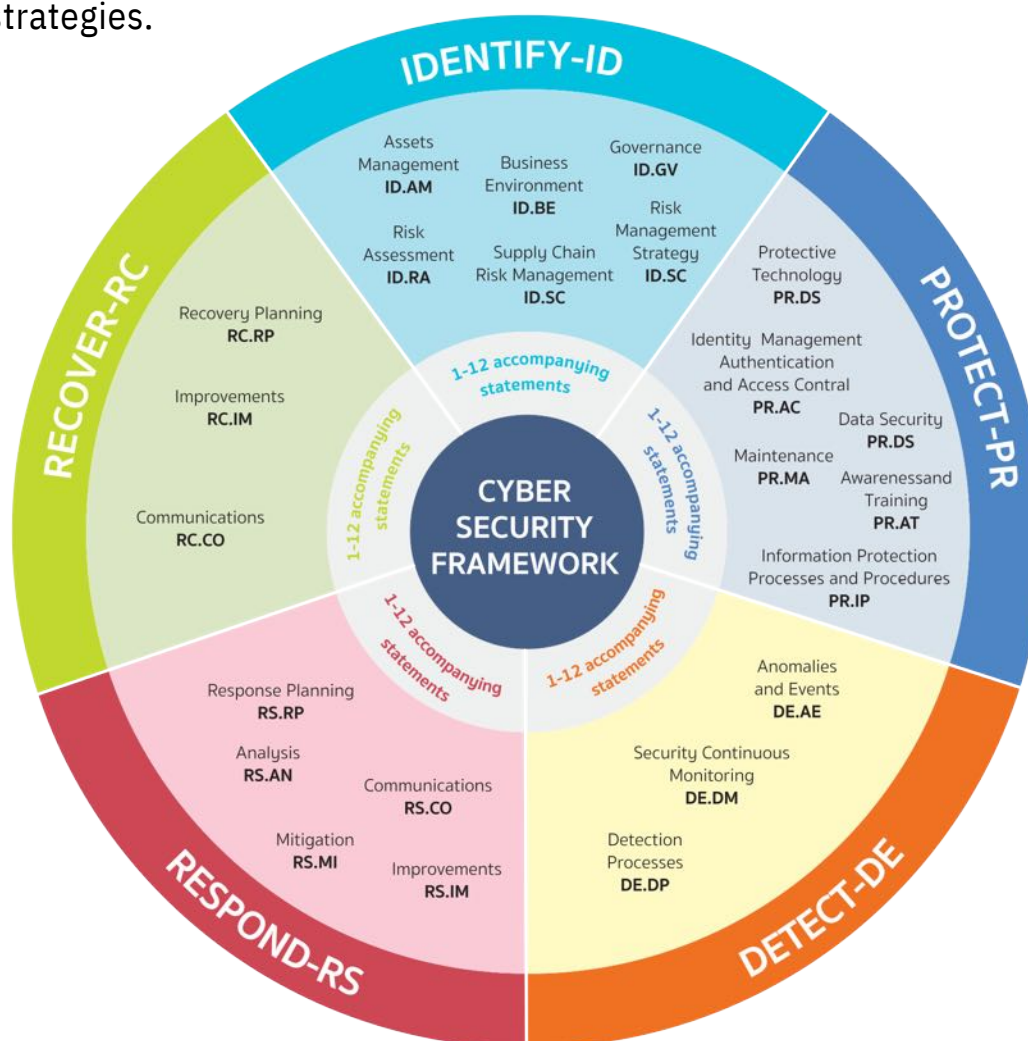


CYBERSECURITY AND DATA PROTECTION PRACTICES

Create cyber security stability Cybersecurity risk management It is a matter that the organization pays attention to the shortcomings of the system. Threat trends and the most important attack on the business first Cyber security framework of the National Institute of Standards and Technology (NIST) is one of the frameworks for cyber security. which is very popularly used nowadays.



Frameworks are widely used all over the world. And many organizations in Thailand Starting to use it to deal with cyber threats. Framework brings together a wide range of best practices. To help business organizations determine guidelines for enforcement. and improves security guidance. NIST Cyber Security Framework Functions help create cyber risk prevention strategies.



Identify

Identification helps develop a business and organization's understanding of how to manage risks to systems, people, assets, information, and capabilities. The main objective is to identify all people, processes, or systems that may be vulnerable to this type of threat.

Protect

Prevention supports the ability to limit or control the impact of a threat. The main objective is to limit the threat of attacks by eliminating or closing vulnerabilities.

Detect

Detection schedules activities to identify timely occurrences. The main objective is to stop the threat. But you must know what to do and businesses and organizations are facing dangers from cyber threats.

Respond

Respond to activities related to cyber threats to reduce the impact and prevent damage that occurs especially damage to reputation and violations of privacy

Recover

Prepare various data recovery plans. In the event of a cyber threat problem to return to normal and find a better way to prevent it before an incident occurs

Ref : NIST-Framework-Visual-with-Functions-and-Categories(expertip.net)

CYBER SECURITY & DATA PROTECTION

Crop Integration Business consider the importance of personal data management (PDPA) of employees at all levels to meet standards International and personal data protection from unrelated people Both about requesting information Data collection Data transmission and destruction.



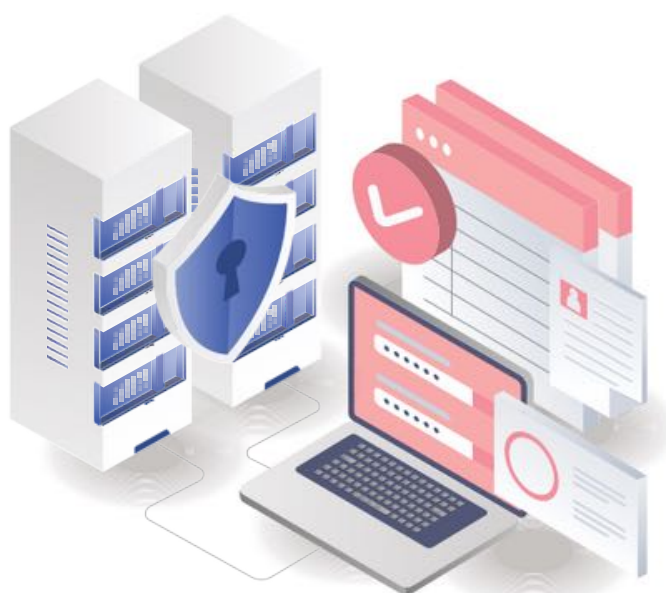
Organized training to provide knowledge to employees on the topic of preparing to support the Personal Data Protection Act on 25 May 2022 with the objective of making each agency aware of their roles and methods of dealing with various cases according to the Act.

Including clarification of the Guidelines for managing following matters:

- Guidelines for managing in the case of customers or employees exercising their rights. According to the Personal Data Protection Act
- Guidelines for management in the case of personal information being violated or leaked.

Organize knowledge training and take annual PDPA tests for all employees through the Group's online system.

Set PDPA guidelines on Data Subject Request / Data breach for use within the organization.



HEALTH

CropIntegrationBusinesscommitted to driving society towards sustainability through innovation that help promote good health for consumers. In addition, we implement projects aimed at improving the quality of life and health of people through our shared experiences and knowledge with a focus on comprehensive development in economic, social and environmental aspects.





To achieve the vision of being a leading company Integrated agribusiness and industrial agriculture Under the framework of vision, mission and policy, it is determined Social sustainability goals include:



Social Impact



Health & Well-being



Occupational
Safety



Innovation



Relationship with
Stakeholders



SOCIAL IMPACT & ECONOMIC CONTRIBUTION

| GRI 103-1, 103-2, 103-3, 201-1, 413-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business sees the problem of inequality as one of the causes of discrimination in society, and lack of trust. This puts the business at risk for reputation, and more supervision from official agencies as well as may affect the performance of the business in the long run. Therefore, the problem of inequality is no longer just a social problem that is nearby. But it can become a business risk.

Our organization integrates stakeholder expectations as part of our corporate goals to connect business and society.

Goal 2030

100,000 farmers, small

entrepreneurs and vulnerable groups receive career promotion and quality of life.

SUPPORTING THE SDGs



SDG 1

No Poverty

Reduce poverty by at least 50%

1.2

Equal rights to ownership, basic services, technology, and economic resources

1.4

SDG 4

Quality Education

Increase the number of people with the necessary financial skills



4.4

SDG 8

Decent Work and Economic Growth



8.6

Substantially reduce the proportion of youth not in employment, education or training



SDG 10

Reduced Inequalities

Reduce income inequality

10.1

KEY OPERATING RESULTS IN

2024 Social Impact



Farmers who received occupational and income promotion

26,049 persons



Investment in social development and support

2.48 million baht



Vulnerable groups that receive career and quality of life support

14,000 persons

MANAGEMENT GUIDELINEARIOUS SECTIONS



NUMBER OF BENEFICIARIES (PERSONS)



26,214 persons
farmers supported



14,643 persons
members of vulnerable groups
supported



SOCIAL ACTIVITIES



3.40 million baht
Charitable Donations



2.48 million baht
Community Investment



2.48 million baht
Support community
& society

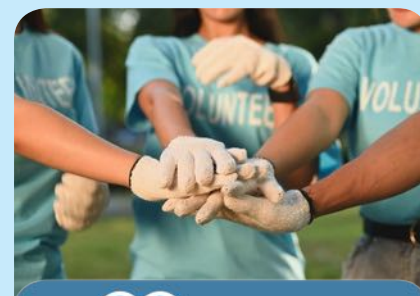


145.46 million baht
Tax paid to the
government



CREATING A GOOD IMAGE
FOR THE ORGANIZATION

Media Value
5 million baht



CSR SPIRIT CSR SPIRIT

2,017
persons

12,350
hours

GUIDELINE FOR MANAGEING FARMER SUPPORT

SUPPORTING FARMERS

Crop Integration Business aware of and prioritizes business operations that may be affected by economic and social roles. by supporting farmers small entrepreneur and vulnerable groups to be part of the business. Encourage participation and creativity with continuous operation to be able to solve problems and help promote the quality of life for the community as well as vulnerable groups to be able to live sustainably

MANAGEMENT APPROACH



Provide farmers with groups. (Market leading production) and operating in an integrated manner between the relevant departments



Training to farmers until they can reduce production costs, increase productivity and produce good quality.



Let the farmers be managers: manage production, produce and market knowledge.



CPP as the market for hedging the risk of price fluctuation, which can help members reduce their debt condition



CASE STUDY Sustainable Rubber Plantation Project

Charoen Pokphand Agriculture Co., Ltd., a fully integrated rubber business, is piloting the Thailand Voluntary Emission Reduction and Storage (T-VER) project in rubber plantations in Phu Ruea District, Loei Province. This project serves as a model area for farmers in the project to promote high-quality rubber to develop and share social responsibility in sequestering and reducing greenhouse gas emissions, in line with the Charoen Pokphand Group's policy and goal of carbon neutrality by 2030 and the goal of achieving net-zero greenhouse gas emissions by 2050.

This project is a collaboration between Charoen Pokphand Agriculture Co., Ltd. and Carbon Scout Co., Ltd. Training workshops and sample plot surveys were held. For employees and farmers who manage rubber plantations, the Office of the Natural Resources and Environmental Policy and Planning (ONEP) has approved the registration of the Capturing and Reducing Greenhouse Gas Emissions Project in Rubber Plantations, Charoen Pokphand Agriculture Company Limited, Loei Province, in accordance with Thailand's Standard T-VER (Standard T-VER) for the reduction, absorption, and storage of greenhouse gases from the forestry and agriculture sectors (FOR&AGI). The project area, covering 3,400.35 rai, has an expected greenhouse gas reduction/storage volume of 14,535 tCO₂eq/year. The project credit period is 7 years (April 5, 2024 - April 4, 2031), with a projected 7-year carbon credit total of 101,745 tCO₂eq.



SUPPORTING THE VULNERABLE GROUP

MANAGEMENT APPROACH

Crop Integration Business committed to conducting business in accordance with the C.P. Excellence approach based on the awareness of social responsibility according to the philosophy of 3 benefits to sustainability of the Charoen Pokphand Group. Ready to drive sustainable development goals Sustainable Development Goals (SDGs) in all 3 areas, consisting of society, economy and environment. to eradicate poverty promote food security build quality of life share educational opportunities gender equality, Sustainable Water Management access to modern renewable energy Support decent work in line with economic growth Develop industry and infrastructure through innovation. Reduce income inequality have a safe settlement of communities and cities Suitable consumption and production plans take care of the climate marine resources and terrestrial ecosystems Fairness and peace, enhancing cooperation towards the Sustainable Development Goals

PERFORMANCE 2024



Develop Education

National Children's Day 2024

Number of participants

8,500 persons

Agricultural youth fight
for sustainability YS

9 School 540 persons

CONNEXT ED

phase **31** School

English Day Camp

1 time

Tour online

14 time

NamJai nee jak Pee soo Nong

213 scholarships

CONSERVATION NATURAL AND ENVIRONMENT



Rak Pasak River Basin

1 time



Release

60,000 fish



PR Environmental Day

20 pieces

Develop the community economy and society.

Prosthetic leg unit issued 6 times
(Nakhon Si Thammarat, Sakon Nakhon,
Phetchaburi Ratchaburi, Uthai Thani,
Champang)



694 disabled people,

741 prosthetic legs

Creating happiness for the elderly.



Giving consumer goods,

895 persons



Songkran Festival,

700 persons



The Power of the Heart,

1 time



Offering Pha Pha,

26 temples



Donate blood at
C.P. Tower 2,

4 times



Blood donations:

873 persons

641 units

Communicate a good image



Media **5** million baht,
Communicated to more

10 million persons
English On Tour **1** times

CSR SPIRIT



CSR Spirit

2,976 persons

(double count)

Total 10,483 hours

CASE STUDY Creating Happiness for the Elderly, Year 12

Recognizing the importance and impact of Thailand's aging society, Crop Integration, Rice, Transport and services business has joined forces with executives and employees, integrating with government agencies, and providing health screenings and basic well-being care. This initiative creates value and brings happiness to the elderly, including bedridden patients, the disabled, and vulnerable groups. The initiative also provides consumer goods and services to alleviate hardship and boost morale for 1,200 elderly residents living around its facilities nationwide and in its sales areas, in line with the Charoen Pokphand Group's 3 Benefits philosophy.



CASE STUDY Continuing the Songkran tradition

Continuing the Songkran tradition and creating happiness for the elderly. The integrated plant, rice, transportation, and service business participated in preserving this beautiful Thai tradition by organizing Songkran activities for the elderly and communities surrounding the business's locations in 11 locations. This activity aimed to preserve and continue the traditions, including making merit by offering alms to monks, pouring water over their heads, and offering Chat brand rice to over 1,000 elderly people. This activity aimed to bring good fortune, express gratitude, and preserve this beautiful tradition.



CASE STUDY**Project for Underprivileged Children
Youth Farmers for Sustainability Year 6**

Crop Integration, Rice, Transport and service business aims to pass on agricultural knowledge, which has long been the foundation of Thailand's economy, to the younger generation through the transfer of basic agricultural knowledge to youth. This project, now in its sixth year, targets youth living near the business. Training sessions cover basic agricultural knowledge (soil, water, and fertilizer use), agricultural waste management, modern, safe agricultural technologies, and the importance of the five food groups.

Executives and staff support the establishment of agricultural plots for schools, fostering hands-on learning experiences for students. This initiative also promotes the establishment of school food banks, resulting in the "Sustainable Youth Farmers Project." This project aims to produce safe produce for the school lunch program, promote nutritious meals, and generate additional income for students in the surrounding area



CASE STUDY CP Blood Donation

Crop Intrgration, Rice, Transport and service business, in collaboration with the National Blood Center of the Thai Red Cross Society, is contributing to saving lives through blood donations to meet the needs of hospital patients and provide a blood reserve for those in dire need.

This initiative involves setting up an off-site blood donation point within the premises. Furthermore, in collaboration with CP Tower 2 (Fortune), a multipurpose area on the 2nd floor, a blood donation point is set up for employees and those interested in donating blood within the building and surrounding area. In 2024, four off-site blood donation events were held, with 873 participants. 641 units of blood were received.



CASE STUDY Sharing water, kindness to the disabled, royal prosthetic legs

Crop Integration, Rice, Transport and service business has supported the Prostheses Foundation of Her Majesty Queen Sirikit the Queen Mother in providing free mobile prostheses for amputees of all ages, genders, and races for 17 consecutive years. This initiative aims to create opportunities for people with disabilities to help themselves and gain employment, while also encouraging them to live a meaningful life.

In 2024, our organization supported six mobile prostheses for amputees in Sisaket, Trat, Roi Et, Nakhon Pathom, Trang, Phitsanulok, and Nong Khai provinces. A total of 696 amputees participated in the prostheses, giving them the opportunity to return to a normal life. We also supported the foundation and local agencies with Chat brand rice throughout the prostheses unit, and offered Chat brand omelet rice booths to provide satisfaction and boost morale for amputees and others. 3,700 dishes were served at the event.

Her Royal Highness Princess Maha Chakri Sirindhorn visited the Prostheses Foundation of Her Majesty Queen Srinagarindra in Mae Rim District, Chiang Mai Province. Mr. Thianchai Ju Pattanakul, Deputy Managing Director of Corporate Communications and Social Responsibility, was in attendance to receive a plaque of honor for the company's support of the Royal Prostheses Unit, which provides free prosthetic limbs to amputees of all races and religions.

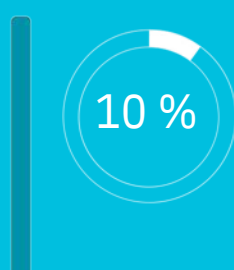


HEALTH AND WELL-BEING

| GRI 103-1, 103-2, 103-3

OPPORTUNITIES AND CHALLENGES

Crop Integration Business dedicated to research and develop products to meet agricultural product standards. By controlling and inspecting quality throughout the value chain, along with promoting knowledge and technology to farmers. Along with implementing projects to promote the health and well-being of employees and people in the community.



Goal 2030

Sales generated from B2B2C and B2C products and services that promote health and well-being.

SUPPORTING THE SDGs



SDG 2

Zero Hunger

Access to food that is nutritious and safe based on international standards

2.1

End all forms of malnutrition

2.2



SDG 3 Health and Well-being

Reduce mortality from non-communicable diseases and support good well-being

3.4

Support research, development,

3.B

and access to affordable essential medicines and vaccines

KEY OPERATING RESULTS IN 2024

Good health and well-being



Sales generated from B2B2C and B2C products and services that promote health and well-being.

Organic fertilizer products with sales of 0.84 %

MANAGEMENT GUIDELINES



MANAGEMENT OF HEALTH PRODUCT INNOVATION



The health and well-being of all citizens in each country is an important issue for will help increase the limit capability of that country in the future, as well as reducing the burden of medical expenses at the national level, CPP, as an upstream company of agribusiness, recognizes that it is a part that can help alleviate such problems effectively. by using the potential of presenting products and services that promote quality of life promote the health and well-being of the people

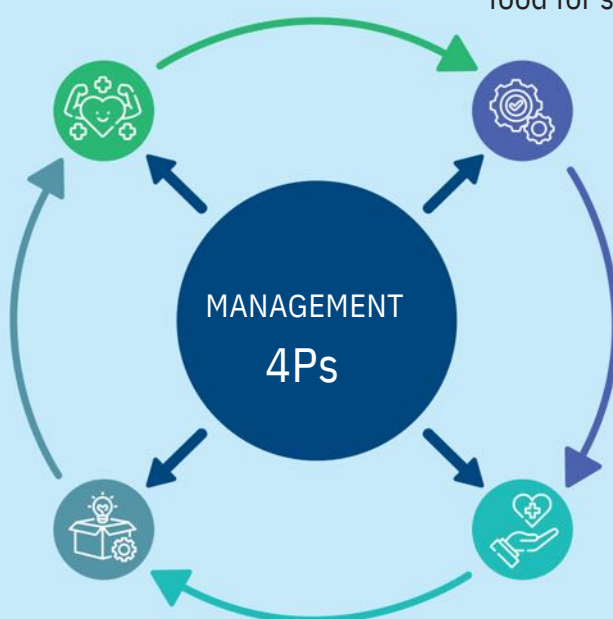
Our company committed to investing in research and development, operating in accordance with international standards and monitoring quality throughout the value chain, and promoting understanding of good nutrition. We focus on development based on the 4Ps management principle to empower our employees (People), develop processes in accordance with international standards (Processes), offer products to promote good health and well-being (Products), and promote understanding of health issues (Health Promotion).

1 PEOPLE

- Recruiting personnel with specific expertise
- Training and developing the necessary skills

2 PRODUCT

- Research and develop products and innovations to create a variety of products
- Invent food products for consumers in each age and food for specific patients



4 PROMOTION OF HEALTH

- Clear and accurate product information
- Traceability system

3 PROCESS

- Systems and management standards
- Analysis System and check the quality of raw materials by a laboratory that meets ISO/IEC17025 standards
- Automated and robotic technology systems
- Traceability system

A graphic for the Occupational Health and Safety section. It features a background image of hands working on a blueprint. Overlaid on this are several semi-transparent icons: a document with a checkmark, a worker in a hard hat and safety vest, a warning triangle with an exclamation mark, a stethoscope inside a blue circle, a shield with a glowing checkmark, a handshake, and a medical syringe. The right side of the graphic is a solid blue vertical bar.

OCCUPATIONAL HEALTH AND SAFETY

| GRI 103-1, 103-2, 103-3, 403-9, 403-10

OPPORTUNITIES AND CHALLENGES

Our organization aware of safety, occupational health and the environment no less than the quality of the product. Therefore, we have established a process to identify hazards and assess risks in the work process. In addition, if there are new machines, it is necessary to identify hazards and assess risks before starting work every time in order to be aware of the potential hazards and find ways to improve, correct and prevent those hazards.

Goal 2030

Zero Accident

Achieve zero lost time injury frequency rate.

SUPPORTING THE SDGs



SDG 3 Good Health and Well-Being

3.4

Reduce mortality from non-communicable diseases and support well-being



SDG 8 Decent Work and Economic Growth

8.8

Protect labour rights and promote safe and secure working environments for all workers, including migrant workers

KEY OPERATING RESULTS IN 2024



Safety Awards

Business Award for Safety, Occupational Health and Working Environment,
Zero Accident Campaign Award

Work-related injury rate



Employee

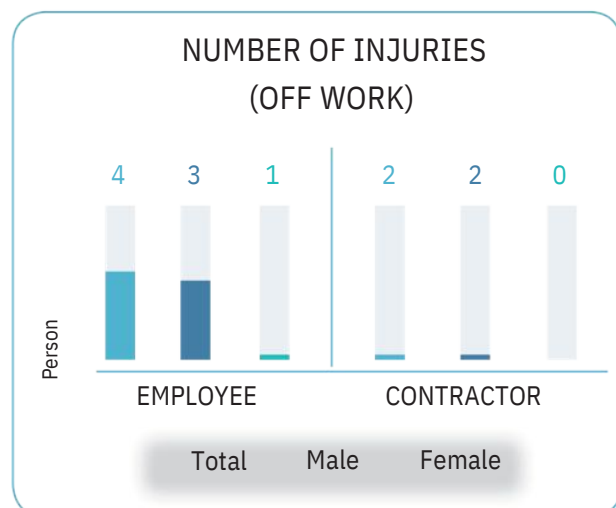
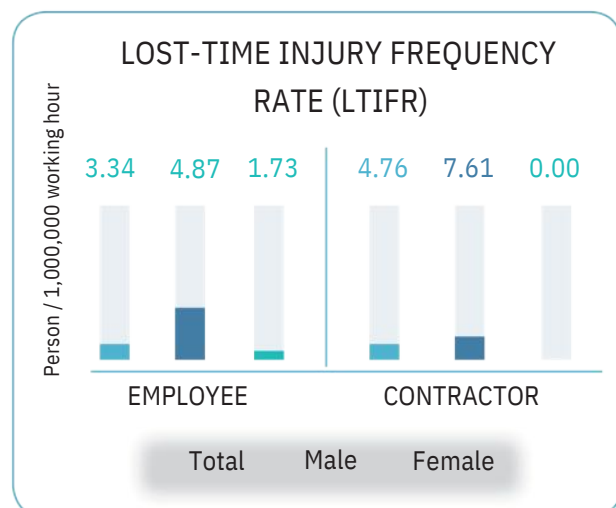
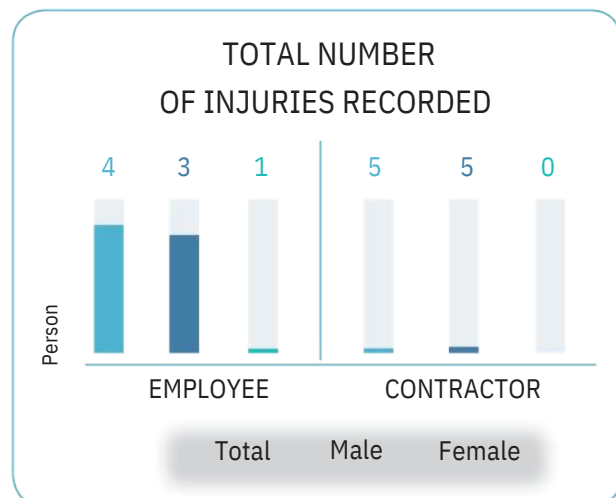
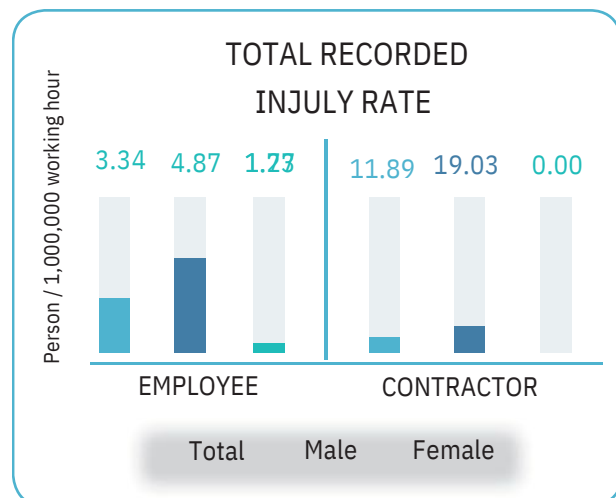
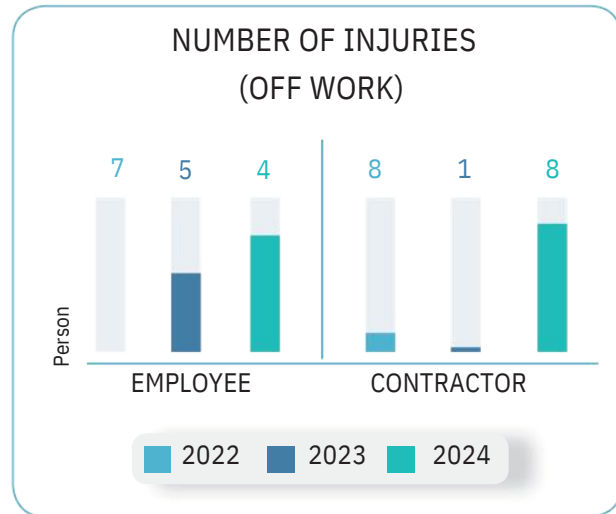
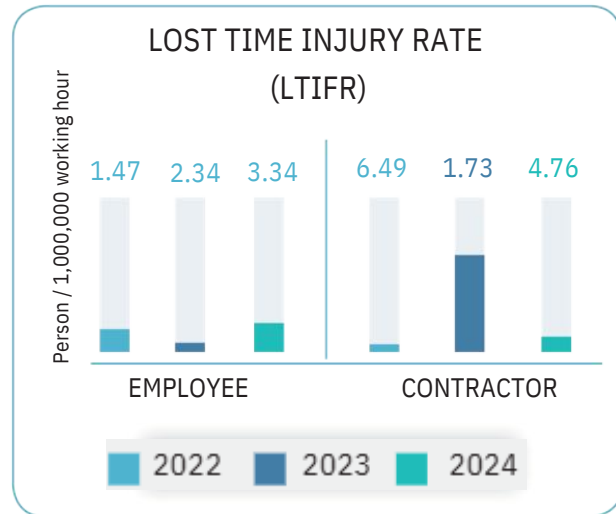
3.34 persons/ 1,000,000 working hours



Contractor

4.76 persons/ 1,000,000 working hours

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT DASHBOARD





OCCUPATIONAL HEALTH, SAFETY AND WORK ENVIRONMENT MANAGEMENT

MANAGEMENT APPROACH

Crop Integration Business focuses on and prioritizes work safety by adhering to the care of employees, contractors, visitors. As well as stakeholders in the business as well as the supply chain, the Company has established a policy of safety, occupational health and work environment as a guideline and enhance the safety operations of the organization with guidelines for do as follows:

1. Safety, occupational health and working environment It is the duty and responsibility of the executives. and employees at all levels and consider the success of the operation as part of the performance evaluation.
2. Support the budget. and resources for the development of safety operations to allow all employees to participate in the implementation of the policy. Including communicating to related parties to acknowledge the results of the operation.
3. Let employees at all levels receive training, knowledge, ability to work. to meet the standards of safety at work To realize the importance of having a good safety system to participate in the efficient use of resources. It is a culture of safety, occupational health and working environment.
4. Manage safety risks properly according to international standards. And integrate with all activities of business operations at all levels throughout the supply chain. for protection And reduce the impact from harm, reduce injuries, illnesses of employees. and those involved Including damage to reputation and property and does not affect external communities.
5. Comply with the laws related to safety, occupational health and working environment both nationally and internationally. local level and complies with international standards Requirements of customers and agencies.
6. Monitor and report effectiveness Management of safety, occupational health and working environment for executives at all levels to be continuously improved in accordance with the reporting format according to international standards

ZERO ACCIDENT OPERATION STRATEGY

1. Upgrading the operational standards for safety, occupational health and the environment to be the same standard in every country (SHE
2. STANDARD) Occupational safety, health and environment contest for business groups through the CEO AWARDS project. Outstanding
3. Safety Establishment Contest Occupational health and working environment at the national level Zero Accident Campaign Contest with NSO



CASE STUDY : CPP FACTORY SAFETY ACTIVITIES.

Charoen Pokphand Produce Co., Ltd. is aware of safety, occupational health and working environment with the goal of becoming a zero accident organization. Therefore, we have applied various technologies and innovations to increase work safety, reduce factory accidents and reduce the rate of employee injuries to the point of having to stop working.

Our organization awareness campaigns and provides safety knowledge training to employees to build trust with employees and increase work efficiency to achieve the set goals.

Organizing training and monitoring safety systems Occupational health and working environment.

TRAINING	Seed Processing Plant Soi 19, 12	Chemical Fertilizer Packing and Mixing Plant	Organic Fertilizer Plant	Rice seed conditioning plant, Chainat	Seed Conditioning Plant, Vietnam	Fertilizer packaging plant and seed, Myanmar
Training <u>on</u> general safety at work and related laws, regulations and welfare, and promoting energy conservation in the factory.	•	•	•	•		
Automotive Safety Attitude Review Course	•	•	•	•		
General safety course, safety regulations and related laws for new employees before starting work.	•	•	•	•		
General occupational safety course and risk factors with contractors before starting work	•	•	•	•		•
Safe Forklift Driving Review Course	•	•	•	•		•
Practice emergency plans for chemical spills, electrical shocks, falls from heights, abnormal boilers, gas leaks.	•	•	•	•		•
Basic <u>fire fighting</u> and evacuation drills	•	•	•	•		•



Safety, occupational health and working environment knowledge activities.

ACTIVITIES	Seed Processing Plant Soi 19, 12	Chemical Fertilizer Packing and Mixing Plant	Organic Fertilizer Plant	Rice seed conditioning plant, Chainat	Seed Conditioning Plant, Vietnam	Fertilizer packaging plant and seed, Myanmar
Activities to meet supervisors and executives	•	•	•	•		•
Car inspection activities and motorcycle	•	•	•	•		
Safety Q&A Activity from the Public Relations Board	•	•	•	•		
Suggestion activities	•	•	•			
Outstanding Safety Agency Contest Activity	•	•	•			
Photo safety activities	•	•	•			
Public Address Activities	•	•	•			
Monthly safety check	•	•	•			•
Safety Day Activities	•					



CASE STUDY : CPA&CPS FACTORY SAFETY ACTIVITIES.

Charoen Pokphand Agriculture Co., Ltd. aware of safety, occupational health and working environment with the goal of becoming a zero accident organization. Therefore, we have applied various technologies and innovations to increase work safety, reduce factory accidents and reduce the rate of employee injuries to the point of having to stop working.

Our organization awareness campaigns and provides safety knowledge training to employees to build trust with employees and increase work efficiency to achieve the set goals.

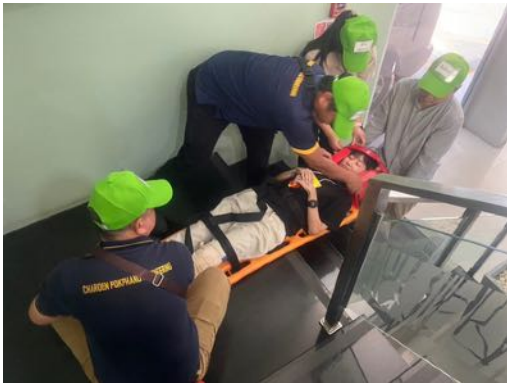
Organizing training and monitoring safety systems Occupational health and working environment.

TRAINING	Rubber plant, Loei	Fruit juice steaming plant	Head office
Basic firefighting	•	•	•
First aid and resuscitation Using an AED	•	•	•
Work safety training (6 hours) as required by law	•	•	•
Training course for executive level safety officers			•
Occupational Safety, Health and Environment Committee			•
Office syndrome	•		•
Training on knowledge of driving attitude and behavior	•	•	•
Safe Forklift Driving Training Course	•		



Safety, occupational health and working environment knowledge activities.

ACTIVITIES	Rubber plant, Loei	Fruit juice steaming plant	Head office
Safety talk / KYT activities to stimulate safety awareness	•	•	
Certification as required by law	•	•	•
Risk-based and legally required emergency plans	•	•	•
SHE DAY activities	•	•	•
Safe Driving Campaign	•	•	•
Explore the impact and create understanding for surrounding communities	•	•	•
Community engagement activities	•	•	•
Safety study tour activities	•	•	•





INNOVATION MANAGEMENT

| GRI 103-1, 103-2, 103-3

OPPORTUNITIES AND CHALLENGES

Business challenges in the digital age is a change in technology and innovation happens quickly. Therefore, to keep up with the changing behavior, our organization is innovating by using new technologies and innovations in research and product development, as well as being aware of social and environmental responsibility because we believe that creating new things will help drive the business forward sustainably amidst rapid changes, as well as create value for society and the environment at the same time.



SUPPORTING THE SDGs



SDG 8

Decent Work and Economic Growth

8.2

Achieve higher levels of economic productivity through diversification and innovation



SDG 9

Industry, Innovation and Infrastructure

9.5

Increase research and technological capabilities of industrial sectors

9.B

Support domestic technology development and industrial diversification



SDG 17

Partnership for the Goals

17.17

Support effective partnerships

KEY OPERATING RESULTS IN 2024



Number of registered patents and petty patents

16 patents



Saving results from One Day Satisfaction Project

120.81 million baht

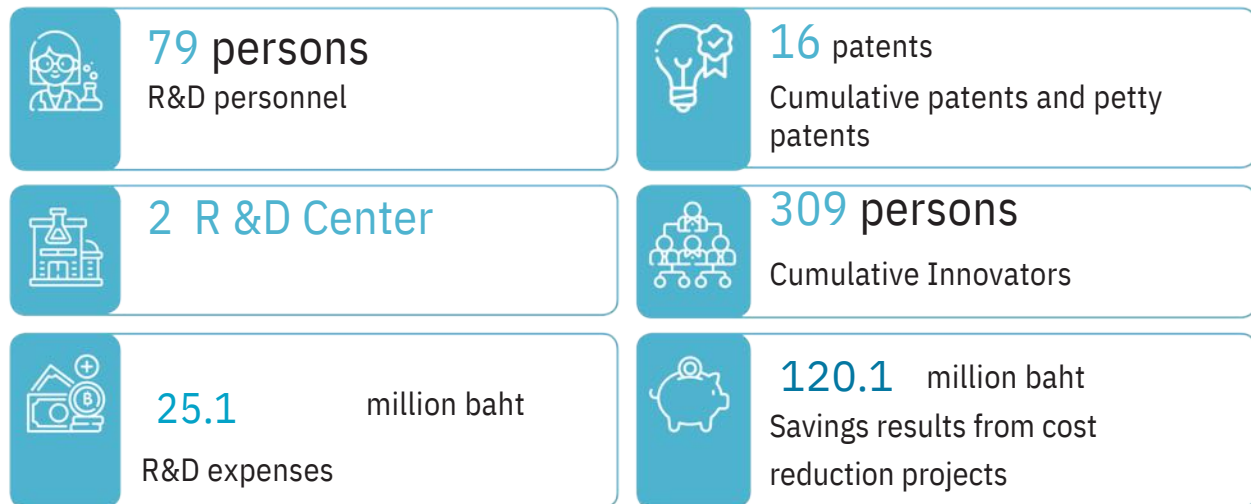


Number of innovators who have invented innovation project Reduce costs and increase efficiency

309 persons

INNOVATION MANAGEMENT

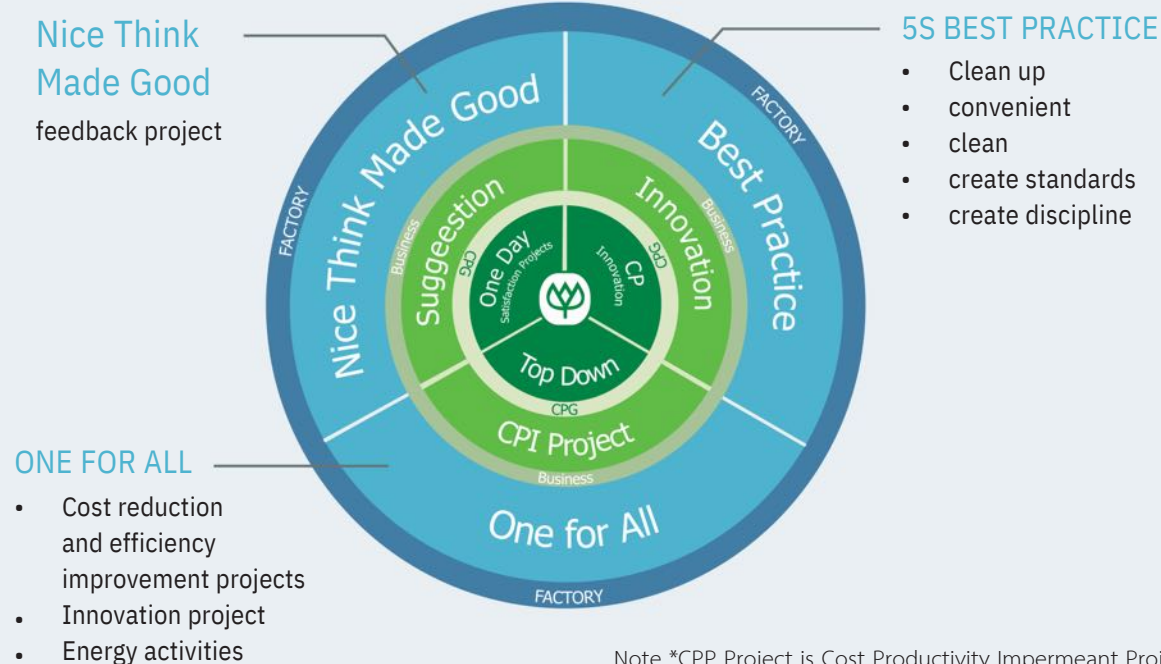
Research and development investment



MANAGEMENT APPROACH

Support the changes that will enter the digital age, Crop Integration Business believes that Innovation will be an important tool that will keep us abreast of global changes or Mega Trends. Therefore, we have determined and implemented the company's innovation management framework, consisting of platform creation, personnel development. and organizational culture (People) process development (Process) including open innovation and management of intellectual property (Pipeline), the basis of which is the use of digital technology to transform the organization. to systematically drive innovation and is constantly evolving Aiming to be an organization-wide innovation organization

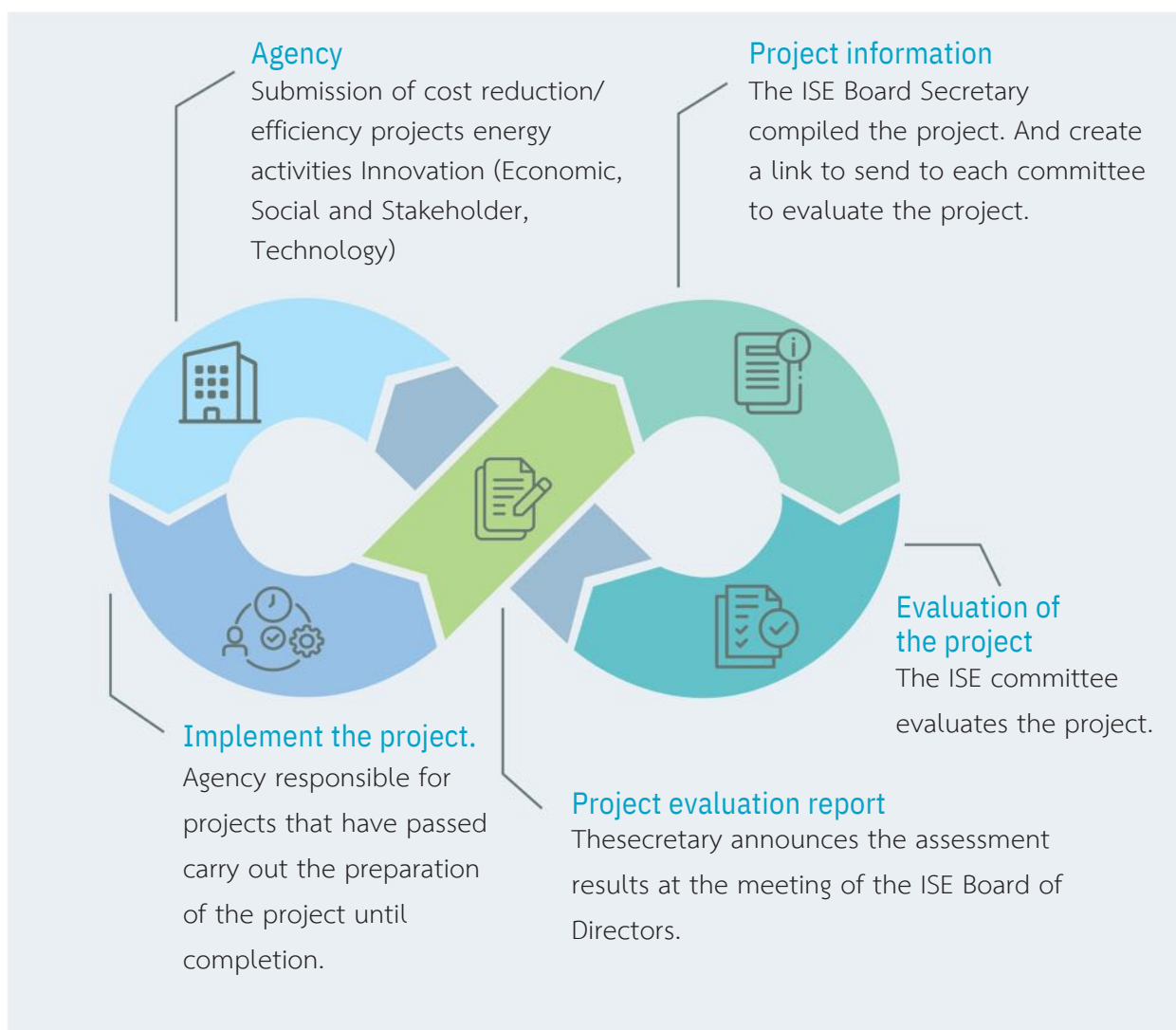
CPP INNOVATION DIAGRAM



CREATING AN INNOVATION ORGANIZATION

Crop Integration Business importance to the creation of new things. to create opportunities and further innovation covering 3 areas: economy, technology and society. By focusing on employees to solve problems on their own. Therefore, a suggestion system (Suggestion) was created and incentives were created. by creating a platform for employees to present to the executives When employees have developed and become a culture to some extent. Next, the goal is for employees to work together so teamwork is set up. By using the concept of QCC System for employees to group together Solve more difficult problems Decisions are made between teams to achieve common solutions through a “one for all” program that encompasses efficiency, cost reduction and continuous improvement.

Emphasis on cross-functional collaboration, developed into an innovation system process, sent to the Group’s C.P. INNOVATION, at the business group level. Organized a forum for employees to show their potential in the CPP Award work contest with the objective of honoring innovators who invent works. and to share knowledge and exchange experiences of employees Outstanding works will be developed and elevated to the Charoen Pokphand Group Innovation Contest.



CASE STUDY : Microorganisms decompose rice stubble, reducing burning. Increase soil carbon sequestration.

Thailand has different post-harvest rice stubble management methods, but the most popular method is stubble burning, as it is a fast method that allows the field to be prepared in time for the next planting (Sonsok, 2016). Burning accounts for 69% of the rice-growing area in Thailand, and 1 rai of rice loses approximately 68-225 kg C/rai of carbon dioxide to the atmosphere (Atthachai, 2004). This impacts the environment and is a major cause of the greenhouse effect. Therefore, microorganisms that produce plant-degrading enzymes have been used to speed up decomposition in time for the next rice crop. The CPP microbial research team has developed a prototype microbial product for decomposing rice stubble and straw. It is a combined inoculum consisting of *Bacillus* B87 and *Actinomyces* A04 in powder form, convenient for farmers to use.

Results from using the company's strain of stubble-decomposing microorganisms showed that 40% of the stubble could be decomposed within 14 days, and no rice plants were found to be infested with the stubble. Farmers' methods of field management (natural decomposition) showed a 29% decomposition rate. Hydrogen sulfide gas was found in the fields, affecting the growth of rice plants in the following season.

In addition to decomposing stubble, it also increases soil organic matter and sequesters carbon, providing another way to reduce greenhouse gas emissions in the agricultural sector.



CASE STUDY : EcoGrow Project: Turning Waste into Life Energy

The factory has previously managed waste from the corn seed production process, laboratories, cafeteria, and offices by separating it into organic and recyclable waste. Primary waste includes corn husks, silk, corn dust, and ash for easy disposal and reduced environmental impact.

However, due to the large volume of primary waste, the factory is considering transforming this waste into organic fertilizer for the "Fruit Sharing Happiness" project. This project will be used to nourish trees and share the produce with employees, reducing waste disposal costs, promoting health and happiness within the organization. Furthermore, the factory applies the 3Rs principle (Reduce, Reuse, Recycle) to recycled office waste.

The factory uses a non-turning composting method, a Maejo engineering formula, to transform waste into high-quality organic fertilizer. The process begins by layering thin layers of waste materials, alternating with 15–17 layers of organic fertilizer, creating a triangular pile 1.5 meters high. Water is gradually added to maintain moisture and allow microorganisms to work. Watering is then stopped and the fertilizer is allowed to dry out. After 90 days, the waste transforms into dark organic fertilizer.

Currently, food scraps within the factory, such as vegetable scraps, rice scraps, and eggshells, are separated from trash and placed in an eco-friendly composting bin. These bins, made from two sizes of plastic containers and stacked baskets, are punctured to allow for air circulation and fitted with a lid. In just 60 days, previously worthless food scraps are transformed into loose organic fertilizer, while also nourishing the factory's plants. This revitalizes the nutrients of every meal.



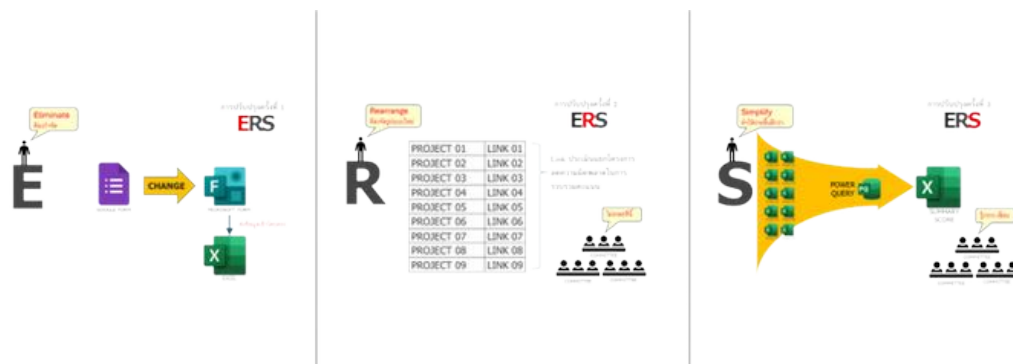
One For All Project Evaluation System

CASE STUDY : Innovation for Accuracy and Speed

Developing a One For All project evaluation system that effectively reduces evaluation time and errors. One For All is the name of the project implemented by the Soi 19 and Soi 12 factories, which allows employees to work together to solve more difficult problems through a design thinking process. This process focuses on finding solutions that emphasize the user's perspective and searching for innovation. Employees propose projects within the framework or areas for improvement based on management's recommendations. This covers increasing work efficiency in terms of quality, cost reduction, safety, and the environment. To allow employees to showcase their potential, exchange experiences, and share knowledge, a forum was established for presenting their work through the One For All project.

Before the project:

1. Evaluation errors: Sending separate Google Form links to each project confuses the judges and leads to misjudgments.
2. Using Google Forms for evaluation has limitations in data management and linking to other systems.
3. Processing scores using Excel requires manually copying data from multiple sources, which is time-consuming and prone to errors: up to two business days (960 minutes).
4. Complicated workflow: Computing scores in Excel requires copying data from multiple departments, which is time-consuming and prone to errors.



After the project:

Productivity: Improved the processing system for faster results.

- Reduced processing time: From 2 business days (960 minutes), results were immediately summarized with rankings. However, the set-up time for voting and querying data took 1 hour (60 minutes). This represents a 93.75% reduction in work time, and data can be summarized instantly in 0 seconds.
- Reduced workflow: From 5 steps to 3 steps, representing a 40% reduction in steps.
- Quality: Reduced errors in data evaluation and analysis.
- Reduced evaluation errors: Reduced errors from project mis-evaluation by 90%.
- Reduced data analysis errors: Reduced errors by 100%.

Cost: Reduced score summary costs by 21,420 baht per year.

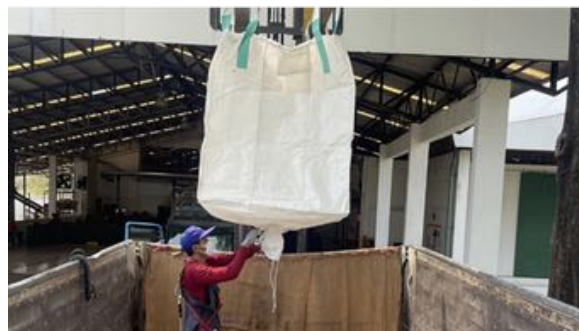
Delivery: Project score results were announced on schedule.

CASE STUDY : Special Jumbo Bag Project

In the corn seed conditioning process, there is a step in sorting out pods that do not meet standards, such as those damaged by insects, infected with fungus, or beginning to sprout. These sorted pods must be moved and dumped onto trucks for disposal or resale. The old method used standard jumbo bags with tied bottoms, which required emptying the pods from the bottom. This caused problems with pods not flowing smoothly, wasted work time, was dangerous, and damaged bags increased waste in the process.

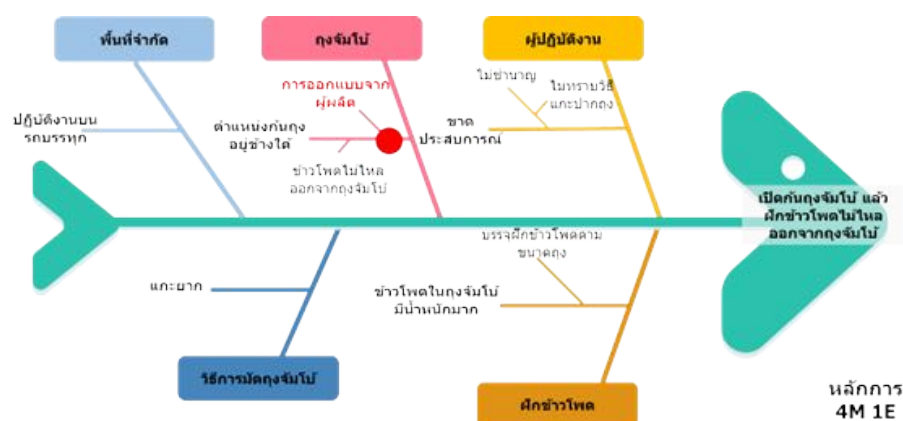


(Tying the bottom of a jumbo bag)



(Jumbo bag bottom unpacking operator)

The team conducted a 4M 1E analysis and found that the main cause was the manufacturer's (Machine) bag bottom design that did not match the actual usage, causing delays in the process and increasing hidden costs from labor and consumables. To solve the problem, the team developed an innovative Special Jumbo Bag through the creation of several versions of prototypes:



Innovation Results

- 70% reduction in work time, resulting in a faster pod-splitting process
- 70% reduction in labor costs due to reduced steps and time
- Reduced waste from damaged bags and consumables from repairs
- Improved safety, reducing risky operations for employees
- Simplifying complex tasks, promoting production efficiency and user satisfaction

CASE STUDY : Project slips and flows

From a field inspection (Success My by Walking) and observing the behavior of employees in the corn planting process, it was found that for some varieties, corn cobs were stuck in the track between the conveyor belt and the oven, and silk was stuck at the corner of the track. This prevented the cobs from continuously flowing down the conveyor belt into the oven, causing them to pile up. Employees therefore had to stop their work, climb up, and use a rake to spread the cobs and silk down to allow the process to continue. This created safety risks, such as falls from heights, injuries requiring work stoppage, and impacting production efficiency.

From the root cause analysis, it was found that the factors that cause the pods to stick may be due to the quality of the pods, such as few kernels attached to the cob, a lot of corn cobs, husks or silk attached, including the moisture content of the pods that are processed.



Before improvement



After renovation

To solve the problem of stuck corn cobs, the team has developed and improved the oven's corn cob chute to accommodate all types of cobs and allow them to flow continuously down the conveyor belt, reducing pile-up, safety risks, and ensuring uninterrupted production processes. This concept uses slope measurement to find the optimal angle for the corn cobs to flow. Measurements are performed in both percentage (%Slope), which is calculated from the vertical distance divided by the horizontal distance multiplied by 100, and in degrees, using the arctan mathematical formula (vertical distance ÷ horizontal distance) to obtain a chute angle that facilitates smooth flow, resulting in a "slide, flow" device.

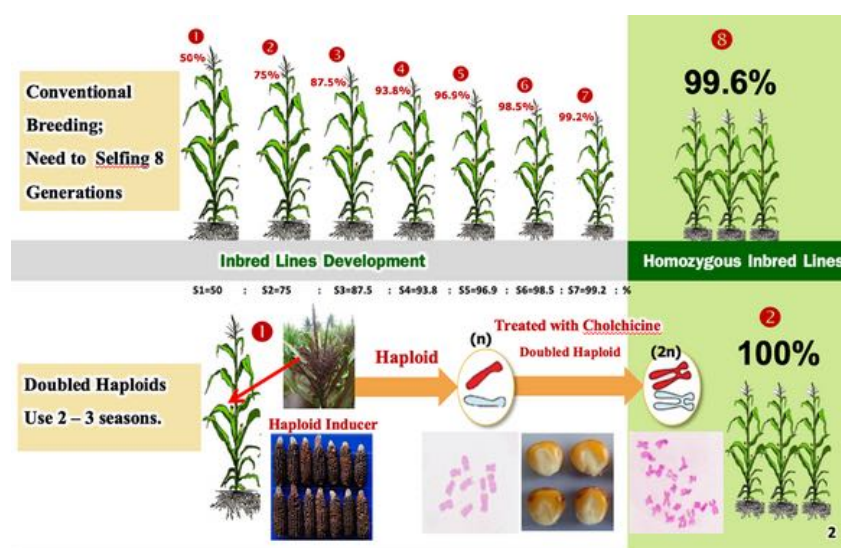
Development of purebred corn lines

CASE STUDY : using Doubled Haploid (DH) technology

Conventional maize inbred line development is the basis of commercial breeding. It emphasizes selfing + selection to create genetically competent inbred lines. These lines are used as parents for high-potential hybrid maize production. This method involves continuous selfing for 6–8 generations (S1 to S6 or S7), which takes 3–4 years. Obtaining inbred lines is time-consuming and resource-intensive. Therefore, Doubled Haploid (DH) technology is introduced to reduce the time and increase accuracy. By developing inbred lines with Doubled Haploid (DH) technology, the entire process takes only 1.5–2 years (to create an inbred line with 100% genetic purity).

Steps in the DH process in corn:

Crossing with a haploid inducer line involves crossing the haploid inducer line with the desired variety. The resulting pods contain some haploid embryos (having only one set of chromosomes from each parent, $1n$). These pods are identified using markers such as embryo color. Chromosome doubling is then induced using chemicals such as colchicine to increase the number of chromosomes in haploid cells, transforming them into diploids. The result is a doubled haploid plant, which is a pure, inbred line.



The obtained DH plants are planted in the plots, selecting plants that are healthy, have good characteristics, and are suitable for the project's goals. Each DH plant can be used for testcrossing immediately.

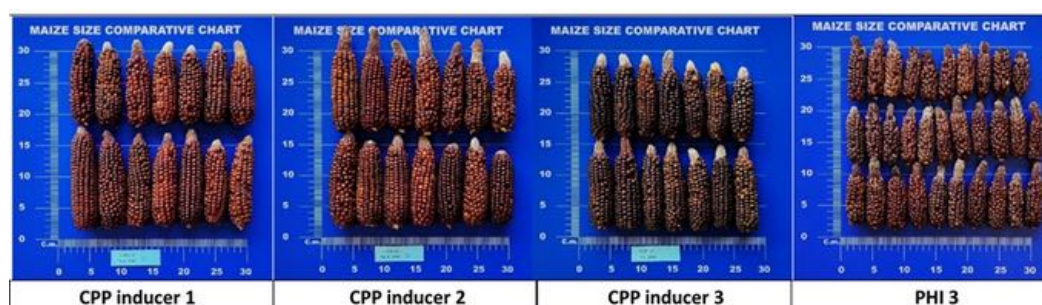
The Importance of Haploid Inducers

Haploid inducers are specialized maize varieties that, when crossed with a recipient variety, produce seeds with approximately 5–10% haploid genome inheritance from the parent. Therefore, the importance of developing them to suit the environment and achieve a high induction rate is recognized.

The development of haploid inducers for the tropics requires combining genetics with adaptability to real-world environments. The goal is to increase:

1. Haploid Induction Rate (HIR) $\geq 10\%$
2. Pollen viability and environmental adaptability
3. Easy identification of haploid from diploid seeds (markers)

The idea is to create new inducers from existing lines, hybridize them, and select for desired traits.



NO	Male	inducer type	Total Seed	Haploid seed	HIR
1	CPP inducer 1	Hybrid	3,965	611	15.4
2	CPP inducer 2	Hybrid	5,886	722	12.3
3	CPP inducer 3	Hybrid	5,867	440	7.5
4	CPP inducer 4	Hybrid	5,158	672	13.0
5	CPP inducer 5	inbred	6,305	1,101	17.5
6	CPP inducer 6	inbred	8,021	1,349	16.8
7	CPP inducer 7	inbred	10,039	706	7.0
8	PHI3	inbred	5,854	680	11.6

Research Summary

CPP-Inducer 1, which yields a HIR of 15.4%, is more adaptable to environmental conditions than the original strain and still provides a clear marker for haploid seed identification. This will be useful in effectively shortening the time required to develop pure strains.



New inducer



CPP inducer 1



PHI 3



STAKEHOLDER ENGAGEMENT

| GRI102-21,102-40,102-42,102-43,102-44, 413-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business believes that good corporate governance is something that Charoen Pokphand Group places importance on in order to enhance its competitiveness and sustainable development, as well as help increase value for stakeholders in the long term. Because good corporate governance indicates an efficient, transparent and auditable management system, building trust among stakeholders, which requires commitment and cooperation from employees at all levels, with support from the Board of Directors and executives, in order for corporate governance to be tangible.



SUPPORTING THE SDGs



SDG 16 Peace, Justice, and Strong Institutions

16.7

Ensure responsive, inclusive, participatory, and representative decision-making at all levels



SDG 17 Partnerships for the Goals

17.6

Enhance the global partnership for sustainable development

17.7

Encourage and promote effective partnerships

KEY OPERATING RESULTS IN 2024



All companies Stakeholder groups are defined and looking for needs and expectations

100%



Engagement score of multi-stakeholder perception survey

82 %

STAKEHOLDER ENGAGEMENT FRAMERWORK

MANAGEMENT APPROACH



Crop Integration Business has announcing policies and considering stakeholders involved in business operations in the scope of each company. Also analyze the stakeholder relationship of the organization to reflect the business context in a comprehensive manner. CPP identifies that business operations throughout the value chain are involves direct and indirect stakeholders and analyzes issues that stakeholders have an impact and expect the organization, including the issues that the organization has impact and expect to stakeholders who the company has given importance and increasing the positive impact and reducing the negative impact to maintain the competitiveness to develop the growth potential of long term business.

Our company determines how to engage with each group of stakeholders in order to communicate, manage and implement significant issues in formulating ways to meet stakeholders' needs and create consistent bonds across the organization.



Investor



Employee



Farmer

Customer
& Consumer

Supplier



Partner

Media & social
online

Government



Bank



NGO



Community

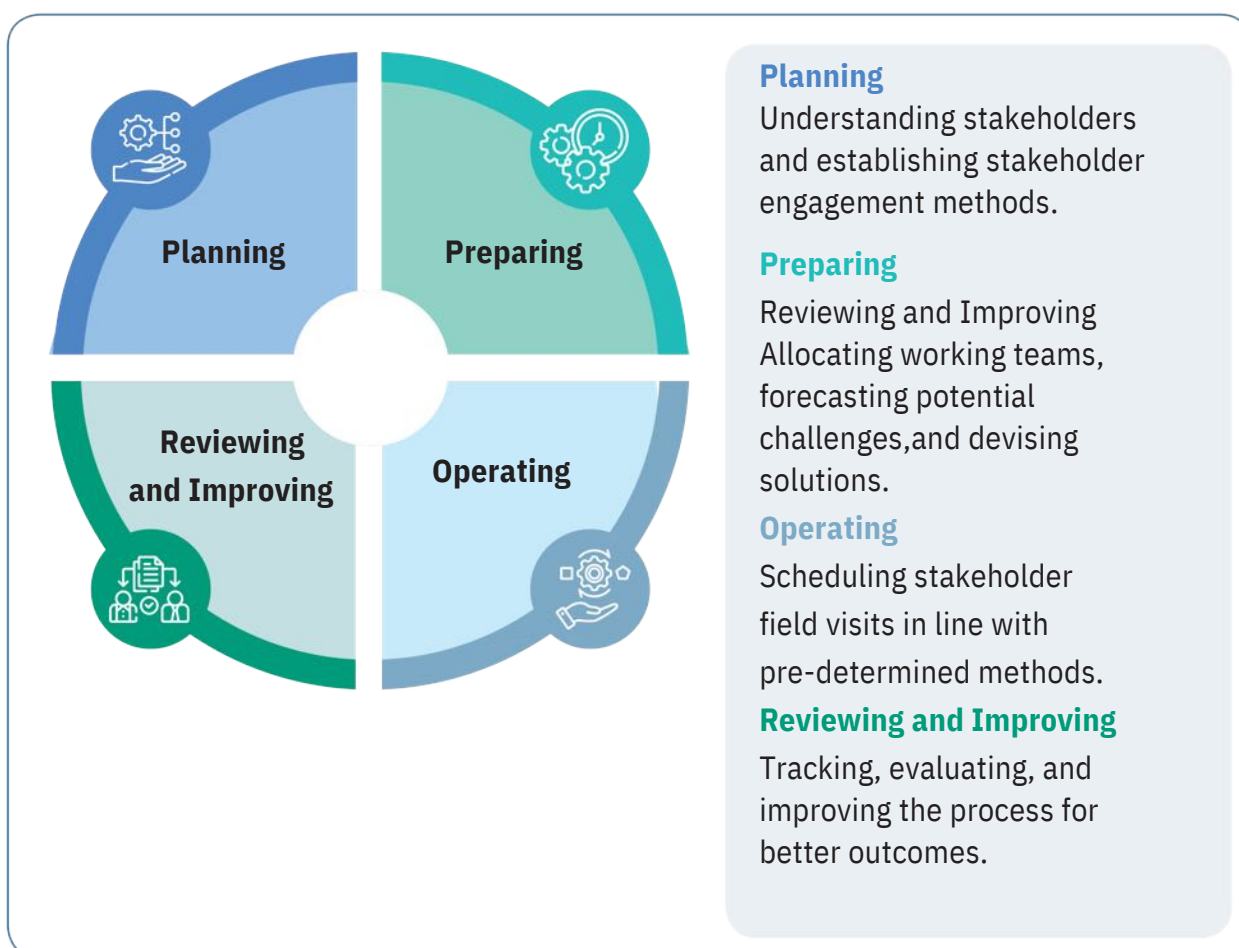


Competitor

THE VOICE OF STAKEHOLDERS

Crop Integration Business has compiled issues and opinions covering the economic, social and environmental dimensions of stakeholders, as well as prioritizing them. Stakeholders on the sustainable development of the significant issues have been applied in formulating ways to meet stakeholders' needs and create consistent ties across the organization

Building engagement with stakeholders in each area is considered the key to building the foundation for a sustainable organization. Stakeholders is a group of people who are positively and negatively affected by their business operations, both inside and outside the organization. CPP listens to stakeholders through a variety of channels that have analyzed those opinions and suggestions to understand expectations and needs before responding in a way that can manage issues that are important to both the business and all stakeholders appropriately.



STAKEHOLDER ENGAGEMENT FRAMEWORK



METHOD OF ISSUES OF ENGAGEMENT INTEREST		MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Employee				
• Intranet, CPTG & CROP Connect Mobile Applications • E-mail and Social Media • Meetings with executives Activities of the Welfare Committee and Safety Committee Satisfaction and engagement surveys Feedback and grievance channel	• Compensation, benefits, and remuneration Career progression Work environment • Occupational health and safety	• Corporate governance • Human rights & labor practices • Leadership & human capital development	• Treat employees with respect for human rights principles • Continuously develop employees' capability • Retain good and talented employees • Develop a human resources management system • Comply with Thai labor standards • Enact the Safety, Occupational Health and Workplace Policy and Guidelines	• Employees receive appropriate training • Leadership training and development • Grievances and whistle-blowing management • Assessments on safety, occupational health and work place environment

METHOD OF ENGAGEMENT	ISSUES OF INTEREST	MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Community and society				
- Sustainability Report - Opinion survey and listening to recommendations - Grievance channel - Dialogues and regular visits - Activities to promote quality livelihoods	- Business impacts on societies, communities, and the environment - Engagement in promoting community - Livelihoods - Fair complaints process - Transparent and efficient communications on performance	- Social impact - Climate change management - Water stewardship - Ecosystem & biodiversity protection	- Control efficiency of the pollution prevention system - Support to increase the quality of life and generate income for the community - Leverage the Company's competitive advantages as tools to create positive impacts and mitigate negative impacts on societies	- Initiatives that create values for society - Climate change management - Water stewardship - Ecosystem and biodiversity protection
STAKEHOLDER GROUP : Consumer/ Customer				
- Consumer center - Feedback and grievance channels - Customer surveys and interviews - Meetings and site visits - Websites, E-Mail and Social Media	- Good product quality and suitable price - Food Safety - Product traceability - Post-sale information about products and services - Personal data privacy	- Health & well-being - Ecosystem & biodiversity protection	- Develop products and services that meet quality and safety standards - Help consumers understand products and services through product labeling, and protect customer data privacy - Develop a product traceability system	- Commitment to quality production processes - Product labels, website, and direct consumer hotline - Raw material sourcing and traceability

METHOD OF ENGAGEMENT	ISSUES OF INTEREST	MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Partner				
• Site visits and joint meetings • Partner development training courses • Supplier capacity-building projects, partnerships, and joint innovation development • Assessments, consultations, and technical • Services • Grievance channel	• Fair business practices • Business Equality • Supplier capacity-building • Human rights and environmental impacts in the supply chain	• Corporate governance • Responsible supply chain management	• Continuously develop supplier partnership projects • Develop criteria for supplier assessment according to the Sustainable Procurement Policy • Communicate with suppliers to help them understand requirements • Treat all suppliers equally and fairly according to business agreements / Business Code of Conduct	• Supplier capacity-building • Communications on the Supplier Code of Conduct • Operations based on the foundations of ethics and transparency
STAKEHOLDER GROUP: Shareholder / Investor				
• Meetings and roadshows • Site visits to operational units • Sustainability Report • Grievance channel	• Corporate Governance • Complete, transparent, and efficient performance disclosures • Enhancing competitiveness and business direction	• Corporate governance	• Operate in compliance with laws, corporate governance principles, objectives, company's regulations, and decisions of the Shareholders • Comply strictly with the creditor's conditions • Listen to the recommendations and reflections from shareholders and investors • Collaborate with relevant agencies to improve operational efficiency	• Good corporate governance • Corporate sustainability management

METHOD OF ENGAGEMENT	ISSUES OF INTEREST	MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Media / Online media				
- Communications through all formats/channels - Media visits to operational units - Press conferences and regular media interviews - Support and engagement in media activities - Grievance channel	- Corporate governance - Complete, transparent, and efficient performance disclosures - Business impacts on societies, communities, and the environment - Social projects	- Corporate governance - Stakeholder engagement	- Engage media to strengthen good relations. Provide factual, useful, and timely information for Official communication to the public. - Monitor news reports to inform future operational approach	- Useful and timely information based on facts - Useful and timely information based on facts - Support and participate in media activities
STAKEHOLDER GROUP: Government Auditor				
- Meetings and visits on various occasions - Collaboration and support for initiatives, project development, and beneficial activities - Grievance channel	- Compliance to relevant laws and regulations - Being a model business for social and environmental responsibility - Complete, transparent, and efficient performance disclosures	Corporate governance	- Monitor and strictly comply with all relevant laws and operating guidelines - Collaborate on and support initiatives, and develop projects and activities that will benefit the country - Communicate and disclose performance in a complete, transparent, and efficient manner, and receive recommendations for improving operational plans	- Good corporate governance - Oversight of compliance across the Group - Partnerships for sustainable development
STAKEHOLDER GROUP: Supplier				
Site visits and joint meetings Supplier development training courses Grievance channel	Transparent and fair procurement contracts Organize capacity-building training courses Human rights and labor practices throughout the supply chain	- Good corporate governance - Oversight of compliance across the Group - Partnerships for Sustainable development	- Fair and transparent contracts - Organize a course to increase the potential for supplier development - Operate in accordance with human rights policy and labor practices throughout the supply chain	- Supplier capacity-building - Communications on the Supplier Code of Conduct - Operations based on the foundations of ethics and transparency

METHOD OF ENGAGEMENT	ISSUES OF INTEREST	MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Competitors				
- Meetings with third party organizations such as the Federation of Thai Industries - News and information obtained through public media and forums - Grievance channel	- Compliance with ethics of competition, laws, and trade regulations - Equitable, transparent and fair competition	Corporate governance	- Adhere to the rules/ethics of competition and establish a monitoring mechanism to ensure that there is no conduct associated with gaining trade secrets from competitors - Prohibit any actions to defame competitors' reputation based on unfounded facts	- Good corporate governance - Anti-corruption
STAKEHOLDER GROUP: Non-profit organization				
- Regular feedback and dialogues - Support collaboration through networks as appropriate - Site visits to operational units - Grievance channel	- Impacts of business operation on societies, communities, and the environment - Social projects - Complete, transparent, and efficient performance disclosures to the public	- Human rights & labor practices - Social impact - Ecosystem & biodiversity protection	- Coordinate work locally to jointly address problems - Listen to recommendations to inform determination of operational approach - Communicate and disclose performance in a complete, transparent, and efficient manner, and receive recommendations for improving operational plans	- Operations that uphold human rights and labor practices - Value-added initiatives for societies - Ecosystem and biodiversity protection
STAKEHOLDER GROUP: Creditors and banks				
- Letters to creditors - E-mail and Social Media - Grievance channel	- Pay in full and on time - Complete, transparent, and efficient performance disclosures	Corporate governance	- Provide accurate and complete financial information - Comply with contract terms - Strictly follow the conditions - Pay off debts on time	- Good corporate governance - Anti-corruption

CASE STUDY : Volunteer Spirit: "We Do Good with Our Hearts" Celebrating His Majesty the King's 72nd Birthday

Crop Integration, rice, transport and service businesses (CPCRT) are joining forces to weave together good deeds and unite volunteers from all business units within the group to perform good deeds and contribute to society under the "We Do Good Deeds with Our Hearts" project in honor of His Majesty King Rama X's 72nd Birthday Anniversary on July 28, 2024. Led by Senior Chairman Dhanin Chearavanont, Mr. Suphakit Chearavanont, Mr. Suphachai Chearavanont, and Mr. Narong Chearavanont, along with executives and employees, they joined government and public volunteers in maintaining canals in the Khlong Prem Prachakon community in Don Mueang, Bangkok.

CPCRT, led by Vice Chairman Mr. Prasit Damrongchitanon, and employees, participated in public service activities under the "We Do Good Deeds with Our Hearts" volunteer project in honor of His Majesty. Executives and employees participated in public service activities, planting trees, cleaning, and improving the landscape, both domestically and internationally, at six locations:

1. Community service and vegetable gardening for the southern airport community, Khlong Prem Prachakon, Don Mueang District, Bangkok.
2. Nakhon Luang Rice Mill, Wang Daeng Rice Mill, Suphan Buri Rice Mill, Chainat Rice Mill, the main seed production line, the Rice and Horticultural Research Center, the organic fertilizer and chemical production line, Farm Pro B2C, Ayutthaya Port, and ICD jointly organized a landscaping and tree planting activity at Prasat Nakhon Luang, Phra Nakhon Si Ayutthaya Province.
3. Farm Pro Zone Center, Upper North-Lower North, organized a landscaping activity at Wat Khondi, Mueang District, Kamphaeng Phet Province.
4. Rice Mill 888 organized a landscaping activity at Wat Mujjalin, Khlong Khlung District, Kamphaeng Phet Province.
5. CPP MYANMAR organized a community service cleaning activity at Shwedagon Pagoda, Myanmar.
6. C.P. SEEDS (VIETNAM) organized a landscaping activity and distributed supplies to underprivileged children and the elderly at Wat Hoa Sen Trang, Vietnam.



CASE STUDY : CP Volunteer Citizens

Royal Volunteer Training 904

Crop Integration, rice, transport and service business, has continuously implemented the Royal Volunteer Training Program to demonstrate loyalty to the monarchy and express gratitude for the benevolence of His Majesty King Bhumibol Adulyadej the Great. Furthermore, the program fosters a sense of volunteerism among CP Group employees, known as CSR SPIRIT volunteers, who participate in meritorious activities, sacrificing their physical and mental energy to benefit society.

The company led executives and volunteer employees to undergo a practical training course on the Sufficiency Economy Philosophy, based on the royal initiative, problem-solving based on social context, self-reliance, and crisis survival at the Volunteer School Training Center 904 (Bang Khen). Volunteers received hats, scarves, and volunteer ID cards, including the "We Do Good Deeds with Our Hearts," presented in front of the portrait of His Majesty the King. The program has continuously provided training to employees within the Charoen Pokphand Group and the Charoen Pokphand Group under the name "CP Volunteer People," for seven generations.



CASE STUDY : The 5th year of the "CP Doing Good for Children" project, sharing opportunities and promoting good hygiene.

Executives from Charoen Pokphand Engineering Co., Ltd. and Charoen Pokphand Produce Co., Ltd. led over 40 volunteer employees in the 5th annual CP Doing Good for Kids event. The event aimed to share opportunities and promote proper hygiene, improve the BBL (Brain Based Learning) area and the petanque court, and help improve the mushroom cultivation facility, which serves as a food source for students at Ban Km. 5 School in Sattahip District, Chonburi Province.

The engineering team also helped improve light bulb covers and install fire extinguishers. The Safety Committee provided advice on fire extinguisher use and inspected basic safety systems around the school. Afterward, lunch, snacks, and milk were provided, sponsored by CPRAM Co., Ltd. and CP-Magic Co., Ltd.

The "CP Doing Good for Kids" activity was a collaborative effort by a group of volunteer employees to share opportunities and promote good hygiene in schools within the company's facilities, in line with the CP Group's "3 Benefits" philosophy.



CASE STUDY : “RUN FOR FISH ... Stronger Outing Trip #6”
Exercise for health and help restore the ecosystem of Koh Samet.

Executives and volunteer employees of the integrated plant business, together with volunteer employees of Charoen Pokphand Engineering Co., Ltd., organized a running event, "RUN FOR FISH," Stronger Outing Trip #6, at the Naval Aviation Operations Center, Sattahip District, Chonburi Province. Part of the proceeds from the running event were used to purchase 2,000 local fish to be released on Koh Samet to restore and conserve the sustainable marine ecosystem.

The running event was part of a volunteer effort by employees of the "Stronger" group, a fully integrated plant business, and Charoen Pokphand Engineering Co., Ltd. The event aimed to encourage employees to exercise and pay more attention to their health. At the same time, it also encouraged them to participate in the restoration and conservation of biodiversity to create a sustainable marine ecosystem on Koh Samet. This aligns with CP Group's sustainability policy, which aims to promote community coexistence with nature to create ecological balance.



CASE STUDY : Forest planting activities to restore upstream forests in honor of Her Majesty Queen Sirikit

Executives of Safe Nature Project, Charoen Pokphand Group, together with Sri Lanna National Park and network partners in Phrao District, Chiang Mai Province, participated in a reforestation activity in the "Watershed Forest Restoration Project in Honor of Her Majesty Queen Sirikit the Queen Mother on the Auspicious Occasion of Her Majesty's 92nd Birthday Anniversary, 12 August 2024" at the Ban Huai Ngu Reforestation Plot, Mae Pang Subdistrict, Phrao District, Chiang Mai Province.

The 10-rai reforestation area was originally farmland for locals. However, after Sri Lanna National Park collaborated with the community to survey land ownership in accordance with the guidelines for resolving land issues in protected forest areas under Section 64 of the National Park Act of 2019, an agreement was reached to return the area to its original state and restore it to a pristine forest. The saplings planted included teak, guava, and Indian gooseberry trees.

This reforestation activity was held in honor of Her Majesty Queen Sirikit the Queen Mother on the auspicious occasion of her 92nd birthday on August 12, 2024. The reforestation aimed to restore degraded areas to natural forest and restore balance to the watershed ecosystem within Sri Lanna National Park. It also aimed to raise awareness of conservation and foster a sense of love and respect for this watershed forest among the local community.



HOME



CropIntegration Business realize the importance of environmental sustainability. The business is operated under the concept of using natural resources for the benefit of the value. Along with taking care of natural resources and the environment through various activities under the Safe Thai Nature Project, Charoen Pokphand Group” with the following objectives:

1. To educate and instill consciousness in the youth and the community to live happily in harmony with nature.
2. To protect, suppress and proactively campaign for areas that are still intact. both at the area level and the overall picture of the country
3. To rehabilitate, reforest and preserve watersheds in damaged areas. by planting forests to suit that area, such as planting softwood trees Original solid wood flooring precious wood, rare wood wood to hold soil, absorb water and wood for animal feed
4. To encourage people to use the forest area as an area to make a living. Have a career path and have a good quality of life



The Strategy and action plan are implemented through supporting activities in various forms, namely educating and cultivating awareness of the people and the environment. Enhancing efficiency, suppressing the authorities, restoring reforestation, preserving watersheds in damaged areas, and promoting people who use forested areas as planting land to have a better career and quality of life. To achieve the vision of being an organization that creates a positive contribution to the agricultural society through product and management innovations that improve the progress and security of food crops and energy crops to a global society on the basis of sustainable environment conservation under the framework of vision, mission and safety policy. Occupational Health, Environment, Energy and Efficiency, the following environmental sustainability goals consisting of



Greenhouse
Gas Emissions



Circular economy
system



Maintenance of
water resources



Protection of
ecosystems
and biodiversity



Responsible Supply
Chain Management



CLIMATE RESILIENCE

GRI 103-1, 103-2, 103-3, 302-1, 302-3, 305-1, 305-2,
305-4, 306-2, 307-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business committed to reducing greenhouse gas emissions and continuous monitoring measures by managing climate change and participating in reducing environmental impacts on a wide scale, adhering to relevant international principles and integrating them into business operations principles that emphasize the impacts of climate change.

Net Zero

Goal 2030

Reduce GHG emissions per revenues unit by 25% compared to the base year 2020.

SUPPORTING THE SDGS



SDG 7

Affordable and Clean Energy

7.2

Increase substantially the supply of renewable energy in the global energy mix

7.3

Double the global rate of improvement in energy efficiency



SDG 11

Sustainable Cities and Communities

11.6

Reduce the adverse per capita environmental impact of cities



SDG 12

Responsible Consumption and Production

12.2

Achieve the sustainable management and efficient use of natural resources

12.3

Halve per capita global food waste

12.5

Substantially reduce waste generation



SDG 13 Climate Action

13.3

Improve education, awareness-raising and human and institutional capacity on climate change

KEY OPERATING RESULTS IN 2024



Reduce Greenhouse gas emissions per revenue compared to the base year 2020

89.18%



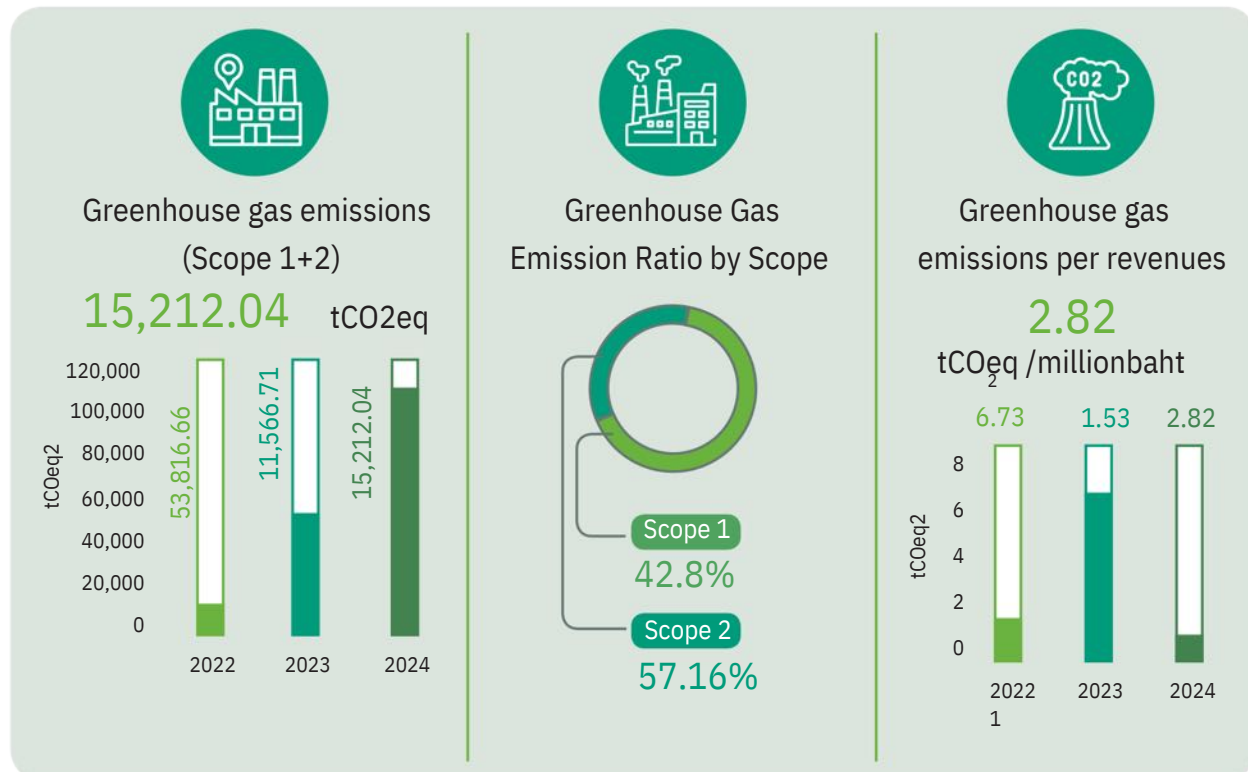
Greenhouse gas emissions
519,471.45 tCO₂eq



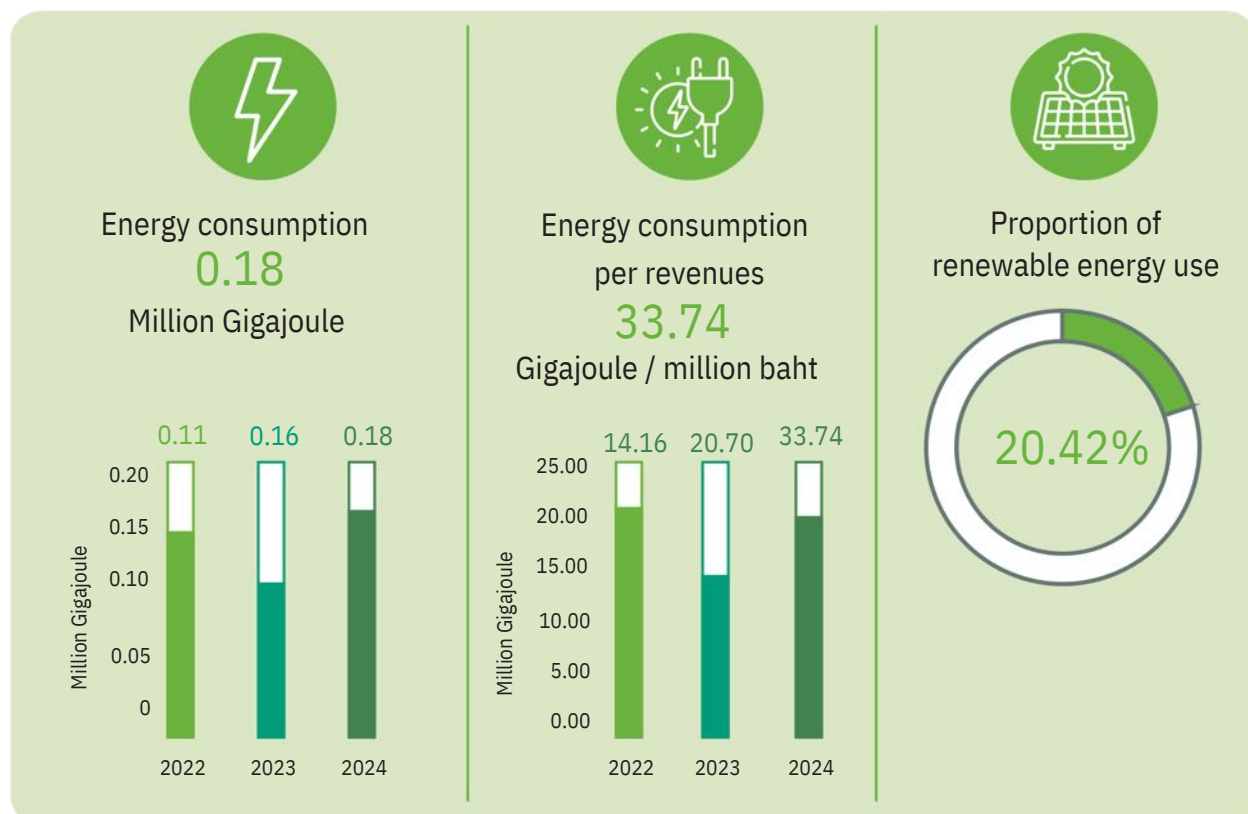
Proportion of renewable energy
20.42%

GREENHOUSE GAS EMISSION

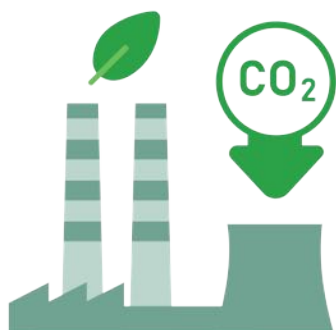
2023 PERFORMANCE



ENERGY MANAGEMENT INFORMATION

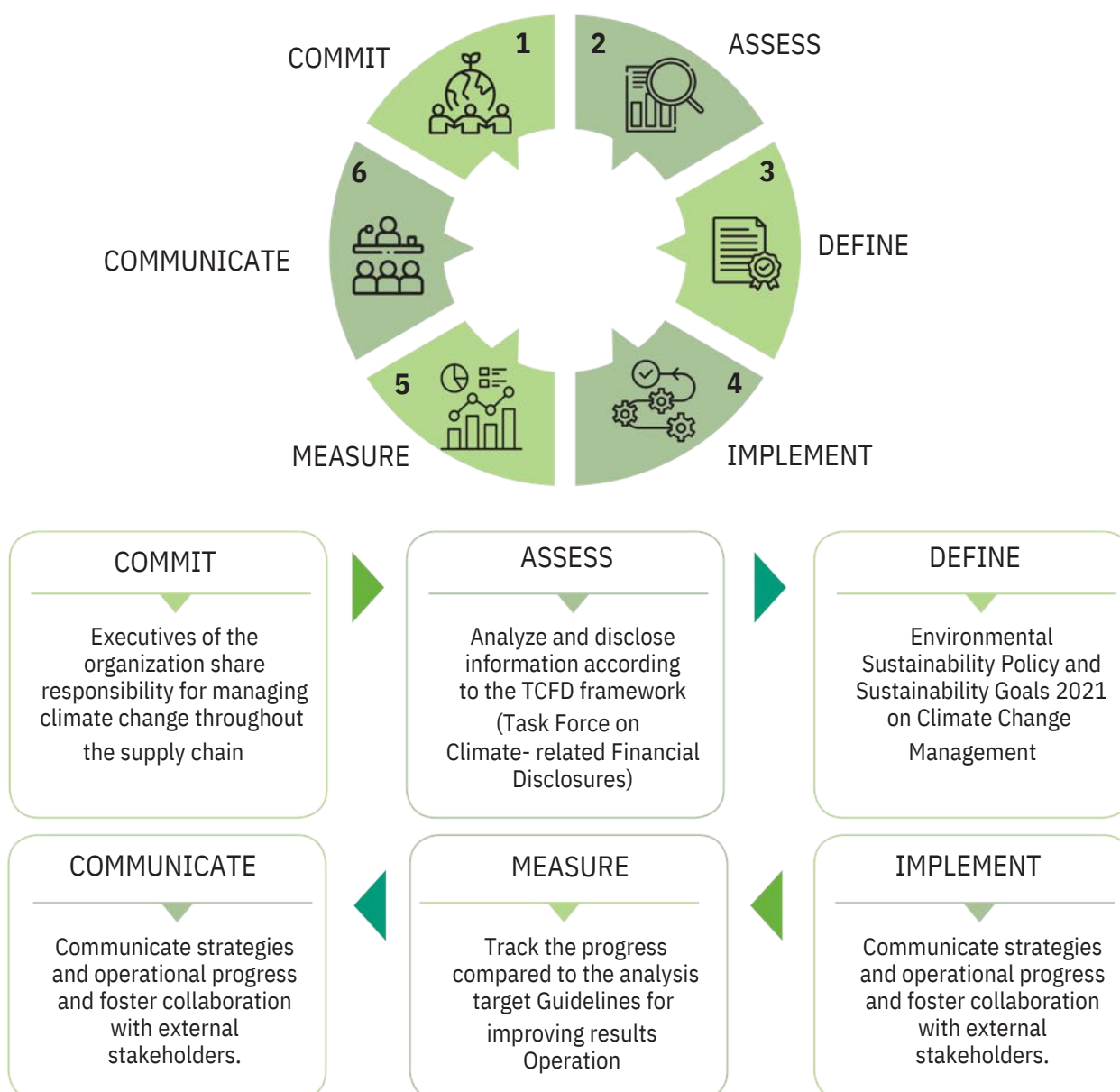


ASSESSMENT OF CLIMATE RISKS AND OPPORTUNITIES BASED ON THE TCFD FRAMEWORK



Crop Integration Business sets goals for climate change management throughout the supply chain, covering energy efficiency, renewable energy use, waste management, reduction of plastic packaging use. It assesses climate risks and opportunities and in the future will conduct a Scenario Analysis based on the guidelines of the Task Force on Climate-Related Financial Disclosure (TCFD), organizing work that covers all aspects such as physical, technological, marketing, policy and regulatory risks, and corporate reputation.

CLIMATE CHANGE MANAGEMENT OPERATIONS.



GHG REDUCTION TARGETS

Business	Emission volume (equivalent to tons of carbon dioxide)	Emission volume (5% increase every year)	Emission volume (Kg.CO2 equivalent) (Captured at 25% of total discharge volume)	Tree planting goals (trees) (Self Assessment) (1 tree can store 9.5 kg of carbon)	Tree planting goals (trees) (LESS/T-VER) (1 tree can store 100 kg of carbon)
CPP (Thailand)	4,069.81	6,313.60	1,578.403	166,147 (150,000)	15,784
Seed Fertilizer Promotion	2,586.70	4,012.80	1,003,205	105,600 (100,000)	10,032
CPP (Vietnam)	235.38	555.10	138,753	14,606 (20,000)	1,387
CPP (Myanmar)	235.38	555.1	138,753	138,753	1,387
CPP (India)	3,465.61	5,376.20	1,344,075	141,481 (150,000)	13,440
CPP (Total)	10,357.50	16,067.80	4,016,970	422,839 (420,000)	40,169
CPA / CPS	7,659.05	11,881.71	2,970,427	312,677 (310,000)	29,704



CASE STUDY GREEN HOME Project

Green Home Project : Saeng Phan Pilot Area, the first T-VER (Forestry Sector) prototype of a fully integrated plant business (CPCRT) certified as a voluntary greenhouse gas reduction program (T-VER) according to Thailand standards by a business organization aiming to become a carbon neutral organization by 2030 and aiming for net zero greenhouse gas emissions by 2050.

Charoen Pokphand Produce Co., Ltd., Crop Integration, Rice, Transport and services business, is an upstream business of the Charoen Pokphand Group. It is committed to operating a fully integrated agricultural business under the philosophy of "3 Benefits for Sustainability" for farmers, the nation, and the organization, along with the continuous conservation of natural resources and the environment. This is in line with Charoen Pokphand Group's policy of prioritizing sustainable operations based on social and environmental responsibility. It places importance on reducing the potential environmental impacts of its business operations, aiming to become a carbon-neutral organization by 2030 and achieving a policy of net-zero greenhouse gas emissions by 2050.

The company is promoting policies to reduce risks arising from climate variability that could impact business operations. This includes research and development of plant varieties that increase yields and adapt to climate change. This includes developing technologies and adapting crop production processes to suit the needs of the company, starting with reducing plowing, cultivating, maintaining, and reducing fertilizer use, implementing safe and proper plant protection, and post-harvest management, avoiding the burning of corn stubble. Furthermore, the company has adjusted its production processes to minimize environmental impacts and maximize efficiency. Furthermore, the company has planted trees within its corporate premises to increase green space and increase carbon dioxide absorption from the atmosphere under the "Home Forest" project, which began in 2020 in potential areas within the company, including research stations, production farms, factories, and partner networks. Both in Thailand and abroad, including Myanmar, Vietnam, and India, have announced the goal of Carbon Neutral by 2030 and the policy of Net Zero greenhouse gas emissions by 2050 of the business on August 11, 2022 at the organic fertilizer factory, Kham Phran Subdistrict, Wang Muang District, Saraburi Province, and have continuously driven the project of planting forests in the home.



CASE STUDY Green Home (Thailand)

Executives and staff of Saeng Phan Research Station, Saeng Phan-Kham Phran Farm, planted trees in the tree planting activity in the home forest planting project at the Saeng Phan Research Station's forest planting plot, which is part of the drive to become a carbon neutral organization by 2030 in accordance with the policy of Charoen Pokphand Group.

Crop Integration Business has started tree planting activities in the home forest planting project since 2020 in the company's areas, such as the Saeng Phan Research Station in Saraburi Province, the Sawankhalok Research Station in Sukhothai Province, with a total of more than 3,600 newly planted trees planted and more than 20,000 original forest trees surveyed and counted.

The trees planted include 500 bamboo trees of 12 species, such as Sang Mun bamboo, Fangyan bamboo, Lai Liang bamboo, Angel bamboo, etc., because bamboo is a fast-growing plant, drought-resistant, suitable for the local environment, and can store carbon well, as well as being useful.

For the trees that were planted, there were 500 bamboo trees of 12 species, such as Sang Mun bamboo, Fangyan bamboo, Lai Liang bamboo, Angel bamboo, etc., because bamboo is a plant that grows fast, is drought-resistant, is suitable for the environment in the area, and can store carbon well. It is also useful.



GREEN HOME THAILAND.

Area	Original wood (tree)	2020 (tree)	2021 (tree)	2022 (tree)	2023 (tree)	2024 (tree)	Total (tree)
1.CPP	50,000	2,208	2,567	2,067	6,408	5,800	69,050
2.CPA & CPS	83,353	260	280	381	-	1,000	85,274
3.CPI & ขนส่งและ บริการ	224	-	-	-	300	700	1,224

CASE STUDY GREEN HOME OVERSEA

After receiving the sustainability policy and perennial tree seedlings from the Green Home Reforestation Project in 2020, CPP Myat Min Agro Co., Ltd., C.P.Seeds Vietnam Co., Ltd. and C.P.Seeds (India) Pvt., Ltd. have planned to drive the home reforestation project by planting perennial trees in the factory area and various farms, and have announced their intention to become a Carbon Neutral organization by 2030.

Green Home : CPP INDIA

Executives and volunteer staff of CP Seeds (India) Pvt. Ltd. planted 100 mango trees in the “Green Home : CPP INDIA” at the Vijayawada Seed Conditioning Plant as part of the drive towards becoming a carbon neutral organization by 2030 in line with the sustainability policy of Charoen Pokphand Group.

CP Seeds (India) Pvt. Ltd. has been prioritizing and participating in tree planting activities in the Home Forestry Project to increase green spaces in the area around the organization since 2020. Currently, a total of 2,400 new trees have been planted.



Green Home : CPP MYANMAR

Executives and volunteer staff of CPP Myat Min Agro Co., Ltd. planted 2,200 Acacia trees in the “Green Home : CPP MYANMAR” next to the water reservoir at Bawni Farm as part of the drive towards becoming a carbon neutral organization by 2030, in line with the sustainability policy of Charoen Pokphand Group.

CPP Myat Min Agro Co., Ltd. has been driving tree planting activities in the In-Home Forestry Project to increase green spaces in the area around the organization since 2020. Currently, a total of 6,820 new trees have been planted.

GREEN HOME OVERSEAS

Area	Goal (tree)	Original wood	2020 (tree)	2021 (tree)	2022 (tree)	2023 (tree)	2024 (tree)	Total (tree)
India	2,500	429	23	346	360	1,030	212	2,400
Myanmar	-	513	1,108	1,870	929	2,200	200	6,820
Vietnam	5,655	-	1,700	1,000	1,000	1,000	-	4,700

CPCRT organized a workshop on ecological reforestation, tree database creation, carbon sequestration certification (LESS), and reforestation to enhance carbon sequestration. Reforestation to enhance carbon sequestration: Thailand Voluntary Emission Reduction Program (T-VER) in the area of "Home Reforestation Project: Saeng Phan Pilot Area", Zone 1 Organic Fertilizer Factory, and Zone 4 Saeng Phan Research Station. The goal is to replenish forests to enhance carbon sequestration by 400 trees, including Golden Teak, Makha, Yangna, Phruek, and Hemp. In this workshop, the project working group will use the knowledge gained to plan planting. And take care of the forests in the local area to achieve the goal of pushing for carbon neutrality by 2030 and the Net Zero greenhouse gas emissions policy by 2050 of Charoen Pokphand Group. For 2024, received a certificate of honor for the Low Emission Support Scheme (LESS) from the Greenhouse Gas Management Organization (Public Organization) or TGO in 4 areas: Soi 12 Seed Conditioning Factory, Soi 19 Seed Conditioning Factory, Chainat Seed Conditioning Factory and a rubber factory in Loei Province. It can store a total of 673 tons of greenhouse gases or equivalent.



A large graphic on the left side of the page. It features a central image of the Earth (Globe) with green foliage growing on its continents. This globe is surrounded by a circular green arrow that forms a loop, with three arrows pointing in a clockwise direction. To the right of the globe, there is a green circular icon containing a white symbol of a gear with a leaf inside, and a cloud above it. A green vine with leaves is also visible on the right side of the globe. The background of the graphic is a bright green field with a cloudy sky.

CIRCULAR ECONOMY

GRI 103-1, 103-2, 103-3, 306-1, 306-2,
306-3, 306-4, 306-5

OPPORTUNITIES AND CHALLENGES

Crop Integration Business committed to managing resources carefully so that nothing is discarded. Products and materials are kept for reuse, remanufactured and recycled to maximize resource usage and create added value for waste. Waste is not managed by landfill and new sustainable product design approaches are developed, which is a goal for all companies in the business group to pursue. 1. Reduce the amount of food waste to zero. (Zero Food Waste)

2. No general waste disposal by landfill. (Zero Waste to Landfill)
3. All used plastic packaging can be recycled, reusable, reusable or biodegradable.



Goal 2030

Zero food waste and waste going to landfill. All plastic packaging used can be recycled, reused or biodegradable

SUPPORTING THE SDGs



SDG 11

Sustainable Cities and Communities.

11.6

Reduce the adverse per capita environmental impact of cities.



SDG 12

Responsible Consumption and Production.

12.2

Achieve the sustainable management and efficient use of natural Resources.

12.3

Halve per capita global food waste.

12.5

Substantially reduce waste generation.

KEY PERFORMANCE IN 2024



Announcement of the circular economy policy food waste reduction policy and food waste sustainable packaging policy and waste management policy.



Modify waste data reporting according to GRI 306: WASTE (2020).



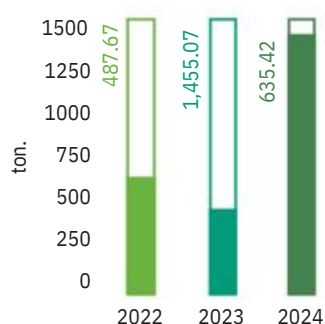
Create a baseline on the loss in the production supply chain. (Food Loss)

WASTE MANAGEMENT MANAGEMENT APPROACH

Crop Integration Business committed to managing industrial waste and waste within the factory by using the international standard system ISO 14001:2015 to manage waste within the organization systematically and correctly according to the requirements and laws. It also operates according to the electronic authorization system (management of unused materials) consisting of SK.1, SK.2 and SK.3 continuously, resulting in the organization having no environmental complaints from surrounding communities.

2023 PERFORMANCE

Total waste volume 635.42 tons



Waste volume by type



General waste **98.16%**
623.71 tons



Hazardous waste **1.84 %**
11.71 tons



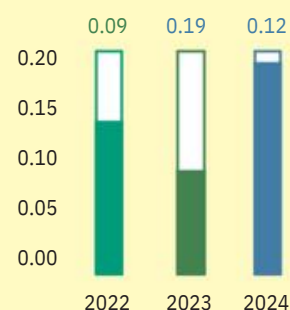
- *Note 1. Waste volume data does not include Sawankhalok Research, Salaengphan Research, CPS, CPA and total revenue CPP, CPS, CPA All waste is processed Offsite Waste management process is hired waste disposal contractors that are authorized according to the regulations in each country, namely: Akki Prakarn Co., Ltd. (Public Company Limited), Better World Green Co., Ltd. (Public Company Limited), Obkij Plastic Co., Ltd., and abroad: Golden Dowa Eco-system Myanmar Co., LTD, M/S. Sri Chandra Sekhara Enterprises, Siam City cement (Vietnam) Limited (SCC-VN)

VOLUME OF WASTE PER INCOME.



0.12*
Ton/Million Baht

*Note:Waste volume Calculate only CPP, Revenue Calculate CPP, CPS, CPA.



CASE STUDY : WASTE MANAGEMENT IN FACTORIES (CPP)

Charoen Pokphand Produce Co., Ltd. set a policy for waste management throughout the system based on the principles of the circular economy by reducing the amount of waste from the production process and reusing it as much as possible. It also supports the creation of projects and activities to provide knowledge on waste management processes, such as waste separation, reuse, and processing of agricultural raw materials to make employees aware of the value and maximum use of resources.

PROJECTS AND ACTIVITIES TO PROVIDE KNOWLEDGE ABOUT WASTE MANAGEMENT.

Projects and activities	Seed Processing Plant Soi 19, 12	Chemical Fertilizer Packing and Mixing Plant	Organic Fertilizer Plant	Rice seed conditioning plant, Chainat	Fertilizer and seed mixing and packaging plant, Myanmar	Seed Conditioning Plant, Vietnam
Project to promote farmers to produce cattle feed from stubble	•					
Corn cob fuel project	•				•	
Car wash water reuse project		•				
Zero waste project training activities	•					
Campaign for waste separation	•					



Project to promote farmers to produce cattle feed from stubble

CASE STUDY : WASTE MANAGEMENT IN FACTORIES (CPA &CPS)

Charoen Pokphand Agriculture Co., Ltd. set a policy for waste management throughout the system based on the principles of the circular economy by reducing the amount of waste from the production process and reusing it as much as possible. It also supports the creation of projects and activities to provide knowledge on waste management processes, such as waste separation, reuse, and processing of agricultural raw materials to make employees aware of the value and maximum use of resources.

PROJECTS AND ACTIVITIES TO PROVIDE KNOWLEDGE ABOUT WASTE MANAGEMENT.

Projects and activities	Rubber factory, Loei	Rice mill, Chainat	Head Office	Fruit juice steaming plant
BIO Filter System.	•			
Wastewater treatment system.	•			
Organize separate bins.	•	•	•	•
"Change waste into usefulness" project.			•	
Old calendar replacement project It is a Braille book.			•	
Project to deliver hard plastic cups to the disabled.			•	
Project to turn leftovers into lunch money for children			•	



WATER STEWARDSHIP

| GRI 103-1, 103-2, 103-3, 303-1, 303-3

OPPORTUNITIES AND CHALLENGES

Half of the world's people will suffer from water scarcity if the use of water continues to flow. Moreover, the World Economic Council argues that water is one of the most important environmental issues in the 2017. Maintaining the stability of natural resources, especially clean water, is a major concern for the private sector. Crop Integration Business Group give importance to and pay attention to water resource management as a fundamental factor for doing business, as well as supporting the Sustainable Development Goals 6



SUPPORTING THE SDGS



SDG 6

Clean Water and Sanitation
Improved water quality through safe treatment and rec

- 6.3** Increased water use efficiency and ensure sustainable supply
- 6.4** Implement integrated water resources management
- 6.5** Support the participation of local community in improving water and sanitation management



SDG 12

Responsible Consumption and Production
Achieve the sustainable management and efficient use of natural resources

- 12.2** Achieve the sustainable management and efficient use of natural resources



SDG 14

- 14.1** **Life Below Water**
Reduced marine pollution

KEY OPERATING RESULTS IN 2024



Reduction of water per revenues of the amount of water used per revenue of the base year 2020

98.25 %



Water consumption

0.97 M M3



Proportion of water being used

0.002%



Amount of water used per Revenue

179.80 M3 / M baht

WATER CONSERVATION



MANAGEMENT APPROACH

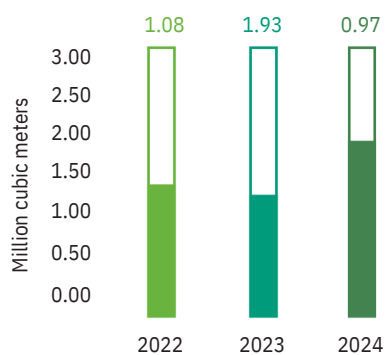
Crop Integration Business operates on water stewardship under the UN Global Compact and Water Stewardship policy, and the Water Stewardship Framework. These serve as guidelines, facilitating the business to achieve its strategic goal to assess water scarcity risk.

WATER STEWARDSHIP MANAGEMENT FRAMEWORK

2023 PERFORMANCE

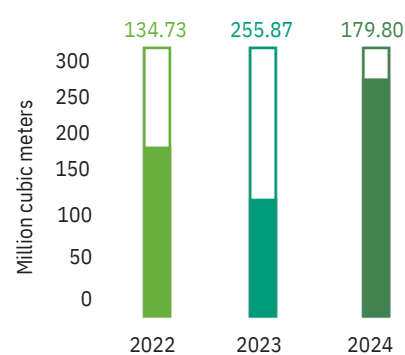
Water consumption

0.97 M M3

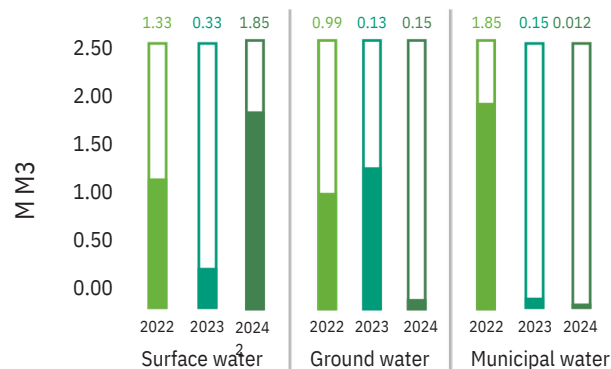


Amount of water used per revenue

179.80 M M3

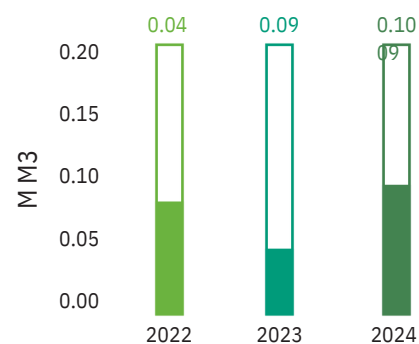


Separate by water source



Water discharge

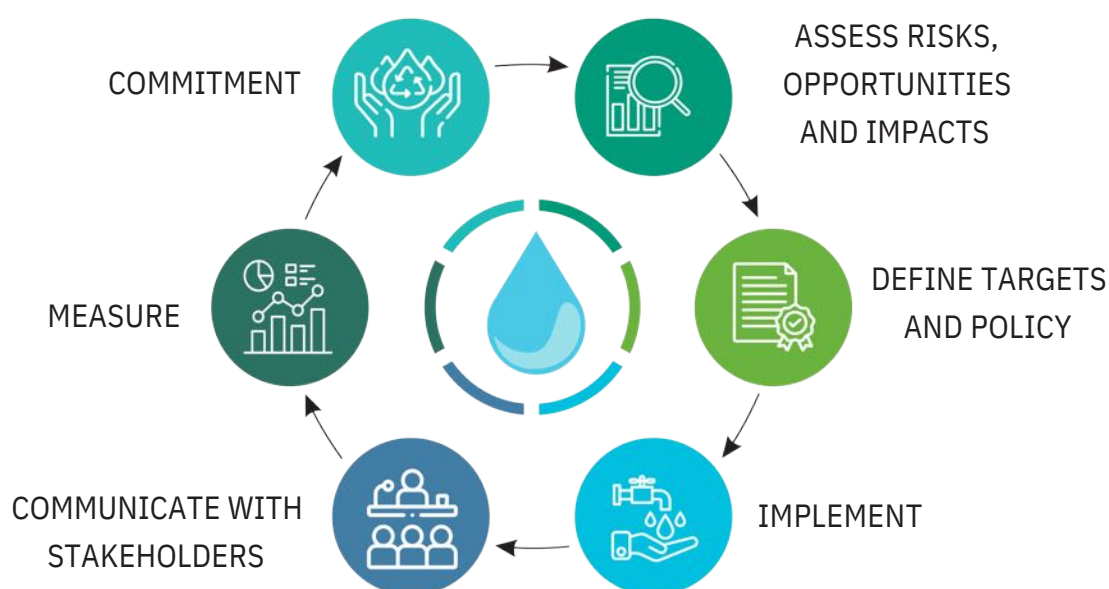
0.10 M M3



MANAGEMENT APPROACH

Water is a natural resource that is essential for all life and is also important for business operations. Currently, water scarcity has become an increasingly serious issue around the world. Charoen Pokphand Group is aware of this problem and risk, so it has established guidelines to ensure that business operations can maintain a balance between water usage and the water needs of communities and nature as follows:

WATER STEWARDSHIP MANAGEMENT FRAMEWORK



COMMITMENT

Corporate executives share responsibility and promote water resource conservation throughout the supply chain.



ASSESS RISKS, OPPORTUNITIES AND IMPACTS

Integrated water risk assessment covering physical, quantity, quality, regulatory, regulatory and corporate image risks.

DEFINE TARGETS AND POLICY

Environmental Sustainability Policy and 2020 Sustainability Goals for Water Resources Conservation



IMPLEMENT

Implement water stewardship throughout the supply chain.



COMMUNICATE WITH STAKEHOLDERS

Communicate strategy and progress, as well as foster collaboration with external stakeholders.

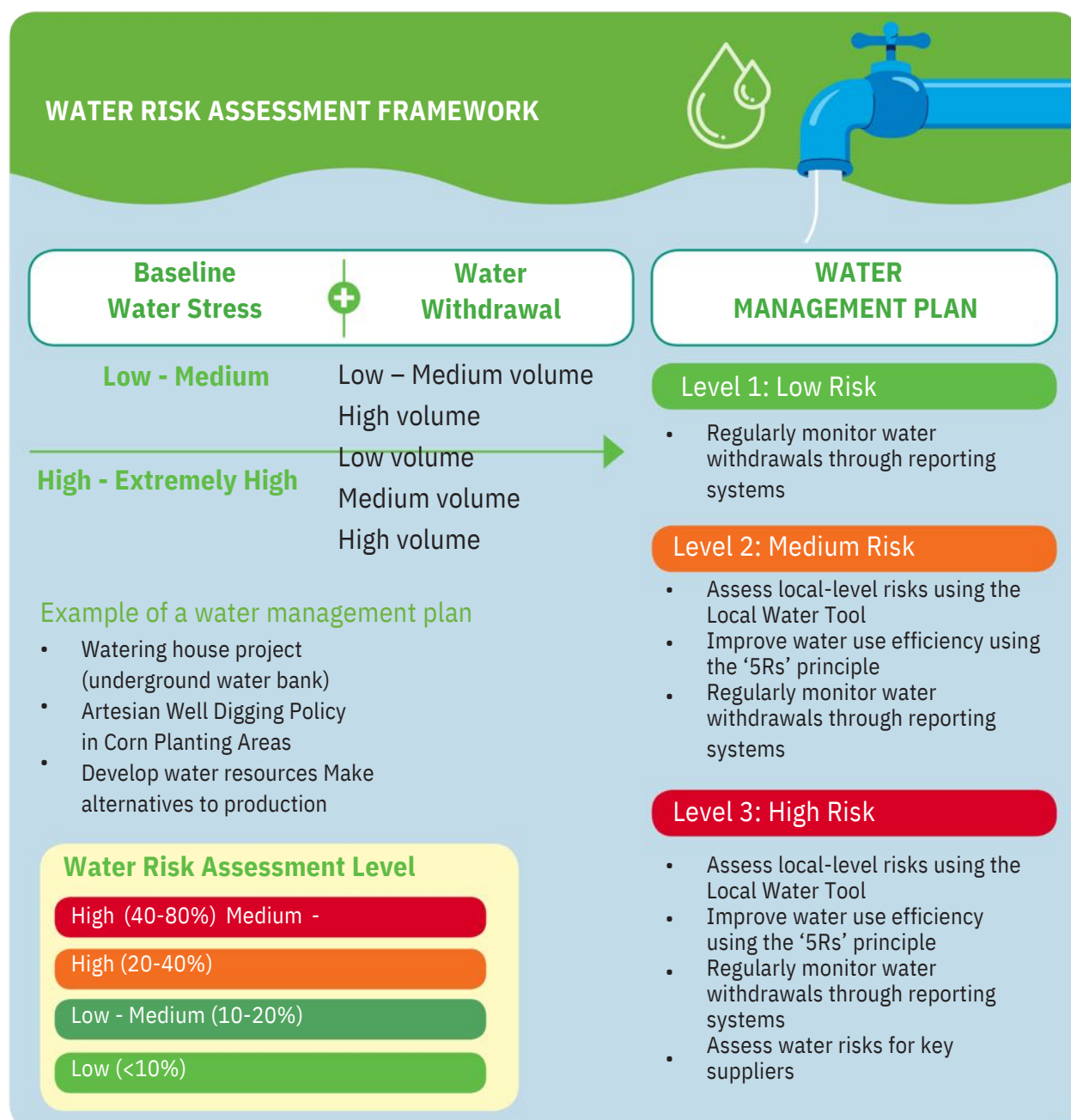


MEASURE

Monitor and analyze progress against targets to identify operational gaps to be improved.

ENABLING A GOOD WATER MANAGEMENT PLAN THROUGHOUT THE SUPPLY CHAIN.

Crop Integration Business has developed a water resources risk assessment framework that is applied across all of its units and Business Groups. The assessment evaluates risk factors in various dimensions, including the volume of water withdrawal by organization, and baseline water stress levels. Our business has adopted the internationally-recognized Aqueduct Water Risk Atlas tool of the World Resources Institute (WRI) for use as our preferred assessment tool. The results of the assessment are ranked according to three levels of water risk and are then used to develop appropriate management plans.



CASE STUDY : “Living Weir ... Pan River, the River of Life”

Executives of the Safe Nature Project and Executives of the Public Sector Sustainability and Public Affairs Department of Charoen Pokphand Group, in collaboration with Maejo University, local network partners, educational institutions, and the Ban Mae Pan-Sankiang community, conducted the activity “Building a Living Weir... Lam Nam Pan, the River of Life.” This activity aimed to slow down and retain water in the Mae Pan River for local communities to utilize, restore natural resources and ecosystems, reduce the risk of forest fires and haze problems, and raise awareness of the value of conserving and restoring natural resources among the new generation.



Safe Nature Project, in collaboration with Maejo University, has supported the development of agricultural water sources and a water distribution system for the Mae Pan-Sankiang community since 2012. This initiative addresses the community's water shortage, which previously allowed only one crop per year. The project transformed the community into a year-round water resource for agriculture, enabling them to diversify their agricultural activities, including fruit farming (longan, mango, and durian), egg-laying chicken farming, pig farming, and a community product processing facility (pork meat). This initiative generates a stable income for the community. Furthermore, the project supported the establishment of the "Mae Pan-Sankiang Safe Natural Agriculture Community Enterprise Group" to expand into businesses that fit the community's way of life. Currently, the group has 164 member households.





ECOSYSTEM & BIODIVERSITY PROTECTION

| GRI102-9,103-1,103-2,103-3, 304-2

OPPORTUNITIES AND CHALLENGES

Crop Integration Business aware of the problems that arise and committed to taking part in reducing impacts and protecting the integrity of biodiversity and ecosystems through the involvement of businesses and industry in Take care and minimize these effects. Our organization continues to assess the risks of global biodiversity by striving to conserve and utilize marine resources responsibly, protect, restore and support the use of terrestrial ecosystems, forests and natural diversity.



Goal 2023 The number of areas that have been undertaken to protect and restore terrestrial ecosystems.

SUPPORTING THE SDGS



SDG 6
Clean Water and Sanitation
Protect and restore water-related ecosystems

6.6



SDG 14
Life Below Water

Reduced marine pollution

14.2

Sustainable fishing

14.4

Conserve coastal and marine area

14.5



SDG 15
Life on Land

Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services

15.1

Halt deforestation, restore degraded forests

15.2

Ensure the conservation of mountain ecosystem

15.4

Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity

15.5

KEY OPERATING RESULTS IN 2024



Number of ecosystem and biodiversity protection projects
1 Project
(Safe Thai Nature Project)



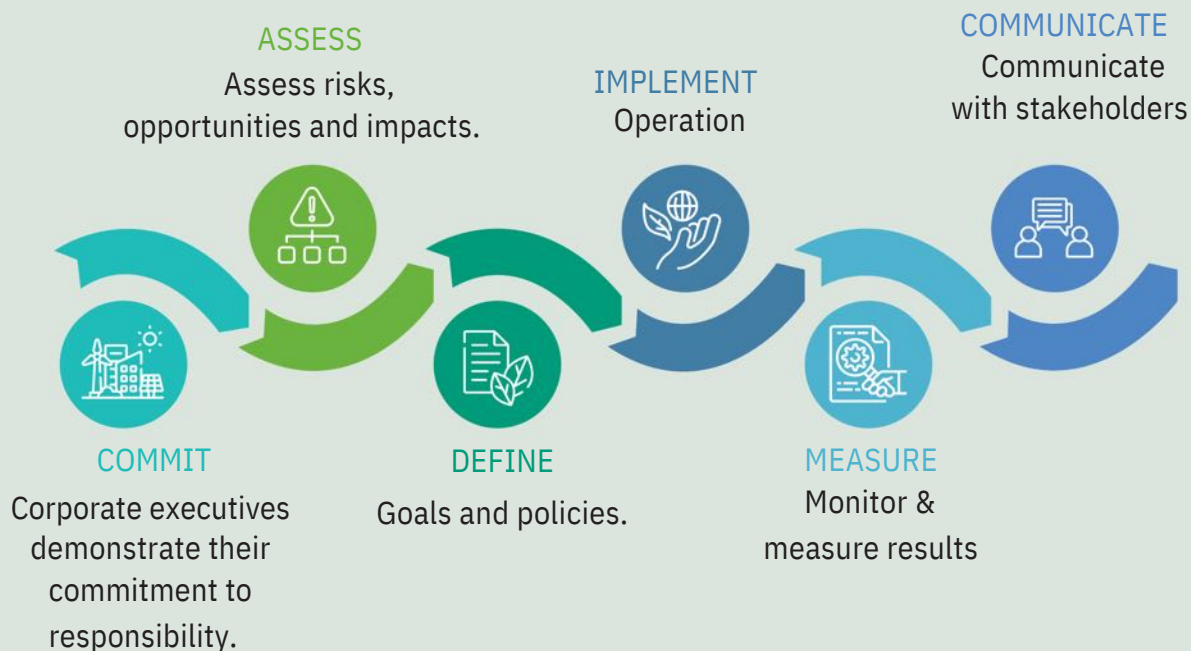
Environmental investment
Through the Safe Nature Project
6 Million baht

MANAGEMENT APPROACH

Crop Integration Business believes that protection of ecosystems and biodiversity based on the equitable use of resources is the responsibility of all sectors of society, therefore, guidelines in line with the Rio Declaration on Environment and Development and the Convention on Biological Diversity are therefore formulated :

1. Participate responsibly to protect ecosystems and biodiversity in compliance with laws, regulations and international standards and set long-term goals to guide business operations as well as to cooperate with organizations working in conservation.
2. Reduce impacts on ecosystems and biodiversity along the supply chain by developing supply chain management practices. Responsible for preventing deforestation and ensuring guidelines are implemented effectively.
3. Ecosystem and biodiversity risk assessments are carried out to inform decision-making and effective risk management.
4. To promote awareness and understanding of ecosystem protection and biodiversity to employees, partners and key stakeholders by organizing training knowledge sharing or organizing campaign activities.
5. Disseminate information and performance on the protection of ecosystems and biodiversity through Sustainability Reports. Charoen Pokphand Group to report the progress status of current operations against the targets identified to stakeholders.
6. Develop cooperation with government agencies, non-profit organizations (NGOs), educational institutions, community and other agencies to jointly solve ecosystem and biodiversity

ECOSYSTEM AND BIODIVERSITY PROTECTION FRAMEWORK



COMMIT

Commitment to share responsibility for protecting ecosystems and biodiversity throughout the supply chain.

DEFINE

Goal and environmental sustainability policy Charoen Pokphand 2021 on protecting the ecosystem and natural diversity.

MEASURE

Track progress against goals, analyze and improve performance.

ASSESS

Evaluate the impact of business operations on relying on nature according to the Natural Capital Protocol.

IMPLEMENT

Take action to protect ecosystems and biodiversity throughout the supply chain.

COMMUNICATE

Communicate strategies, progress and build partnerships with external stakeholders.

CASE STUDY : Protect the Pasak River Basin at the Pasak Jolasid Dam

Crop Integration, Rice, Transport and service business is moving forward with the "Raksa Pa Sak River Basin # 4" project, releasing native fish to restore balance to the Pa Sak Cholasit Dam and conserving the natural water resources of the Pa Sak River at the Pa Sak Cholasit Dam in Nong Bua Subdistrict, Phatthana Nikhom District, Lopburi Province.

Mr. Kittipop Kongphanitham, District Chief and Head of the Phatthana Nikhom Administrative Management Group, presided over the ceremony. Participating government agencies include the Water Allocation and Irrigation System Improvement Division of the Pa Sak Cholasit Dam, the Lopburi Freshwater Fisheries Research and Development Center, and the Kham Phran Subdistrict Municipality.

The "Raksa Pa Sak River Basin Year 4" project released native fish, including the yellow catfish, a native fish whose numbers have declined significantly in the Pa Sak River, along with 60,000 silver barb and gold barb. This project aims to restore the ecological balance of the Pa Sak River and protect and conserve natural resources and the environment, which are crucial to the livelihoods of communities from upstream to downstream. A booth selling Chat brand omelet rice was also available at the event.



CASE STUDY : Providing food and drinking water supplies to support the mission to solve the smog problem in Phrao District, Chiang Mai Province

Safe Thai Nature project administrators, in collaboration with Sri Lanna National Park, provided food and drinking water to the subdistrict heads, village heads, and community leaders' associations in Phrao District to boost morale and support the mission to monitor and address forest fire haze and PM 2.5 levels in Phrao District.

Safe Thai Nature project administrators supported the mission to monitor and address forest fire haze in Phrao District. This integrated and comprehensive effort has been implemented between Sri Lanna National Park and the Phrao District community and network since early December 2023. The project includes field visits to understand the situation, forest fire suppression drills and planning, and ongoing cooperation in monitoring and surveillance.



CASE STUDY : Participate in reforestation along the Western Forest Complex using the Stepping Stone method. Restore the ecological balance between protected forests in Kamphaeng Phet.

Executives of Safe Thai Nature Project and volunteers from the Integrated Plant Business, along with the Seub Nakhasathien Foundation, representatives from the Khao Sanam Phriang Wildlife Sanctuary, Khlong Wang Chao National Park, schools, and local community networks—over 100 people—planted 400 bamboo saplings in the project members' lands at Ban Rai Phichit, Kosamphi Nakhon District, Kamphaeng Phet Province. This initiative aims to reconnect the Khao Sanam Phriang Wildlife Sanctuary and Khlong Wang Chao National Park with the ecosystem.



The area between the two conservation forests is a buffer zone of the Western Forest Complex, rich in plant and wildlife species. However, it is currently separated by agricultural land and Rural Highway 1116. In 2020, the Safe Nature Project, in collaboration with the Seub Nakhasathien Foundation, supported the restoration of the ecosystem in this area through the planting of commercial trees (bamboo forests) using a stepping stone method instead of monoculture crops. This method aims to provide the community with sustainable income while also restoring balance and diversifying the local ecosystem.

Currently, the community has planted bamboo along five stepping stones, totaling 18,787 trees. An additional 1,800 trees will be planted in 2024. Recent field patrols to collect scientific data revealed wildlife such as wild boars, barbet-legged civets, foxes, junglefowl, and various bird species utilizing the area and surrounding community forests.





RESPONSIBLE SUPPLY CHAIN MANAGEMENT

| GRI 102-9, 103-1, 103-2, 103-3, 308-1, 308-2, 414-1, 414-2

OPPORTUNITIES AND CHALLENGES

Crop Integration Business realizes that the strength of the supply chain depends on the least strong link. The company is therefore a part in strengthening business partners throughout the supply chain to achieve excellent practices in all dimensions, including the economy, society, and the environment. This is considered a challenge to drive positive change and is committed to developing the potential of partners, thinking together, and creating together to move towards sustainability. In addition, the company also aims to develop sustainably in every country in which it operates or invests, in accordance with the CP Group's 3-Benefit Philosophy.



Goal 2030 Business groups with high-risk raw material traceability processes Including sustainability audits with high-risk trading partners.

SUPPORTING THE SDGS



SDG 4

Quality Education

Increase the number of youth and adults who have relevant skills, and promote Entrepreneurship

4.4



SDG 8

Decent Work

and Economic Growth

Promote development-oriented policies that support decent job creation, entrepreneurship

8.3



SDG 9

Industry, Innovation, and Infrastructure

Upgrade infrastructure to make them sustainable, with increased resource-use efficiency and greater adoption of technologies

9.4

KEY OPERATING RESULTS IN 2024



Determine Tier 1 are audited for sustainability.

73.91%

RESPONSIBLE SUPPLY CHAIN MANAGEMENT

MANAGEMENT APPROACH

Crop Integration Business focuses on managing supply chain by defining management procedures as a guideline for all companies in the business group to provide supply chain management go in the same direction in supply chain management, the business group starts from communicating manuals. Code of Conduct for Partners to all business partners for business partners to be aware of the policies and Expectations of the business group and can work together continuously.



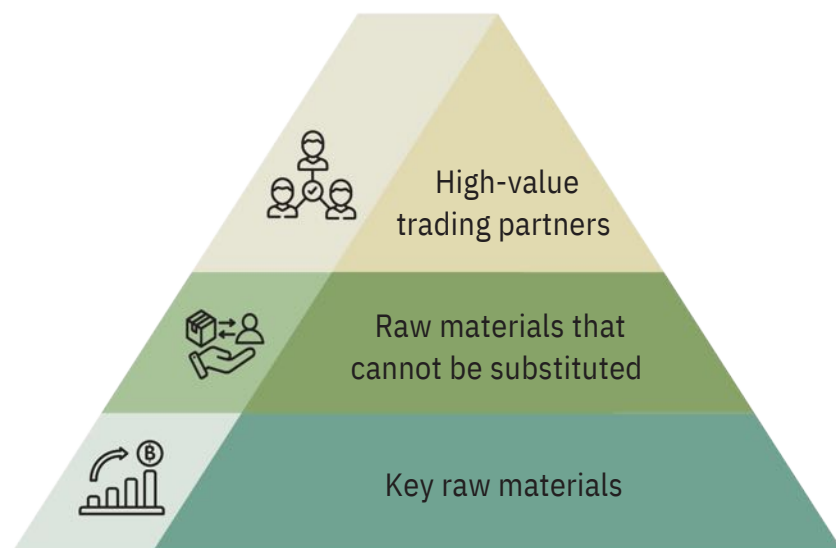
RAISING AWARENESS AND RISKS

Crop Integration Business has received a policy from the Charoen Pokphand Group and is committed to raising awareness of responsible supply chain management. With major business partners first (Critical Suppliers). The principles used to classify the main trading partners are as follows:

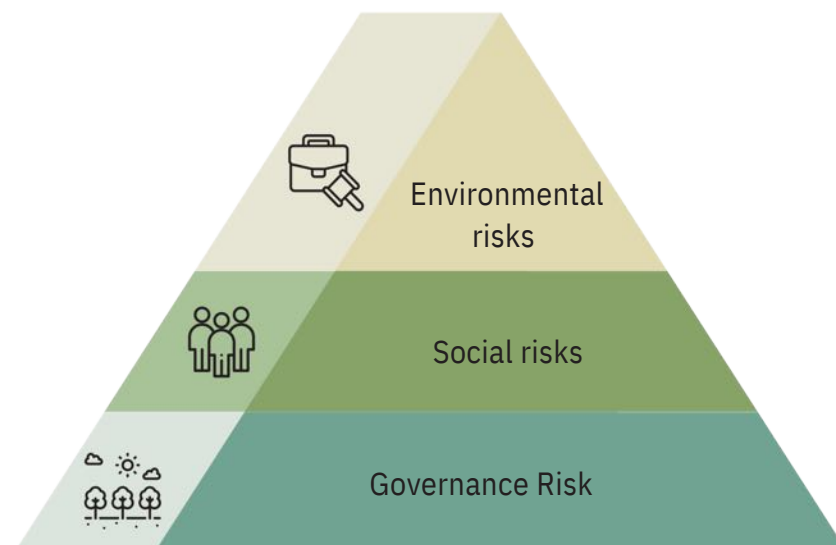


In addition, it was identified to find business partners who are at risk by assessing sustainability risks throughout the supply chain through two-dimensional assessment criteria, namely the severity of the impact. and the likelihood of risk, which the risk issue used in the assessment is taken from the channel.They are as follows: 1.News 2.Past Performance 3.Industry-related risk factors and 4.Trends and potential risks in the future.

DETERMINE MAIN TRADING PARTNERS.

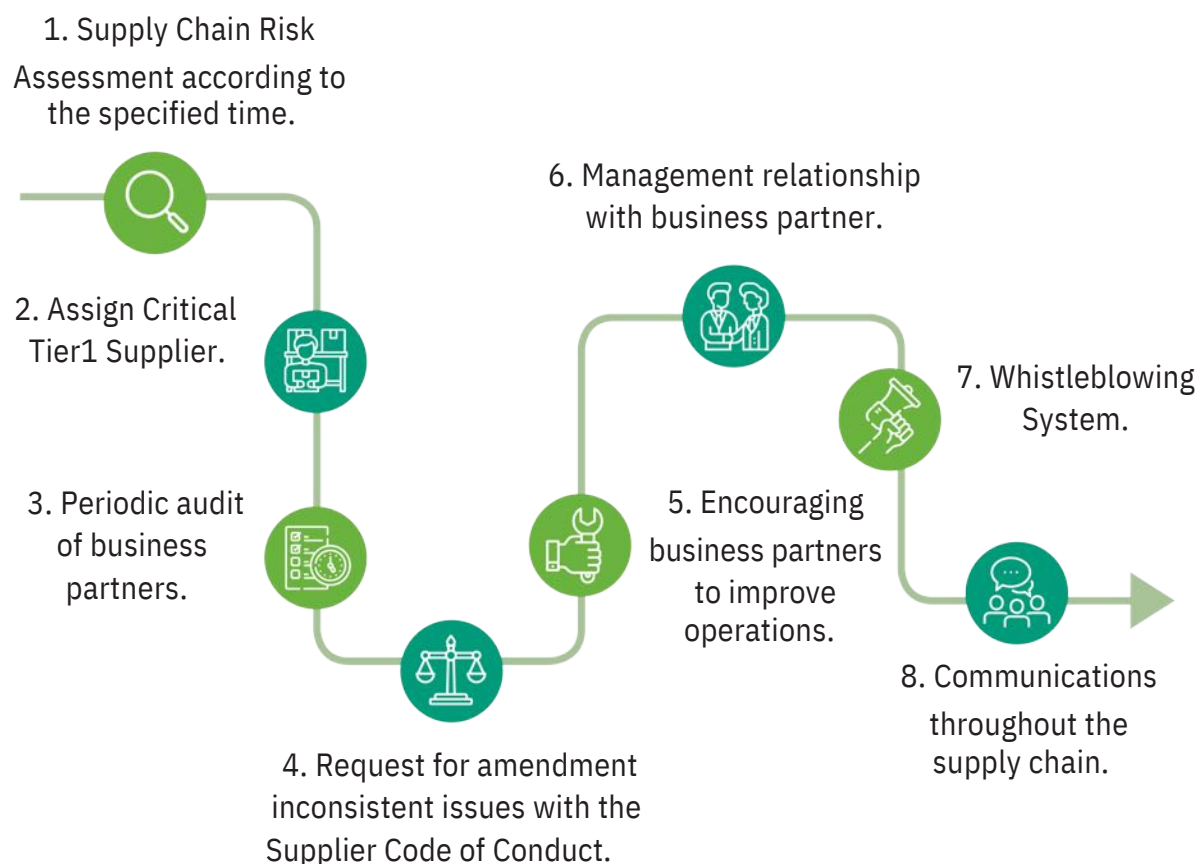


IDENTIFICATION OF RISK TRADING PARTNERS.

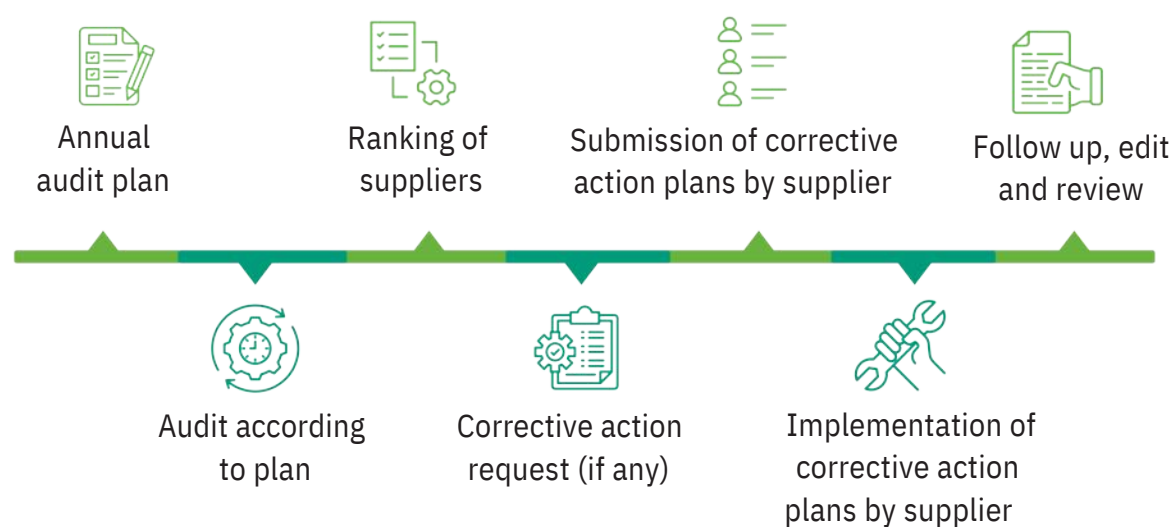


CRITERIA FOR EVALUATING IMPORTANT SUPPLIERS.

PROCEDURES AND PRACTICES FOR SUSTAINABILITY SUPPLY CHAIN MANAGEMENT



CRITERIA FOR EVALUATING KEY PARTNERS.



CASE STUDY

KEY SUPPLIER

ASSESSMENT PERFORMANCE

Crop Integration Business set up a compliance audit committee to show commitment to conducting business as standards and operational guidelines. Ready to create a register of main business partners (Critical 1Tier Supplier) as well as set criteria for evaluating business partners and operating standards.

After grading assessment scores Both the preparation of a self-assessment (Self assessment) and the assessment of the auditors in order to follow and supervise in accordance with the established rules.



Critical Supplier 1 audit 2024 (case)



AUDIT PLAN

20



AUDIT ACTUAL

13



KPI>80 %

65



Online

100%

Ethical assessment for business partners at the business premises by the assessment team.



APPENDIX



COMPANIES WITHIN THE SUSTAINABILITY REPORTING SCOPE

4 COUNTRIES



THAILAND



MYANMAR



VIETNAM



INDIA



Thailand

Charoen Pokphand Produce Co., Ltd.
Charoen Pokphand Seed Co., Ltd.
Charoen Pokphand Agriculture Co., Ltd.



INDIA

Overseas Business



MYANMAR

CPP Fertilizer Co.,Ltd
CPP Myat Min Agro Co.,Ltd



VIETNAM

C.P.Seeds Vietnam Co.,Ltd.
C.P.Seeds (India) Pvt.,Ltd



8
Research and
Development
Stations.



12
Laboratories.

8

Seed Processing Plants.

5

Fertilizer Plants.

1

Rubber Plant.

12

Farms and orchards.

SUSTAINABILITY PERFORMANCE 2022-2024

Charoen Pokphand Produce Co.,Ltd. and companies in Crop Integration Business

GRI	Performance		Unit	2022		2023		2024	
ECONOMIC PERFORMANCE									
G4-EC1	Revenues		Million Baht	7,290.70		7,540.74		5,394.97	
	Employee	Benefits	Million Baht	166.84		26.51		24.3	
	Employee	Benefits	Million Baht	175.40		109.86		145.46	
	Investing in research and development		Million Baht	72.10		17.69		25.1	
	Community and Social Contrubution		Million Baht	1.51		2.47		2.48	
SOCIAL PERFORMANCE									
Employees									
102-8	Total Employees		persons	2,183		2,183		2,606	
			Male / Female	1,499	684	1,499	684	1,762	844
102-8	Separate by contract type		persons						
	Employees			2,183		2,198		2,238	
			Male / Female	1,499	684	1,508	690	1,441	797
	Worker / Contractors			50		232		368	
			Male / Female	39	11	215	17	321	47
405-1	Separate by gender		%						
	Male			68.67 %		70.91%		67.61%	
	Female			31.33 %		29.09%		32.38%	
401-1	New Hires								
	Number of new hires		persons	353		462		562	
			Male /Female	244	109	216	246	363	119
	Ratio of new hires		%	16.17 %		20.23%		21.56%	
			Male / Female	16.28%	15.94%	9.46%	10.77%	20%	24%

GRI	Performance	Unit	2022		2023		2024	
401-1	Turn Over							
	Number of turn over	persons	317		481		488	
		Male / Female	126	257	278	203	337	151
	Ratio of Turn Over	%	14.52 %		21.06 %		18.72%	
		Male / Female	12.74%	18.42%	12.17%	8.89%	12.93%	5.79%
404-1	Average of training hours for all employees	Hours per	5.24		19.15		37.06	
404-1	Number of Employees completed sustainability Training	persons	2,183		2,283		2,137	
OCCUPATIONAL HEALTH AND SAFETY								
DJSI 3.7.2	Injury Rate (IR)							
	Employees	Persons per 1,000,000 working hours	1.47		2.34		3.34	
		Male / Female	1.08	2.04	2.96	1.27	4.87	1.73
DJSI 3.7.3	Worker / Contractors	Persons per 1,000,000 working hours	6.49		1.73		4.76	
		Male / Female	5.03	9.15	2.52	0.00	7.61	0.00
	Lost-Time Injury Frequency Rate (LTIFR)							
	Employees	persons	7		5		4	
		Male / Female	3	4	4	1	3	1
	Worker / Contractors	persons	8		1		2	
		Male / Female	4	4	1	0	2	0
403-9(a)	Occupational Fatality Rate							
	Employees	Persons per 1,000,000 working hours	0.00		0.00		0.00	
		Male / Female	0.00	0.00	0.00	0.00	0.00	0.00

GRI	Performance	Unit	2022		2023		2024	
403-9(b)	Worker / Contractors	Persons per 1,000,000 working hours	0.00		0.00		0.00	
		Male / Female	0.00	0.00	0.00	0.00	0.00	0.00
403-9(a)	Number of facilities as a work-related injury							
	Employees	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(b)	Worker / Contractors	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(a)	Number of High-consequence work-related injury (excluding facilities)							
	Employees	Persons per 1,000,000 working hours	0.00		0.00		0.00	
		Male / Female	0.00	0.00	0.00	0.00	0.00	0.00
403-9(b)	Worker / Contractors	Persons per 1,000,000 working hours	0.00		0.00		0.00	
		Male / Female	0.00	0.00	0.00	0.00	0.00	0.00
403-9(a)	Rate of High-consequence work-related injury (excluding facilities)							
	Employees	persons	0		0		0.84	
		Male / Female	0	0	0	0	1.62	0
403-9(b)	Worker / Contractors	persons	0		0		2.38	
		Male / Female	0	0	0	0	3.81	0
403-9(a)	Number of Recordable work-related injury							
	Employees	Persons per 1,000,000 working hours	2.11		3.75		3.34	
		Male / Female	2.15	2.04	5.19	1.27	4.87	1.73
403-9(b)	Worker / Contractors	Persons per 1,000,000 working hours	7.30		1.73		11.89	
		Male / Female	6.29	9.15	2.52	0.00	19.03	0
403-9(a)	Number of Recordable work-related injury							
	Employees	persons	10		8		4	
		Male / Female	6	4	7	1	3	1

GRI	Performance	Unit	2022		2023		2024	
403-9(b)	Worker / Contractors	persons	9		1		5	
		Male / Female	5	4	1	0	5	0
403-9(a)	Number of Recordable work-related injury							
	Employees	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(b)	Worker / Contractors	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(a)	Number of Fatalities as a result of Work-related ill health							
	Employees	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(b)	Worker / Contractors	persons	0		0		0	
		Male / Female	0	0	0	0	0	0

Note :

- *The data was collected from 4 countries as follows: Thailand, Vietnam, India and Myanmar
- The severity level of an injury is calculated from the number of absent work days. Injury Rate (IR) = [Total number of injuries at all levels (during the reporting period) X 1,000,000 hours worked] / Total number of hours worked (during the reporting period).
- Lost Time Injury Rate (LTIR) = [Total number of lost time injuries (during the reporting period) X 1,000,000 hours worked] / Total number of hours worked (during the reporting period).
- Lost Day Rate (LDR) = [Total number of lost days (during the reporting period) X 1,000,000 hours worked] / Total number of hours worked (during the reporting period)

SUSTAINABILITY PERFORMANCE 2022-2024

Charoen Pokphand Produce Co.,Ltd. and companies in Crop Integration Business.

GRI	Performance	Unit	2022	2023	2024
		Gigajoules	113,263.91	156,057.60	182,027.35
	Fuel Consumption	Gigajoules	13,320.53	65,853.51	92,306.84
	Renewable energy	Gigajoules	78,316.34	31,865.97	22,883.09
	Electricity Consumption	Gigajoules	21,627.05	58,338.12	66,837.42
	Energy intensity value perunit of income	Gigajoules / Million baht	-	20.70	33.74
GREEN HOUSE GAS (GHG) EMISSION					
305-2(a)	Total Green House gas (GHG) emission	tCOeq2	53,816.67	455,128.17	519,471.45
305-1(a)	Green House gas (GHG) emission (Scope 1)	tCOeq2	35,253.34	4,468.91	6,516.29
305-2(a)	Green House gas (GHG) emission (Scope 2)	tCOeq2	18,563.32	7,097.80	8,695.75
302-4	Green House gas (GHG) emission (Scope 3)	tCOeq2		443,561.45	504,259.41
305-4(a)	Greenhouse gas cost per income	tCOeq ₂ / M baht		1.53	2.82
WATER					
303-5	Water consumption	Million / m3	1.08	1.93	0.97
303-3(a)	Total volume of water withdrawn	Million / m3	1.12	2.02	1.07
303-3(c)	Freshwater (≤1,000 mg/L Total Dissolved Solids)	Million / m3	1.12	2.02	1.07
	Surface water	Million / m3	0.99	1.85	0.84
	Ground water	Million / m3	0.13	0.15	0.16



GRI	Performance	Unit	2022	2023	2024
	Municipal water supplies	Million m3		0.012	0.067
	Other water (>1,000 mg/L Total Dissolved Solids);	Million m3			-
	Surface water	Million m3		-	-
	Ground water	Million m3		-	-
	Municipal water supplies	Million m3		-	-
303-4 (b)	Total of water being used	Million m3		0.002	0.002
303-4 (a)	Total of water discharge	Million m3		0.09	0.101
	GHG emissions intensity ratio	Million m3		255.87	179.80
WASTE					
306-3 (a)	Total weight of waste generated	Ton	487.67	1,455.07	635.42
	Total weight of hazardous waste generated	Ton	6.40	8.63	11.71
	Total weight of non-hazardous waste generated	Ton	481.28	1,446.44	623.71
306-4 (a)	Total weight of waste diverted from disposal	Ton	438.95	558.81	538.71
306-4 (b)	Total weight of hazardous waste diverted from disposal	Ton	0.37	1.30	0.08
	Preparation for reuse	Ton	-	1.30	0.05
	Recycling	Ton	0.37		0.03
306-4 (c)	Total weight of non-hazardous waste diverted from disposal	Ton	438.57	557.51	537.74
	Preparation for reuse	Ton	0.34	-	0.07
	Recycling	Ton	25.17	146.69	0.05
	Composting; (Not Included food wate)	Ton	180.70	125.94	10.18
	Feed Marerial	Ton	232.35	284.88	-
	Constuction Material		-	-	-

GRI	Performance	Unit	2022	2023	2024
306-5 (a)	Total weight of waste directed to disposal	Ton	48.73	896.26	97.61
306-5 (b)	Total weight of hazardous waste directed to disposal	Ton	6.02	7.33	11.62
	Incineration (with energy recovery).	Ton	5.33	3.30	11.21
	Incineration (without energy recovery).	Ton	-	3.28	-
	Landfl ling.	Ton	0.70	0.74	0.42
	Other disposal operations	Ton	-	-	-
306-5 (c)	Total weight of non-hazardous waste directed to disposal	Ton	42.71	888.93	85.99
	Incineration (with energy recovery).	Ton	0.04	-	0.34
	Incineration (without energy recovery).	Ton	-	690.41	24.97
	Landfl ling.	Ton	42.67	198.52	60.68
	Other disposal operations.	Ton	-	-	-
	Waste generated intensity ratio	Ton/ Million baht	-	0.19	0.12
PLASTIC PACKAGING					
	All plastic packaging	Ton	-	-	-
	Biodegradable plastic packaging	Ton	-	-	-
	Recyclable plastic packaging	Ton	-	-	-
	*Category Mono Layer				

Note

- *Calculations are based on GRI G4 (EN3) Sustainability Reporting.
- Amount of fuel energy used = sum of each type of fuel used X calorific value of each type of fuel (measurement unit: gigajoules per month)
- CONVERSION FACTOR based on Thailand's annual energy report Department of Alternative Energy Development and Efficiency
- Electric power consumption = Sum of the amount of electrical energy used. (kWh) X 3.6 (measurement unit: gigajoules per month)
- Total amount of energy used = exhausted energy + renewable energy + electrical energy consumption (measurement unit: gigajoules per month)
- Energy intensity per income covers non-consumed energy such as diesel fuel, renewable energy such as rice husks and internal electricity only.



- Emission calculations GHG emissions Scope 2 (Scope 2) have been recalculated using the emission factor using the following reference values:
 - Thailand according to the Energy Policy and Planning Office ministry of energy (<http://www.eppo.go.th/index.php/en/en-energystatistics/co2-statistic>)
 - Myanmar, referenced from <https://united4efficiency.org/country-assessments/myanmar>
 - Vietnam, referenced from https://www.iges.or.jp/en/publication_documents/pub/data/en/1215/IGES_GRID_EF_v10.10_20210223.xlsx
 - India, referenced from https://www.iges.or.jp/en/publication_documents/pub/data/en/1215/IGES_GRID_EF_v10.10_20210223.xlsx
- *Greenhouse gas emissions reporting covers CO₂, CH₄ and N₂O, calculated and displayed in terms of the Global Warming Potential (GWP) set by the Intergovernmental Panel on Climate Change 2006 (IPCC) while the coefficient Greenhouse gas emissions (Emission Factor) based on data from IPCC and Thailand Greenhouse Gas Management Organization. (Public Organization) (GRI G4-EN 15, EN 16) The value of greenhouse gas concentration per income covers the volume. GHG emissions Scope 1 (Scope 1) and Scope 2 (Scope 2) (GRI G4-EN 18) Total water consumption collected from meter/billing receipt/groundwater usage report. The amount of general waste and the amount of hazardous waste stored within the company are the total amount of waste for the past year (G4-EN23). Total amount of waste generated Including only the amount of general waste and hazardous waste generated each year by the amount of waste stored within the company each year Calculated from accumulated waste in the current year – accumulated waste in the past year (G4-EN23)
- Information on waste disposal methods is obtained from the disposal method confirmation from the waste disposal operator or from the waste disposal invoice (G4-EN23).
-

GRI (GRI CONTENT INDEX) :**GRI 102: GENERAL DISCLOSURES 2016**

DISCLOSURES		CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Organizational Profile				
102-1	Name of the organization	Our Business		
		About this Report		
102-2	Activities, brands, products, and services	Our Business		
102-3	Location of headquarters	Business Overview		
102-4	Location of operations	Business Overview		
		Our Business		
102-5	Ownership and legal form	Our Business		
102-6	Markets served	Business Overview		
		Our Business		
102-7	Scale of the organization	2021 Highlights		
		Business Overview		
102-8	Information on employees and other workers	Appendix		
102-9	Supply chain	Responsible Supply Chain Management		
102-10	Significant changes to the organization and its supply chain	About this Report		
102-11	Precautionary Principle or approach	Climate Change Management		
		Water Stewardship		
102-12	External initiatives	Stakeholder Engagement		
102-13	Membership of associations	Stakeholder Engagement		
Strategy				
102-14	Statement from senior decision-maker	Message from the President		
		Message from the CEO		

	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
102-15	Key impacts, risks, and opportunities	Message from the President Message from the CEO Our Business Climate Change Management Water Stewardship		
Ethics and Integrity				
102-16	Values, principles, standards, and norms of behavior	Six Core Values C.P. Excellence		
102-17	Mechanisms for advice and concerns about ethics	Corporate Governance		
Governance				
102-18	Governance structure	Sustainability Governance Corporate Governance		
102-20	Executive-level responsibility for economic, environmental, and social topics	Sustainability Governance		
Stakeholder Engagement				
102-40	List of stakeholder groups	Stakeholder Engagement		
102-41	Collective bargaining agreements	Human Rights and Labor Practices		
102-42	Identifying and selecting stakeholders	Stakeholder Engagement		
102-43	Approach to stakeholder engagement	Stakeholder Engagement		
102-44	Key topics and concerns raised	Stakeholder Engagement		

DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Reporting Practice			
102-45	Entities included in the consolidated financial statements	Our Business Reporting Boundary Materiality Assessment	
102-46	Defining report content and topic Boundaries		/
102-47	List of material topics	List of Material Issues	/
102-48	Restatements of information	In 2022, we discontinued reporting GRI 308-2 and GRI 414-2 as our supplier audit program is set to be completed by 2022. We will report the abovementioned GRI indicators again once the result of the program has been confirmed.	
102-49	Changes in reporting	About this Report	
102-50	Reporting period	About this Report	
102-51	Date of most recent report	About this Report	
102-52	Reporting cycle	About this Report	
102-53	Contact point for questions regarding the report	Materiality Assessment About this Report	
102-54	Claims of reporting in accordance with the GRI Standards	About this Report	
102-55	GRI content index	GRI Content Index	
102-56	External assurance	Appendix	

SPECIFIC STANDARD DISCLOSURES

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Economic Performance				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Sustainability Milestone		
	103-2 The management approach and its components	Sustainability Milestone		
	103-3 Evaluation of the management approach	Sustainability Milestone		
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	2022 Highlights		
Indirect Economic Impacts				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Social Impact Education Innovation		
	103-2 The management approach and its components	Social Impact Education Innovation		
	103-3 Evaluation of the management approach	Social Impact Education Innovation		
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Social Impact Education		
	203-2 Significant indirect economic impacts	Social Impact Education Innovation		
Anti-corruption				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Corporate Governance		
	103-2 The management approach and its components	Corporate Governance		

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
	103-3 Evaluation of the management approach	Corporate Governance		
GRI 205: Anti-Corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	Corporate Governance		
Energy				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Climate Change Management		
	103-2 The management approach and its components	Climate Change Management		
	103-3 Evaluation of the management approach	Climate Change Management		
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Climate Change Management Appendix		/
	302-3 Energy intensity	Climate Change Management Appendix		
	302-4 Reduction of energy consumption	Climate Change Management Appendix		
Water				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Water Stewardship		
	103-2 The management approach and its components	Water Stewardship		
	103-3 Evaluation of the management approach	Water Stewardship		

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Water Stewardship		
	303-2 Management of water discharge-related impacts	Water Stewardship		
	303-3 Water withdrawal	Water Stewardship Appendix		/
	303-4 Water discharge	Water Stewardship Appendix		/
	303-5 Water consumption	Water Stewardship Appendix		/
	Biodiversity			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Ecosystem & Biodiversity Protection		
	103-2 The management approach and its components	Ecosystem & Biodiversity Protection		
	103-3 Evaluation of the management approach	Ecosystem & Biodiversity Protection		
GRI 304: Biodiversity 2016	304-3 Habitats protected or restored	Ecosystem & Biodiversity Protection		

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Emissions				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Climate Change Management		
	103-2 The management approach and its components	Climate Change Management		
	103-3 Evaluation of the management approach	Climate Change Management		
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Climate Change Management Appendix		/
	305-2 Energy indirect (Scope 2) GHG emissions	Climate Change Management Appendix		/
	305-4 GHG emissions intensity	Climate Change Management Appendix		
Wastes				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Circular Economy		
	103-2 The management approach and its components	Circular Economy		
	103-3 Evaluation of the management approach	Circular Economy		
GRI 306: Waste 2020	GRI 306-3: Waste generated	Circular Economy Appendix		/
	GRI 306-4: Waste diverted from disposal	Circular Economy Appendix		/
	GRI 306-5: Waste directed to disposal	Circular Economy Appendix		/

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Supplier Environmental Assessment				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	responsible supply chain management		
	103-2 The management approach and its components	responsible supply chain management		
	103-3 Evaluation of the management approach	responsible supply chain management		
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	responsible supply chain management		
Employment				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Human Rights and Labor Practices		
	103-2 The management approach and its components	Human Rights and Labor Practices		
	103-3 Evaluation of the management approach	Human Rights and Labor Practices		
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Appendix		
Occupational Health and Safety				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Occupational health and safety		
	103-2 The management approach and its components	Occupational health and safety		
	103-3 Evaluation of the management approach	Occupational health and safety		
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Occupational health and safety		
	403-2 Hazard identification, risk assessment, and incident investigation	Occupational health and safety		

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
	403-3 Occupational health services	Occupational health and safety		
	403-4 Worker participation, consultation, and communication on occupational health and safety	Occupational health and safety		
	403-5 Worker training on occupational health and safety	Occupational health and safety		
	403-6 Promotion of worker health	Occupational health and safety		
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health and safety		
	403-6 Promotion of worker health	Occupational health and safety		
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health and safety		
	403-9 Work-related injuries	Human Rights and Labor Practices		/
		Occupational Health and Safety		
		Appendix		
	403-10 Work-related ill health	Human Rights and Labor Practices		/
		Occupational Health and Safety		
		Appendix		

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Training and Education				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Leadership and Human Capital Development		
	103-2 The management approach and its components	Leadership and Human Capital Development		
	103-3 Evaluation of the management approach	Leadership and Human Capital Development		
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Appendix		
Human Rights Assessment				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Human Rights and Labor Practices		
	103-2 The management approach and its components	Human Rights and Labor Practices		
	103-3 Evaluation of the management approach	Human Rights and Labor Practices		
GRI 412: Human Rights Assessment 2016	412-1 Operations that have been subject to human rights reviews or impact	Human Rights and Labor Practices		
Local Communities assessments				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Social Impact		
		Health and Well-being		
		Education		
		Water Stewardship		
		Ecosystem & Biodiversity Protection		
		Responsible Supply Chain Management		

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
	103-2 The management approach and its components	Social Impact		
		Health and Well-being		
		Education		
		Water Stewardship		
		Ecosystem & Biodiversity Protection		
		Responsible Supply Chain Management		
	103-3 Evaluation of the management approach	Social Impact		
		Health and Well-being		
		Education		
		Water Stewardship		
		Ecosystem & Biodiversity Protection		
		Responsible Supply Chain Management		
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Health and Well-being		
		Education		
		Water Stewardship		
		Ecosystem & Biodiversity Protection		
		Responsible Supply Chain Management		
Supplier Social Assessment				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Ecosystem & Biodiversity Protection		
	103-2 The management approach and its components	Ecosystem & Biodiversity Protection		
	103-3 Evaluation of the management approach	Ecosystem & Biodiversity Protection		

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
GRI 414 Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Ecosystem & Biodiversity Protection		
Product and Service Labelling				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Health and Well-being		
	103-2 The management approach and its components	Health and Well-being		
	103-3 Evaluation of the management approach	Health and Well-being		
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	Health and Well-being		
Healthy and Affordable Food				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Health and Well-being Innovation		
	103-2 The management approach and its components	Health and Well-being Innovation		
	103-3 Evaluation of the management approach	Health and Well-being Innovation		



LRQA Independent Assurance Statement

Relating to CHAROEN POKPHAND PRODUCE CO., LTD. AND CHAROEN POKPHAND AGRICULTURE CO., LTD. AND SUBSIDIARIES IN THE CROP INTEGRATION BUSINESS Sustainability Report for the calendar year 2024

This Assurance Statement has been prepared for CHAROEN POKPHAND PRODUCE CO., LTD. AND CHAROEN POKPHAND AGRICULTURE CO., LTD. AND SUBSIDIARIES IN THE CROP INTEGRATION BUSINESS. in accordance with our contract but is intended for the readers of this Report.

Terms of engagement

LRQA (Thailand) Ltd. was commissioned by CHAROEN POKPHAND PRODUCE CO., LTD. AND CHAROEN POKPHAND AGRICULTURE CO., LTD. AND SUBSIDIARIES IN THE CROP INTEGRATION BUSINESS (CP CROP) to provide independent assurance on its Sustainability Report 2023 "the report" against the assurance criteria below to a moderate level of assurance and at the materiality of the professional judgement of the verifier, using AccountAbility's AA1000AS v3¹, where the scope was a Type 2 engagement.

Our assurance engagement covered CHAROEN POKPHAND PRODUCES CO.,LTD AND CHAROEN POKPHAND AGRICULTURE CO.,LTD.'s subsidiaries in Thailand only includes the integration crop business and specifically the following requirements:

- Evaluating CP CROP's adherence to AA1000 AccountAbility Principles (2018) of Inclusivity, Materiality, Responsiveness, and Impact.
- Confirming that the report is in accordance with:
 - GRI Standards (2021)
- Evaluating the reliability of data and information for only the selected indicators listed below: ¹ - Environmental:
 - GRI 302-1 Energy consumption within the organization, GRI 303-3 Water withdrawal, GRI 303-4 Water discharge, GRI 303-5 Water consumption, GRI 305-1 Direct (scope 1) GHG emissions, GRI 305-2 Energy indirect (scope 2) GHG emissions, GRI 306-3 Waste generated, GRI 306-4 Waste diverted from disposal and GRI 306-5 Waste directed to disposal.
 - Social:
 - GRI 403-9 to 10 Work-related injuries and ill health.

Our assurance engagement excluded the data and information of CP CROP's subsidiaries within Thailand where it has no operational control, all operations, and activities outside of Thailand and suppliers and any third-parties mentioned in the report.

LRQA's responsibility is only to CP CROP. LRQA disclaims any liability or responsibility to others as explained in the end footnote. CP CROP's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of CP CROP.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that CP CROP has not, in all material respects:

- Met the requirements above
- Disclosed reliable performance data and information as no errors or omissions were detected
- Covered all the issues that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a moderate level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a moderate assurance engagement is less than for a reasonable assurance engagement. Moderate assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a moderate assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

¹ GHG quantification is subject to inherent uncertainty.



LRQA's approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Assessing CP CROP's approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. We did this by interviewing CP CROP's management who engage directly with stakeholder groups as well as reviewing documents and associated records.
- Reviewing CP CROP's process for identifying and determining material issues to confirm that the right issues were included in their report. We did this by benchmarking reports written by CP CROP and its peers to ensure that sector specific issues were included for comparability. We also tested the filters used in determining material issues to evaluate whether CP CROP makes informed business decisions that may create opportunities which contribute towards sustainable development.
- Auditing CP CROP's data management systems to confirm that there were no significant errors, omissions or misstatements in the report. We did this by reviewing the effectiveness of data handling process, and systems, including those for internal verification. We also spoke with key people in various departments responsible for compiling the data and drafting the report.
- Visited CP CROP's operations as business representative (Vapor Heat Treatment & Packing facilities in Chonburi) to sample performance data and information for the selected specific standard disclosures to confirm its reliability.

Observations

Further observations and findings, made during the assurance engagement, are:

- **Stakeholder inclusivity:** We are not aware of any key stakeholder groups that have been excluded from CP CROP's stakeholder engagement process. CP CROP has addressed the key stakeholder group's opinion regarding their impacts.
- **Materiality:** We are not aware of any material issues concerning CP CROP's sustainability performance that have been excluded from the report. CP CROP has processes for identifying and determining material issues based on a set of unbiased criteria and qualitative impact valuation.
- **Responsiveness:** CP CROP has addressed the concerns of stakeholders in relation to transition plan for climate change. However, we believe that future reports should disclose safety practices and improvement progress in all CP CROP operations.
- **Reliability:** Data management systems are well defined, but the implementation of these systems varies across CP CROP's operational facilities.
- **Impact:** CP CROP has addressed impacts valuation of an agriculture products, food loss and climate change related.

LRQA's standards, competence and independence

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

This verification is the only works undertaken by LRQA for CP CROP and as such does not compromise our independence or impartiality.

Opert Charuratana
Lead Verifier

Dated: 25 August 2025

On behalf of LRQA (Thailand) Ltd.
No. 252/123, Muang Thai - Phatra Complex Tower B, 26th Floor,
Unit 252/123 (C), Ratchadaphisek Road, Huaykwang Sub-district,
Huaykwang District, Bangkok, 10310

LRQA reference: BGK00001245/B

LRQA Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant LRQA entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

The English version of this Assurance Statement is the only valid version. LRQA Group Limited assumes no responsibility for versions translated into other languages.

This Assurance Statement is only valid when published with the Report to which it refers. It may only be reproduced in its entirety.

Copyright © LRQA Group Limited, 2025.



SUSTAINABILITY REPORT 2024

Charoen Pokphand Produces Co., Ltd.
Charoen Pokphand Agriculture Co., Ltd.
and companies in Crop Integration Business.
Charoen Pokphand Group.

1 Fortune Town (CP Tower 2), 23th Floor
Ratchadapisek Road, Din Daeng, Bangkok 10400

