



Making Today a Better Tomorrow



Charoen Pokphand Group
Sustainability Report 2022

Charoen Pokphand Group Sustainability Report 2022



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Message from THE SENIOR CHAIRMAN



In 2022, the turmoil caused by the COVID-19 pandemic has started to subside, with countries, including Thailand, slowly returning to normalcy. Since our founding Charoen Pokphand Group has learnt to evolve and prepare for crises of any nature by upholding and embedding the Group's Six Core Values into our operations. Even amidst the pandemic when social distancing had caused unprecedented changes in consumer behavior, Charoen Pokphand Group was still capable of comprehensively modifying our operational methods and innovating our business to efficiently align with the new normal lifestyle. The Six Core Values are thus the key strategy that empowers the strong and sustainable growth of Charoen Pokphand Group.

For over a century, Charoen Pokphand Group has overcome countless crises of public health, politics, economy, society, and environment. These circumstances have challenged and compelled the Group to adapt with strong determination to drive sustainability in all aspects. Nevertheless, the Group has always acknowledged that the true foundation of sustainability stems from a peaceful nation. Charoen Pokphand Group has been most fortunate to have the opportunity to operate our business under the Royal Benevolence of His Majesty the Kings of Thailand in a land abundant with resources that has been labelled as the "Kitchen of the World". Therefore, it is the duty of Charoen Pokphand Group and all employees to give back to the country.

“ Charoen Pokphand Group was still capable of comprehensively adjusting our operational methods and innovating our business to efficiently align with the new normal lifestyle. The Six Core Values are thus the key strategy that empowers the strong and sustainable growth of Charoen Pokphand Group.”

Finally, on behalf of Charoen Pokphand Group, I thank all stakeholders for their constant trust and confidence in our business. I also express my appreciation to all executives and employees for their commitment and perseverance in leading Charoen Pokphand Group through crises. These efforts have enabled us to become a world-class company with purpose in order to continue creating values and benefits for the country and the people wherever we operate.



Dhanin Chearavanont

Senior Chairman
Charoen Pokphand Group

Message from THE CHAIRMAN



For more than two years, Charoen Pokphand Group together with every business, community and household around the world have lived through numerous impacts of global crisis and disruptions; namely COVID-19, supply chain disruption, geopolitical issue, inflation, global warming, and the rise in global food and energy insecurity. During this time, Charoen Pokphand Group reassessed our priorities. We adjusted and fortified our business toward sustainability by cultivating our new-generation good and talented leaders along with employing innovation and advanced technology to solve business issue, finding new opportunity in crisis and further developing our organization. In the fast-changing global environment, we are strengthening our foundation and establishing readiness for growth in our next century.

Charoen Pokphand Group remains committed to the six core values which comprises of our three-benefit principle; conducting our business to benefit the country, the people and the company, accepting change, speed-with-quality implementation, leveraging innovation and advanced technology to simplify processes, and operating our business with integrity and honesty. Our six core values enable us to adjust our business strategy and encourage change and development towards business sustainability. We will continue to uphold these values in order to overcome all concurrent economic, social and environmental challenges and accomplish the C.P. Group 2030 Sustainability Framework and Goals. Thus, in each business activity we take into account the relevant stakeholders from all sectors along with consider risks and opportunities, human rights, fundamental freedom, and involvement of employees, SME operators and communities.

At present, Charoen Pokphand Group places priority to innovation and advanced technology partnership in Thailand and at global level on climate change adaptation, ecosystem and biodiversity protection, human rights and labor protection, responsible supply chain management, energy security, food security, and nutrition equity. We determine to play a part in

“We adjusted and fortified our business toward sustainability by cultivating our new-generation good and talented leaders along with employing innovation and advanced technology to solve business issue, finding new opportunity in crisis and further developing our organization.”

preventing and solving these issues in order to uplift the quality of life and wellbeing of the people. In 2022, our collective efforts on corporate sustainability among members of the management and employees were recognized by leading global institutions. Charoen Pokphand Group was listed as a member in The Sustainability Yearbook 2022 of S&P Global and was considered as one of the World's Most Ethical Companies® by Ethisphere.

On behalf of Charoen Pokphand Group, I would like to extend my gratitude to all of our senior management, directors, executives, and colleagues who are the key forces in shaping Charoen Pokphand Group into a stable, strong and sustainable organization that has always prevailed over challenges. It is my sincere hope that our synergy combined with the knowledge and capability of our new-generation good and talented leaders will lead us to achieve sustainability and create a “Better Tomorrow” for the world, the country, the people, societies and communities as we move forward into our next century.



Soopakij Chearavanont

Chairman

Charoen Pokphand Group

Message from THE CEO



In 2022 Charoen Pokphand Group experienced a smooth revival of our business. This was partly due to the decreased severity of COVID-19, the relaxation of travel restrictions in many countries and the Group's initiative to adjust our business strategy to better correspond to the global situation and economic, social, and environmental changes.

At present, all countries around the world are facing challenges that are global megatrends. The six global megatrends are 1. inequality, 2. digitalization and energy transition, 3. climate change, 4. hyperinflation, 5. bipolar world order, and 6. health and epidemics. Charoen Pokphand Group is among one of the organizations to have modified its strategy and business operations to cope with such challenges in order to increase competitiveness and deliver sustainable values to the country, the people, our employees and all stakeholders.

Besides the 2030 Sustainability Goals covering the social, economic and environmental dimensions of sustainability, the Group has further enhanced our operations by focusing on three highly challenging goals: 1. Becoming a net zero organization by 2050 as well as implementing traceability and sustainable sourcing throughout the value chain, 2. Reducing waste to zero by 2030 and creating innovations to build a circular economy, and 3. Reducing social inequality by emphasizing on the development of the education system to provide all genders and ages with equal access to quality education. Furthermore, the Group has developed easily accessible, quality products and services to improve everyone's quality of life. We have also utilized the "Platform of Opportunities" to uplift SMEs to enable higher incomes, while promoting

the quality of life of farmers to sustainably generate income and make positive contributions to society. The Group firmly believes that social responsibility is required in conducting business. As such, we must deliberate as we define sustainability goals to engage with the global effort to find solutions and reduce impacts on the economy, society and environment, a task that must be carried out by every country and everyone.

The first and foremost goal to become a Net Zero organization is a milestone mission for Charoen Pokphand Group. Accordingly, we have set Science-based Targets that align with the goals of the Paris Agreement. The Group has also increased alternative energy consumption to lower greenhouse gas emissions from operations by applying innovation and technology in the processes of invention, design, production, transportation through to services to reduce impacts from upstream to downstream. More importantly, the Group has formed an alliance with suppliers and partners from various sectors, such as the United Nations Global Compact (UNGC), the World Economic Forum (WEF), and the World Business Council on Sustainable Development (WBCSD), etc., in order to make widespread contributions and achieve sustainable and valuable outcomes.

The second goal to reduce waste to zero by 2030 centers on using resources efficiently in accordance with the principles of circular economy, reducing dependency on natural resources, increasing the proportion of eco-friendly products and packaging, and collaborating with various organizations to deliver food surplus to vulnerable groups.

As for our third goal to reduce social inequality, the Group places value on “Education”. We support the development of the educational system to enable equal access to quality education for all genders and ages. Additionally, the Group aims to create opportunities for SME operators by offering them knowledge and linking domestic and international markets to increase opportunities and generate income. Likewise, we give priority to developing easily accessible products and services of greater quality in order to improve the quality of life for all.

“We must deliberate as we define sustainability goals to engage with the global effort to find solutions and reduce impacts on the economy, society and environment, a task that must be carried out by every country and everyone.”

2022 marks another successful year in sustainability for Charoen Pokphand Group. The Group was ranked third in the Industrial Conglomerate sector with the highest score in the environmental dimension by the S&P Global sustainability assessment. We have also received an A- rating for climate change management from the Carbon Disclosure Project (CDP), a non-profit organization focusing on climate change management. These accomplishments underscore the need for the Group to keep driving forwards to make a better difference for our world.

Last but not least, I would like to extend my gratitude to all executives and employees who have dedicated themselves to the best of their ability to drive the Group through yet another significant challenges. I also wish to thank all stakeholders for their collaborative efforts in exploring solutions and creating sustainable benefits for our world. Charoen Pokphand Group alone cannot achieve such objectives, but with the cooperation and connection of everyone, we can all Make a “Better Tomorrow” together.



Suphachai Chearavanont

Chief Executive Officer
Charoen Pokphand Group

Performance Highlights

Creating a **Better Heart**

Total Sales

2,902,000

million THB

Employee-related Expenses

223,207

million THB

100%

Percentage of
Employees with “Code
of Conduct” Training

Number of Pending
Complaints

(Complaints received through
the Group’s complaints
channels)



5 Cases

Proportion of Total
Female Employees

51.24%

Total Employee
Training Hours

8,213,153

Hours

Percentage of Business
Group Conducted Human
Rights Impact Assessment

100%

Cybersecurity
Cases

0 Case

Number of Employees
Promoted in their Careers

52,544 People

Number of People Worldwide
Gaining Access to Education and Lifelong
Learning through the Group’s Support

45,522,730 People

(Include Online and Offline)

Establishing a **Better Health**

Charoen Pokphand Group places great importance on promoting knowledge and abilities while providing a wide variety of support to the society and communities in order to enhance well-being and reduce social inequality. The Group has enhanced and supported the following groups of people:

Farmers

1,061,524

People

SMEs

892,715

People

Vulnerable Groups

192,525

People

Products for Health and Well-being **901** Products

Percentage of Products with Clear and Transparent Communication
43.2%

Research & Development Expenses
28,753 million THB



Value of Social Impact
715,200 million THB

Number of People with Access to the Group's Health Applications
97,000 People
(Number of people who downloaded "MORDEE" Application)



Number of Children, Youths, the Poor and Vulnerable Groups with Access to Safe Food

5,218,867 People

or Equivalent to **2,658,375** Meals

Building a **Better Home**

Announced the
Carbon Neutral Goal 2030 and **Net Zero Goal 2050**

GHG Emissions Reduction
(Scope 1 and Scope 2)

1,320,658 tCO₂e per Year



Energy Reduction per Unit of Revenue

2.34 million GJ per Unit of Revenue

Increased Percentage of Renewable Energy Use by

15% of Total Group Operations



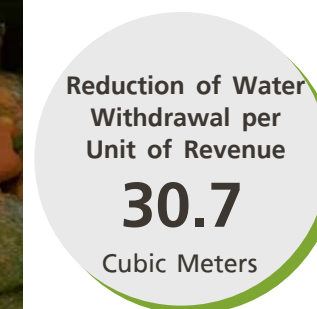
Collaboration with Partners on Reduction of Food Waste and Food

Surplus **31,254** Tons
or Equivalent to **79,073** tCO₂e per Year of GHG Reduction



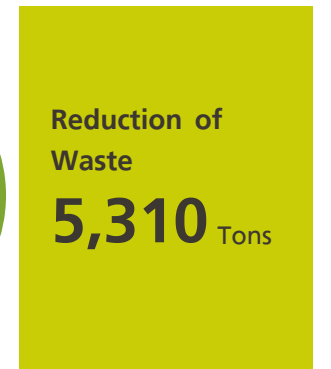
Reduction of Water Withdrawal per Unit of Revenue

30.7 Cubic Meters



Reduction of Waste

5,310 Tons



Number of Suppliers Receiving Capacity Development

17,637 Suppliers

Number of Trees Planted for Ecosystem Protection and Restoration

8,294,180 Tons


























Progress Towards 2030 Sustainability Goals

Heart: Living Right

			2030 Long-term Target	Progress in 2022	Charoen Pokphand Group's				
					Agricultural Farming	Manufacturing	Packaging	Logistics	
	Corporate Governance	All businesses implement a corporate governance impact scoring assessment	100%	78.46%					
	Human Rights and Labor Practices	All businesses conduct human rights impact assessment and tier 1 high-risk suppliers periodically	100%	100% (3 year) 60% (1 year)					
	Education and Inequality Reduction	50 million people received support in the form of access to quality education, lifelong learning or upskilling	50 million people	45.50 million people					
	Leadership and Human Capital Development	100% of employees received trainings on sustainability every year	100%	100%					
		100% of employees participated in sustainability activities or projects every year	100%	44%					
	Cybersecurity & Data Protection	100% of businesses certified with international standards on data and information security	100%	100%					

Health: Living Well

	Health & Well-being	70% of proportion of total sales volume from B2B and B2C products and services that promote health and well-being	70%	50%					
	Social Impact and Economic Contribution	5 million people receive job promotion to generate income for people in need, e.g., farmers, SMEs and vulnerable groups along our value chain.	5 million people	2.32 million people					
	Food Security & Access to Nutrition	10 million children, population and people in need receive access to safe and nutritious food	10 million people	5.22 million people					
	Innovation	7,500 patents and petty patents registered	7,500 patents	3,658 patents					
	Stakeholder Engagement	80% of engagement score of multi-stakeholder engagement survey	80%	80%					

Home: Living Together

	Climate Resilience	Reduce GHG emissions (Scope 1 and 2) from operations from 4.2% target according to Science-based Target	100%	6.20%					
		Zero food waste to landfill	100%	-4.28%					
	Circular Economy	Zero waste to landfill	100%	11.60%					
		All plastic packaging are recyclable, reusable or compostable	100%	94.53%					
	Water Stewardship	20% Reduction of water withdrawal per unit of revenue compared to base year 2020	20%	100%					
	Ecosystem & Biodiversity Protection	100% of high-risk raw material can be traced back to the origin by 2030	100%	53.26%					
		100% of business groups conduct collaborative projects with national and international partners to manage and monitor biodiversity in business operations	100%	36.84%					
	Responsible Supply Chain Management	100% of high-risk suppliers are audited	100%	73.76%					



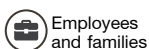
Value Chain

Marketing & Sales

Services

Relevant Stakeholders

Connection to SDGs



Awards and Recognitions 2022

The awards and recognitions accorded to Charoen Pokphand Group are a confirmation of our success and longstanding commitment to sustainability. In addition, these awards and recognitions also reflect the acknowledgement and confidence in the Group from both national and international organizations relating to sustainability.

S&P Global

S&P Global The Sustainability Yearbook 2023

Charoen Pokphand Group and subsidiaries, namely True Corporation Public Company Limited, Charoen Pokphand Foods Public Company Limited, CP ALL Public Company Limited and Siam Makro Public Company Limited, have been selected for inclusion in the Sustainability Yearbook 2023 by S&P Global.



**Top 1% S&P
Global ESG Score**
in Telecommunication
Services



**Top 5% S&P
Global ESG Score**
in Food & Staples Retailing



**Top 5% S&P
Global ESG Score**
in Food Product



**Top 5% S&P
Global ESG Score**
in Industrial Conglomerates
with the highest environmental
score in the industry group



**Sustainability
Yearbook Member**
in Food & Staples
Retailing



Charoen Pokphand Group and subsidiaries received the following CDP scoring in climate change management:



Received score of
A (Leadership)



Received score of
A- (Leadership)



Received score of
A- (Leadership)



Received score of
B (Management)



Ethisphere

Charoen Pokphand Group was recognized by Ethisphere as one of the World's Most Ethical Companies® for the third consecutive year.



2022 World's Best Employers

Charoen Pokphand Group was named one of 2022 World's Best Employers in the Conglomerate sector by Forbes.



CR Reporting Awards 2022

Charoen Pokphand Group Sustainability Report 2021 was recognized as second in the Best Carbon Disclosure Report by Corporate Register



12th Asian Excellence Awards

Charoen Pokphand Foods Public Company Limited and CP ALL Public Company Limited won five awards from the 12th Asian Excellence Awards 2022 organized by the Corporate Governance Asia magazine. The awards included Asia's Best CEO, Asia's Best CFO, Asia's Best Investor Relations Professional, Asia's Best Investor Relations Company, and Asia's Best CSR.



Asian Sustainability Reporting Awards 2022

Charoen Pokphand Group's Sustainability Report 2021 was recognized as Asia's Best Sustainability Report (Human Rights) and Asia's Best SDG Reporting. Furthermore, the Group's disclosures on climate change and supply chain management were selected as finalists.



Low Carbon and Sustainable Business Awards

Charoen Pokphand Group and subsidiaries, namely True Corporation Public Company Limited, Charoen Pokphand Foods Public Company Limited, and CP ALL Public Company Limited, were awarded plaques of honor from the Low Carbon and Sustainable Business (LCSB) 2022.



Thailand Corporate Excellence Awards

Charoen Pokphand Group received the Marketing Excellence Award, CP ALL Public Company Limited received the Human Resources Management Excellence Award, and Charoen Pokphand Foods Public Company Limited received the Product/Service Excellence Award.



About this Report

Charoen Pokphand Group has been disclosing our sustainability performance through the annual Sustainability Report since 2016 until present. The Sustainability Report 2022 is the seventh in its series. The contents of this year's Report are centered on the performance and implementation direction of the Sustainability Strategy's 15 goals, actions in response to the Group's materiality issues, approaches to create long-term value for issues of importance to stakeholders and the Group, and analysis of global and industrial operating contexts to identify positive and negative impacts as well as corrective and mitigation actions.

The preparation of the Sustainability Report 2022 is based on the reporting standards of the Global Reporting Initiative (GRI Standards 2021), Sustainability Accounting Standards Board (SASB), WEF Stakeholder Capitalism Metrics, United Nations Guiding Principles on Business and Human Rights (UNGPs), and WBCSD Reporting Matters. It also presents our progress in complying with the criteria of the United Nations Global Compact, actions in support of the Sustainable Development Goals, and climate-related financial disclosures. The contents of the Report has been reviewed and approved by the Group's Sustainability Committee.

Reporting Scope

The contents of the Sustainability Report 2022 cover all three dimensions of sustainability performance, namely economic, social and environmental, of Charoen Pokphand Group's 14 business groups in Thailand and overseas between 1 January and 31 December 2022.

Third-Party Report Assurance

Charoen Pokphand Group commissioned an independent third-party consultant to verify the accuracy and consistency of the Report's contents according to the GRI Standards 2021. The Group modified indicators to reflect changes in the reporting standards and to better cover the scope of our business operations. The Group required the consultant to verify and assure the accuracy of all 19 indicators. We added GRI 2-25, GRI 301-1 Materials Used by Weight or Volume, 301-2 Recycled Input Materials Used, and Specific Indicator: Food Loss & Food Waste. Furthermore, the Group also assigned the third-party consultant to audit the materiality assessment process, guidelines for risk and supply chain management, and risk management in order to provide assurance that the Group's operations can contribute sustainable benefits to all groups of stakeholders.

GRI Standards 2021 Indicators Validated in 2022

GRI 2-24 (2021)	GRI 2-25 (2021)	GRI 2-26 (2021)	GRI 301-1 (2016)	GRI 301-2 (2016)	GRI 302-1 (2016)	GRI 303-3 (2018)
GRI 303-4 (2018)	GRI 303-5 (2018)	GRI 305-1 (2016)	GRI 305-2 (2016)	GRI 305-3 (2016)	GRI 305-7 (2016)	GRI 306-3 (2020)
GRI 306-4 (2020)	GRI 306-5 (2020)	GRI 403-9 (2018)	GRI 403-10 (2018)	Food Loss & Food Waste	More information available on → page 256-257	

Links to Other Reports and Website of Charoen Pokphand Group



[Double & Dynamic Materiality Assessment Report 2022](#)



[Stakeholder Engagement Report 2022](#)



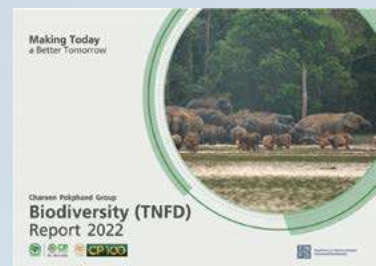
[Sustainability Performance Report 2022](#)



[Sustainable Development Goals Report 2022](#)



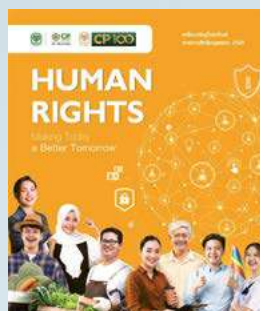
[Task Force on Climate-related Financial Disclosure \(TCFD\) Report 2022](#)



[Biodiversity \(TNFD\) Report 2022](#)



[Corporate Governance Report 2021](#)



[Human Rights Report 2021](#)








Contact

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Our Portfolio

Charoen Pokphand Group's Vision

“To be a Leading Tech and Innovative Conglomerate, Providing Food for both the Body and Mind, that Creates Shared Values and Brings Health and Well-being for All”

	Thailand	China	Others	Total
	(Headquarter)			
 Production Plants (plants)	119	146	98	363
 Livestock/Aquaculture Farms (farms)	433	126	430	989
 7-Eleven Stores (branches)	13,831	-	7	13,838
 Makro Stores (branches)	152	1	9	162
 Lotus's and Lotus Supercenter Hypermarkets/Supermarkets/Mini-supermarkets (branches)	2,578	93	65	2,736
 R&D/Research Centers (centers)	44	42	5	91
 Employees (people)	284,859	88,798	67,949	441,606
Main Business Line				
<div> <div>A B C D</div> <div>E F</div> </div> <div> <div>A B E F</div> <div>G H</div> </div> <div> <div>A B D F</div> </div> <div> <div>A B C D</div> <div>E F G H</div> </div>				

Symbol: Main Business Lines

A Agro-industry and Food

B Retail and Distribution

C Media and Telecommunication

D E-commerce and Digital

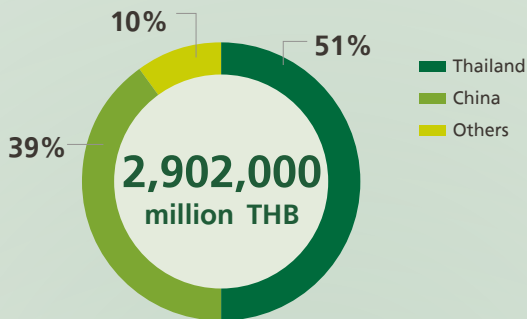
E Property Development

F Automotive and Industrial Products

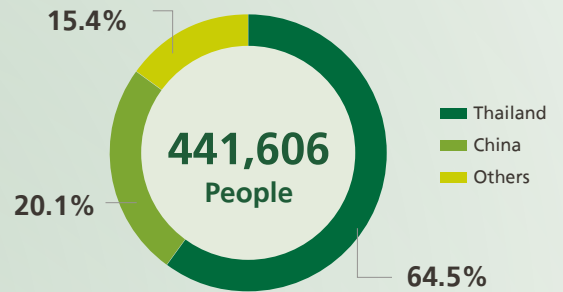
G Pharmaceuticals

H Finance and Banking

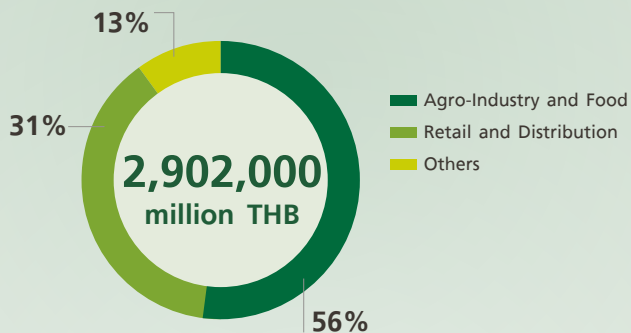
Total Sales by Country



Employees by Country



By Business Lines



Tax Paid to Government



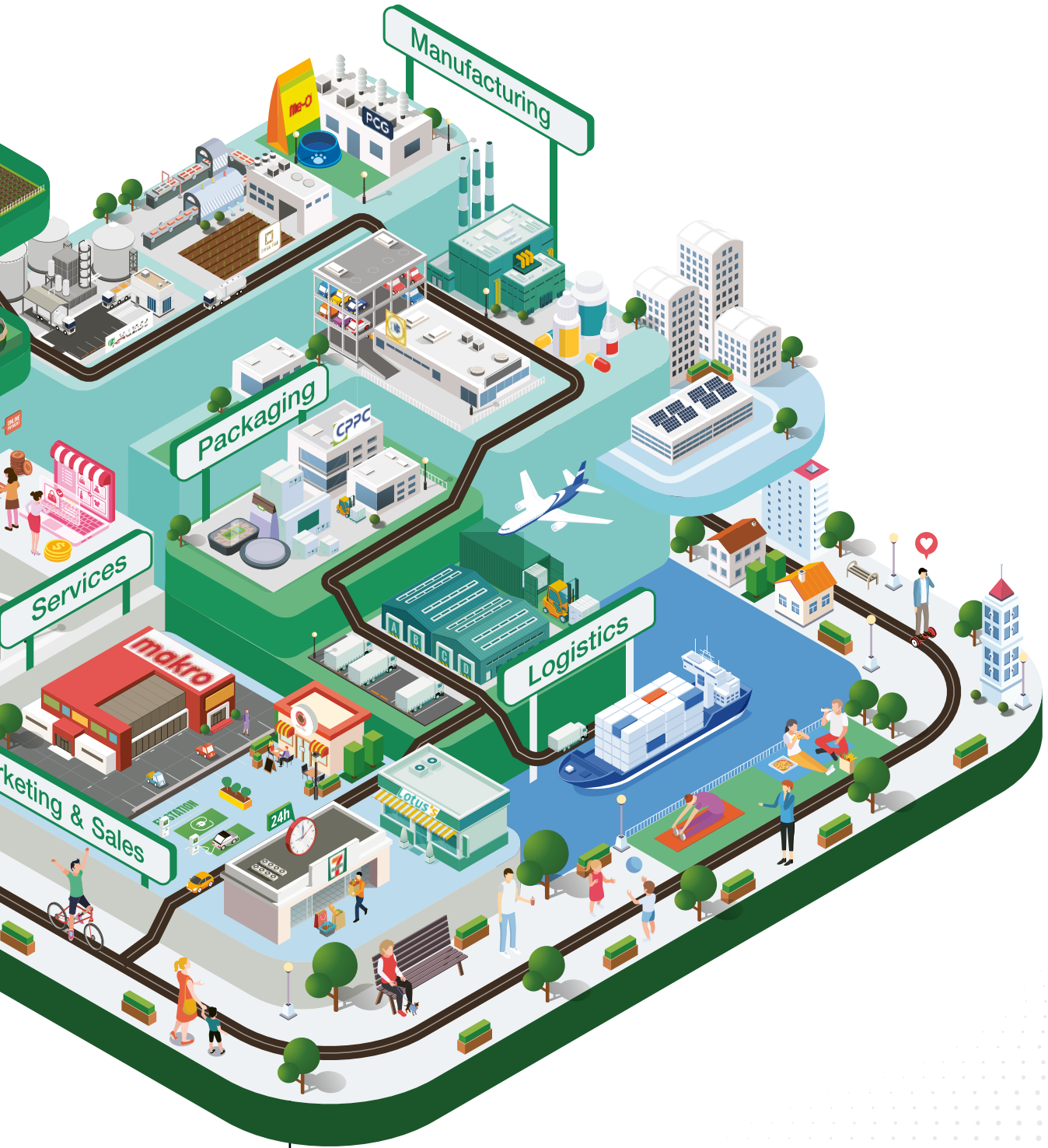
C.P. Group Value Chain

Charoen Pokphand Group operates a diverse business covering Agro-industry and Food, Retail and Distribution, Media and Telecommunication, E-Commerce and Digital, Property Development, Automotive and Industrial Products, Pharmaceuticals, and Finance and Banking. The Group has been integrating the strengths of each business group to sustainably maximize benefits and deliver utmost value to the country, the people and the Company. Furthermore, the Group has also been conducting integrated risk assessment across the value chain to efficiently manage risks, particularly in sustainability.

8 Main Business Lines cover 14 Business Groups

- | | |
|---|--|
| 1 Agro-Industry and Food Business Group | 8 Packaging Business Group |
| 2 Feed Ingredients Trading Business Group | 9 Retail and Distribution Business Group |
| 3 Crop Integration Business Group | 10 International Trading Business Group |
| 4 Pet Food Business Group | 11 E-Commerce and Digital Business Group |
| 5 Seeds, Fertilizers and Plant Protection Products Business Group | 12 Telecommunication Business Group |
| 6 Pharmaceuticals Business Group | 13 Finance and Banking Business Group |
| 7 Automotive Business Group | 14 Property Development Business Group |





Our Business

Charoen Pokphand Group Co., Ltd. serves as parent company of Charoen Pokphand Group as its holding company. It holds shares of subsidiaries in Thailand and overseas. The Group operates across many industries ranging from industrial, production to services

8

Business
Lines

14

Business
Groups

21

Countries and
Economies

1. Agro-Industry and Food Business

- Charoen Pokphand Foods Public Company Limited¹ and its subsidiaries
- Agro-Industry and Food Business Group (China)
- Chia Tai Enterprises International Limited
- Myanmar C.P. Livestock Company Limited
- C.P. Bangladesh Company Limited
- Charoen Pokphand Pakistan (Pvt.) Limited
- Chia Tai Feedmill Pte. Limited
- Chia Tai Company Limited and its subsidiaries
- C.P. Intertrade Company Limited and its subsidiaries
- Charoen Pokphand Produce Company Limited and its subsidiaries
- Charoen Pokphand Agriculture Company Limited
- Charoen Pokphand Engineering Company Limited
- Perfect Companion Group Company Limited

2. Retail and Distribution Business

- CP ALL Public Company Limited¹ and its subsidiaries
- Siam Makro Public Company Limited¹ and its subsidiaries
- Ek-Chai Distribution System Company Limited
- C.P. Lotus Corporation

3. Media and Telecommunications Business

- True Corporation Public Company Limited¹ and its subsidiaries

4. E-Commerce and Digital Business

- Ascend Corporation Company Limited and its subsidiaries
- Freewill Solutions Company Limited



5. Property Development Business

- C.P. LAND Public Company Limited and its subsidiaries
- CP Property Holding Company Limited
- Shanghai Kinghill Limited
- Chia Tai Land Company Limited
- Chia Tai Di Jing (Shanghai) Investment Management Limited



6. Automotive and Industrial Products Business

- ECI Group Company Limited and its subsidiaries
- CPPC Public Company Limited and its subsidiaries



7. Pharmaceuticals Business

- Sino Biopharmaceutical Limited



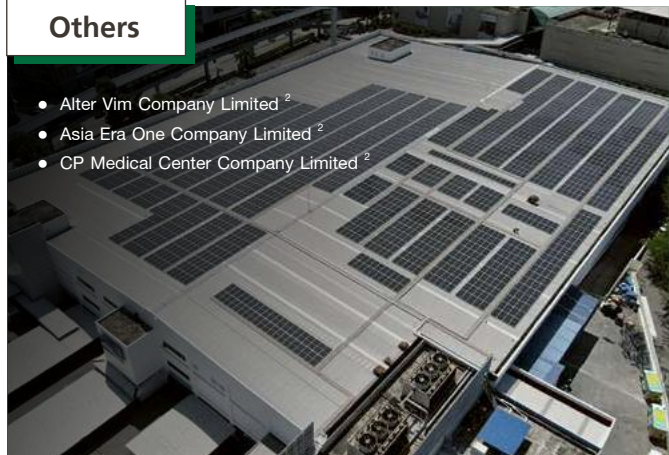
8. Financial and Investment Business

- Zheng Xin Bank Company Limited



Others

- Alter Vim Company Limited ²
- Asia Era One Company Limited ²
- CP Medical Center Company Limited ²



Remark: 1. Company that is listed in Stock Exchange
2. Information/data is not included in the report

More information available in

→ [Business Line](#)

Six Core Values

The Six Core Values have been implemented throughout the organization and have molded our employees to share a common vision, guided by company culture and values. They allow the Group to overcome numerous obstacles and empower our economic, social and environmental growth, in order to sustainably deliver benefits for the next generation.



Three Benefits

Business organizations cannot achieve stability and strength independently. It requires the strength of the people, the society and the country by its side. Likewise, Charoen Pokphand Group has been able to lead the organization to grow sustainably by adhering to the “Three Benefits Principle” throughout our existence. The Three Benefits include benefits for the country of investment, benefits for the people in the country of investment, and benefits for the Company. The Group has cultivated this value since our founding days to ensure that our actions can create benefits for the country of investment and empower our business to grow.



Speed with Quality

When operating a business in a borderless world like today's, the key to business survival and sustainable growth is “speed” and “quality” to enable the business to keep up with changes in technology, news and information, consumer behaviors, and trade rules and regulation. Therefore, the Group must think fast and act quickly without compromising on quality. This key policy is upheld and practiced throughout the organization.



Simplification

Charoen Pokphand Group holds investments in 21 countries and economies, operating through more than 200 subsidiaries and employing over 440,000 employees. The Group places importance in streamlining processes and procedures, using innovation and technology to simplify operations for improved efficiency and effectiveness. “Simplification” is, thus, an important practice which has brought and will continue to bring success to the Group.



Accept Change

The world is overflowing with changes in terms of social conditions, economy, politics, technology and consumer behaviors as well as climate change and unexpected disasters. Therefore, one of Charoen Pokphand Group’s key strategies to empower sustainability is “Accept Change” which has always enabled us to evolve with the world. These changes have prompted the Group to continuously adapt, research, study and explore new opportunities while striving to meet all the needs of consumers and the country.



Innovate

When conducting business, creativity is the driving force for advancement in all aspects, from ideas through to methods, processes, products and services. Just as the world is never at a standstill, businesses must always innovate. Accordingly, Charoen Pokphand Group’s employees are given the tools and supports needed to create “innovation”. Meanwhile, all organizations under the Group are determined to become an “innovative organization” which will undoubtedly result in the creation of the best products and services for consumers.



Integrity

Charoen Pokphand Group has operated with integrity for the past century. Even now, as the Group branches out into various businesses, integrity remains the cornerstone of our organization. We firmly believe that business that focuses solely on enriching itself without regard to these values cannot operate in the long term and will eventually erode the trust of suppliers, partners and stakeholders. Whether selling one piece of product or hundreds of tons of products, one must always adhere to “integrity and honesty”.

CP for Sustainability 2022

Charoen Pokphand Group initiated “CP for Sustainability” to honor executives and employees who have conducted prototype projects on sustainability to help solve problems and improve the quality of life and well-being for societies, communities and vulnerable groups. It also aims to pass on the Group’s Three Benefits principles and practices. Furthermore, the objectives of CP for Sustainability coincide with the Group’s Sustainability Goals, which emphasize on environmental protection and social inequality reduction. In 2022, 63 projects from 8 countries worldwide were selected. CP for Sustainability projects can be classified into five categories:

1. Create Jobs and Career
2. Occupational Health
3. Create Social Value
4. Environmental
5. Educational Opportunities

CP for Sustainability Recognition Ceremony 2022

at Auditorium, 6th Floor,
True Digital Park,
Sukhumvit 101





“ These projects are the importance seeds to create values and changes not only in the society, but in our organization.”

Suphachai Chearavanont

Chief Executive Officer, Charoen Pokphand Group

More information available in

- [CP for Sustainability](#)
- [CP for Sustainability Report 2022](#)



ในชีวิตคนเรามักให้ความสำคัญกับ
ความมั่นคงของชีวิตและความฝันของเราเสมอ
แต่เรามักจะลืมไปว่า สิ่งที่สำคัญที่สุดในชีวิต
ที่ทำให้เกิดความมั่นคงและพลังที่ช่วยทำความฝัน
อันยิ่งใหญ่ของเราให้สำเร็จได้จริงๆ คือ **รักแท้**
(ความเห็นอกเห็นใจ) รักแท้ทำให้เราเห็นและ
ยอมรับในความแตกต่าง เชื่อมเราเข้ากับ
ความเป็นจริงและช่วยให้เราทำได้ ซึ่งรวมไปถึง
ตัวตนที่แท้จริงของเรา ช่วยให้เรานุกไปกับชีวิต
ที่แสนงดงามนี้ได้

”

ณศุภชัย เจียรวนนท์
ประธานคณะผู้บริหาร เครือเจริญโภคภัณฑ์

Sustainability Governance

Sustainability is vital to transparency, flexibility and strength of Charoen Pokphand Group. Therefore, sustainability-related operations have been integrated into all processes and activities, in order to ensure that the Group can sustainably create positive values and deliver equal benefits to all groups of stakeholders. Throughout the past period, the Group has analyzed and adopted a wide range of data, including trends, risks and opportunities related to our business as well as opinions and suggestions from stakeholders, to develop appropriate strategies and operational guidelines that empower our efficient response to uncertainties and the ability to lead the nation, the people and the organization towards a “Better Tomorrow”.

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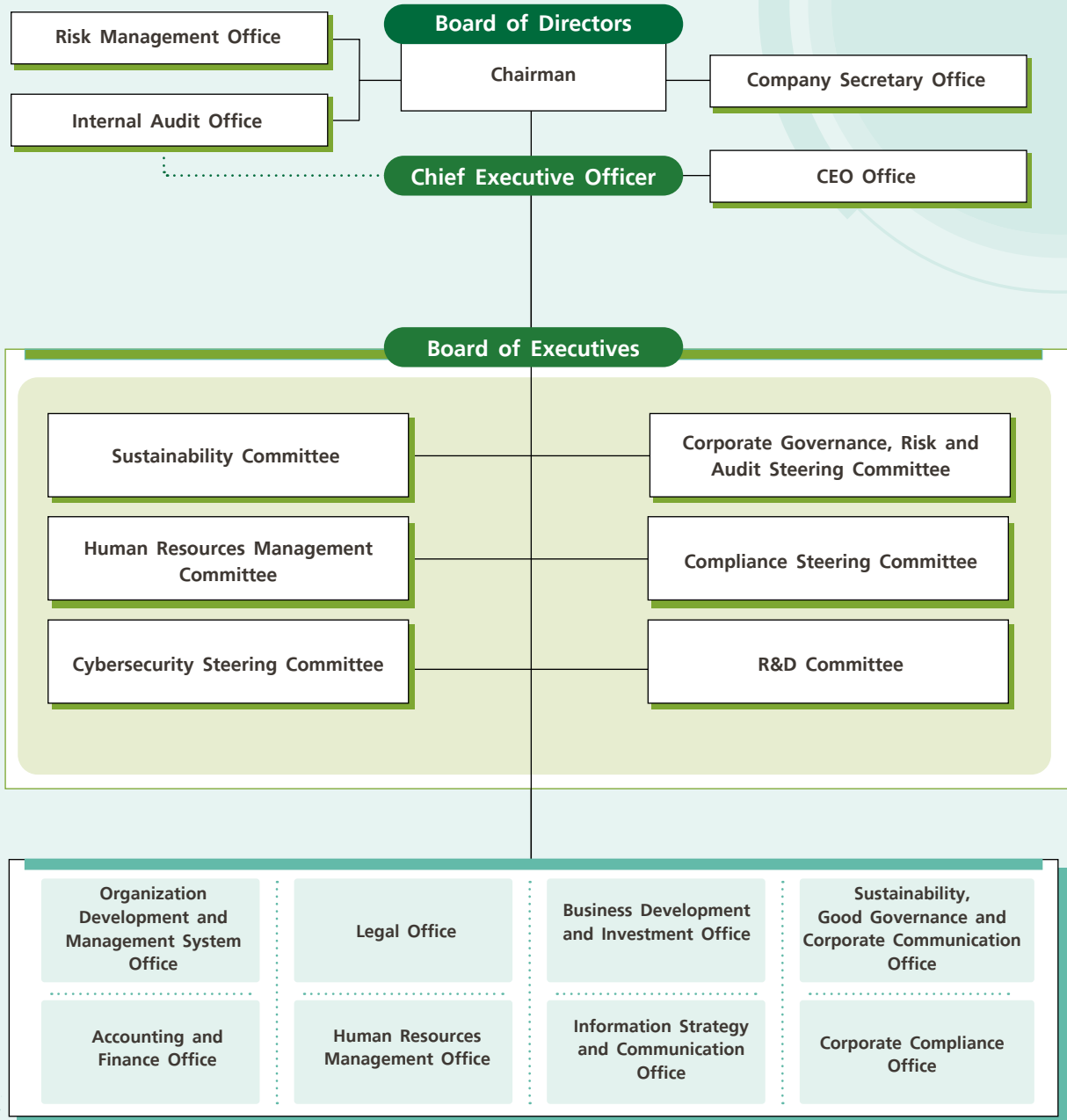
Sustainability Governance

Charoen Pokphand Group acknowledges that the implementation of sustainability principles not only builds a solid foundation for an organization and fosters its ability to compete in highly volatile situations, but it also raises the quality of life and equality of the people, while maintaining integrity of the environment and natural resources. For this reason, the Group has always attached the importance to sustainability in our operations and formed the Sustainability Committee to ensure that our sustainability operations in Thailand and abroad correspond with the Group's sustainability policies and strategies. The Group has also set goals and operating guidelines that are consistent with global trends, short-term, medium-term and long-term material issues as well as expectations of all stakeholder groups.

The Board of Directors has appointed the Chief Executive Officer of Charoen Pokphand Group to chair the Sustainability Committee, which comprises senior executives from various business groups as its members. The Sustainability Committee reports sustainability performances and other relevant issues that have been discussed in the Committee Meetings to the Group's Board of Directors and senior management on a regular basis and adopts any feedback to maximize operational efficiency.

Furthermore, Charoen Pokphand Group also encourages all business groups to form sustainability or other relevant committees, in order to implement sustainability goals, strategies and guidelines prescribed by the Sustainability Committee through formulation of action plans that suit the nature of each business group. This will help balance our sustainability goals and create values for stakeholders in the long-term.

In order to maintain the standards and quality of our sustainability efforts, Charoen Pokphand Group encourages the Sustainability Committee, executives and employees at all levels to regularly participate in seminars and training on relevant topics and apply their newly acquired knowledge and skills to drive the Group's operations to meet established goals and positively contribute to all stakeholder groups. Additionally, the implementation of all 15 goals of Charoen Pokphand Group's 2030 Sustainability Goals has been incorporated as one of the indicators for the performance evaluation of executives according to their scope of responsibility. The result of the evaluation will be reflected in their annual remunerations.



Sustainability Issues Discussed at the Sustainability Committee Meeting

In 2022, Charoen Pokphand Group's Sustainability Committee held meetings on a regular basis with the objective of monitoring sustainability performances according to the Group's sustainability strategies as well as that of our business groups. Furthermore, the Group has conducted a review of our sustainability goals, strategies and guidelines against global and industrial trends and challenges. Material issues that were discussed during meetings of the Sustainability Committee in 2022 included:

Summary of 2030 Sustainability Goals Implementation

This year, Charoen Pokphand Group continued the implementation of the 15, 2030 Sustainability Goals, a continuation of the work done in since 2020 & 2021. The performance in 13 goals was in line with the established annual targets. In this regard, the performance towards the goal in Education and Inequality Reduction, Water Stewardship and Responsible Supply Chain Management exceeded expectations. However, the Group faced challenges in accomplishing the annual target in the area of Climate Resilience, which was the result from our effort to increase proportion of renewable energy and business expansion.

With the objective of responding accurately to global directions and building a "Better Tomorrow", the Sustainability Committee has prioritized the 15 goals according to their significance by taking into account the impacts of the Group's operations on third parties, the Group's ability to drive issues, impacts from external sources on the Group, urgency and global trends. The Group's high priority goals includes:



Climate and Ecosystems

To take part in maintaining the global temperature below 1.5 degrees Celsius, reducing environmental impacts, and conserving biodiversity.



Responsible Consumption and Production

To reduce dependency on natural resources with emphasis on the implementation of circular economy principles.



Inequality

To reduce social inequality and elevate the well-being of the society with focus on developing and providing equal access to education and quality food.

More information available in

→ [Progress towards 2030 Sustainability Goals on page 12-13](#)

Setting Additional Science-based Targets on Greenhouse Gas Emissions

To ensure consistency with global goals, the Sustainability Committee has approved the establishment of additional Science-based Targets (SBT) on greenhouse gas emissions, which include reducing Scope 1, Scope 2, and Scope 3 emissions, in order to become a Net Zero organization. The Group has set Near-term SBTi and Long-term SBTi based on data from 2020.

With regards to near-term SBTi, the Group aims to reduce Scope 1 and Scope 2 emissions by 50%, increase renewable energy consumption by 100%, and reduce Scope 3 emissions by 25% within 2030. The Committee has suggested that the reduction of Scope 3 emissions is essential in order to advance towards Net Zero. Thus, we must expedite cooperation and encourage partners and suppliers to establish a mutual commitment.

Developing Education to Reduce Inequality

The Sustainability Committee has been monitoring the Group's performances in developing education and access to essential resources to empower youths, farmers and the society with equal knowledge, abilities, and skills. During the meeting, there were discussion on increasing public access to education on innovation, technology and digital development, in order to advance into the digital era together.



Development of Carbon Credit Scheme (T-VER) from CPF's Reforestation Efforts

The Sustainability Committee acknowledged the progress report on the reforestation efforts of Charoen Pokphand Foods Public Company Limited (CPF). The CPF Reforestation Working Group has so far conserved and restored a total of 14,189 rais of forest out of the 2030 target of 50,000 rais.

Furthermore, the company applied for carbon credit certification through the Thailand Greenhouse Gas Management Organization (TGO) in accordance with T-VER Standard. In doing so, CPF selected a 117-rai prototype area of the Phaya Doen Tong Mountain Project in Lopburi province, which can store approximately 1,100 tons CO₂ equivalent of carbon within a period of ten years. However, the Sustainability Committee recommended that the Group should hold discussions on carbon credit certification with TGO and ensure its consistency with the true objectives of reforestation.

Operating Context

With operations in 21 countries and economies worldwide, the analysis of operating context, new or changed legal requirements and business-related risks will help us to plan strategies and operational guidelines that promote stable and sustainable growth. In addition, the analysis results of operating context, new laws and risks have also been incorporated into enterprise risk management process and materiality assessment to enable the Group's effective identification of impacts and mitigation measures for each period.

Climate Emergency

In the past years, climate change impacts have become more intense and widespread. These impacts have destroyed the integrity of ecosystems, led economies into recessions and damaged the well-being of the global population. Therefore, in an effort to maintain climate balance and limit global temperature rise, many countries around the world have declared a state of climate emergency and enforced environmental laws and regulations which focus on the use, availability and adequacy of renewable energy, reduction of dependency on natural resources, environmental and ecosystem restoration, and development of environmental innovations. The enforcement of these laws and regulations have caused various companies to lose their competitiveness and trade opportunities, especially those who are unable to comply with such regulations in time. Nevertheless, this also serves as an opportunity for companies to develop innovative processes, products and services that can meet both regulatory requirements and stakeholder needs.

Charoen Pokphand Group's Response Actions

- Driving the continuous implementation of the Group's environmental protection policies, extending such practices to suppliers and partners, and integrating them into future pre-merger audit criteria.
- Setting goals, strategies and guidelines to reduce greenhouse gas emissions according to Science-based Target.
- Analyzing climate-related opportunities and risks according to TCFD standards using a climate change scenario analysis.
- Investing in eco-friendly businesses and improving production processes to reduce dependency on non-renewable energy.
- Collaborating with various sectors to reduce climate change impacts.



Capital Impacted



Financial



Relationship



Manufacturing



Natural



Intellectual

More information on Capital is available on page 50-51

Just Transition

Working to lead the global economy towards Net Zero creates jobs for communities and personnel who have the knowledge, competence and skills that can promote the development of eco-friendly innovations and technologies. At the same time, some job may become redundant as a result of this shift. Governments around the world are aware of such issues and have established policies that will minimize impacts from Net Zero efforts on labor and the society, while promoting equal access to clean energy for all.

Charoen Pokphand Group's Response Actions

- Analyzing the impact of climate change on societies and communities, especially vulnerable groups, as well as finding ways to prevent or reduce the severity of the impacts.
- Announcing the target to create jobs for farmers, SMEs and vulnerable groups as well as providing youths and the public with access to quality education.



Capital Impacted



Intellectual



Human



Relationship

More information on Capital is available on page 50-51



Capital Impacted



Manufacturing



Human



Intellectual



Relationship

More information on Capital is available on page 50-51

Holistic Health

The COVID-19 pandemic during the past years, coupled with current situations, such as digital and technological transformation and climate change, have prompted people to pay more attention to their well-being and strengthen their mental and physical health. Businesses can respond to such demands, which are likely to increase in the future, through innovations that facilitate and provide safety in daily life, especially innovations for the elderly, new products and services that promote well-being and increase immunity for all genders and ages, improvement of upstream-to-downstream production processes with focus on cleanliness and safety to prevent the spread of germs and promote holistic health development.

Charoen Pokphand Group's Response Actions

- Announcing strategies, goals and operational guidelines to promote health and well-being, building food security and access to nutrition, and ensuring responsible supply chain management.
- Developing new businesses that focus on accessible integrated public healthcare and social inequality reduction.
- Offering a comprehensive employee and family care program to create workplace happiness for our employees, both physically and mentally.

External Impact Analysis

Enterprise Risk Factors

Risk: Rising Sea Levels and Reduced Water Quality as a Result of Climate Change on the Group's Operations

Risk Type: Environmental

Capital Impacted:  Financial  Manufacturing  Natural

Related 2030 Sustainability Goal: Climate Resilience Pages 174-191

Description of Risk and Impacts on Business Operations

Rising sea levels and brackish water encroachment constitute one of the direct impacts of climate change on Charoen Pokphand Group's operations and assets. Based on an analysis of sea level rise trend, many of our businesses are at risk of being affected, such as agricultural lands, production units, production processes and locations of service equipment. Without actions to prevent or mitigate risks from such circumstances, there is a high possibility that the Group will face shortage of key agricultural ingredients, while production units may lose the ability to manufacture products as a result of raw material shortage and floods. These incidents can cause the Group to lose competitiveness, damage our reputation and hinder the ability to efficiently deliver products and services to meet market demands.

Prevention and Mitigation Measures

Charoen Pokphand Group uses the Aqueduct Water Risk Atlas tool to analyze areas at risk from rising sea levels and inspects water quality on a regular basis to monitor brackish water incursion. We also work with the public and private sectors to explore prevention methods, such as improving land utilization, creating defensive barriers around farmlands and production sites, elevating the height of service areas, and installing high-quality water filters to effectively filter salt water.

Risk: Shortage of Personnel with Skills Matching the Changing Nature of Future Jobs

Risk Type: Social

Capital Impacted:  Human  Relationship

Related 2030 Sustainability Goal: Education and Inequality Reduction Pages 88-97

Leadership and Human Capital Development Pages 98-107

Description of Risk and Impacts on Business Operations

The rapid advancement of technological changes, the population structure comprising a large number of aging people and declining birth rate, the inability of the education system to respond to global changes, climate change and global recession have obligated many businesses to adapt. These are the main factors causing the shortage of personnel with skills needed to drive the steady growth of businesses and the global economy. Accordingly, Charoen Pokphand Group places importance on and closely monitors the shortage of knowledgeable, capable and skilled personnel that can effectively support the Group's operations. We recognize that such risk does not only affect our ability to invent, research and create products and innovations that enhance the well-being of stakeholders, but also decreases the Group's capacity to compete and achieve goals and visions.

Prevention and Mitigation Measures

Charoen Pokphand Group attaches great importance to the continuous development of our employees' knowledge, competence and skills of the 21st century. The Group allows employees to take part in solving problems, taking action and finding solutions. We place particular emphasis on technological and digital skills that are essential in responding to global changes. The Group offers employees access to training courses on a wide range of topics. We also provide the opportunity for cross-functional learning experiences so that employees can utilize new ideas for their own benefit. Furthermore, the Company engages in the development of the basic education system by engaging 50 government and private organizations in the CONNEXT ED Foundation, where the Group has conducted projects, provided financial support and encouraged employee participation. In addition, we also offer scholarships to students in fields of study that are consistent with the strategies of the country and the Group.

Risk: Supply Chain Security

Risk Type: Environmental

Capital Impacted:  Financial  Manufacturing  Relationship  Natural

Related 2030 Sustainability Goal: Responsible Supply Chain Management Pages 230-237

Description of Risk and Impacts on Business Operations

Over the past few years, Charoen Pokphand Group has been monitoring risks related to supply chain security. The severity and likelihood of such risks have increased significantly and involve many factors, such as natural disasters leading to unpredictable output and low productivity, disease in plants and animals causing inevitable deaths, political uncertainties interrupting raw material import, and cyber terrorism disrupting production processes. Without proper preventive actions, numerous consequences will follow, including reduced income, damaged properties, lack of stakeholder confidence, loss of competitiveness, and increase in costs relating to alternative raw material procurement, and more.

Prevention and Mitigation Measures

Charoen Pokphand Group has taken the following steps to maintain supply chain security and continuously deliver quality products and services to stakeholders across the value chain: announcing the implementation of the Supplier Code of Conduct and the Sustainable Sourcing Policy to encourage suppliers to align their risk and crisis management actions with the Group's directions and international standards; sharing knowledge and technology to enable eco-friendly and safe operations that reduce impact on the society and environment; assessing supplier performance on a regular basis to identify risks and jointly formulate preventive measures; and conducting research and development with third parties to design products and services of the future that reduce dependency on high-risk raw materials as well as the consumption of limited natural resources.

Emerging Risk Factors

Risk: Biodiversity Loss

Risk Type: Environmental

Capital Impact:  Manufacturing  Natural

Related 2030 Sustainability Goal: Ecosystem and Biodiversity Protection Pages 214-229
Responsible Supply Chain Management Pages 230-237

Description of Risk and Impacts on Business Operations

International research indicates that over the past years, climate change and human activities have put more than 1 million species worldwide at risk of extinction. The extinction of one species can inevitably affect others and increases the likelihood of new epidemic outbreaks in the future. This poses risks in terms of shortage of resources essential to the livelihood of all living things, the well-being of the global population, and business growth of many industries, especially Charoen Pokphand Group whose core business comprises agro-industry and food. Potential risks from biodiversity loss include reduced agricultural output due to poor soil quality, insufficiency of clean water, increasing number of plant diseases, and lack of access to quality raw materials and materials of the future due to epidemics or international conflicts. As a result, there is a risk of significant decline in upstream production capacity, increased global demands, and permanent or temporary disruption of transportation. Such risks affect the food security system in the forms of production process disruption, lack of high-quality essential food and beverages, and rising food and beverage prices, and more.

Prevention and Mitigation Measures

As a management measure for potential risks from biodiversity loss, Charoen Pokphand Group implements the Ecosystem and Biodiversity Protection Policy and encourages all relevant business groups and suppliers to adopt the Policy as a guideline for protecting, caring for, maintaining and restoring biodiversity. The Group has also announced the following goals related to biodiversity protection and restoration:

- By 2025, plant 20 million trees;
- By 2030, 100% of raw material sourcing must proceed from sources that do not involve forest encroachment and deforestation;
- By 2030, all business groups conduct projects or collaborate with relevant national and international partners on biodiversity management and monitoring

Additionally, the Group has formulated the Sustainable Sourcing Policy to expand the scope of natural resources protection, especially biodiversity. The Sustainable Sourcing Policy focuses on the responsible procurement of agricultural and marine raw materials to ensure that they do not proceed from the encroachment of protected areas or are associated with agricultural deforestation. Furthermore, the Group also implements a high-risk raw material traceability system to provide assurance to suppliers that our production and raw material procurement processes are in strict accordance with requirements, international laws and Group policies.

Risk: Elimination of Non-Compostable Plastic Use**Risk Type:** Social**Capital Impact:**

Financial



Manufacturing



Intellectual



Relationship



Natural

Related 2030 Sustainability Goal: Circular Economy Pages 192-203**Description of Risk and Impacts on Business Operations**

Nowadays, people are becoming increasingly aware of the impact of plastic on the environment and health. As a result, the demand for non-compostable and single-use plastic has decreased. In fact, there is now a significant increase in the demand for compostable plastic. This trend of alternative plastic demand pose both risks and opportunities for Charoen Pokphand Group's operations, especially in terms of the ability to procure good quality alternative plastic that is resistant to various environments, capable of maintaining product freshness and cleanliness, and safe for consumers. In addition, rising operating costs are another risk factor for the Group due to alternative plastic prices which are higher than conventional plastic as well as expenses related to the improvement of production processes to accommodate new plastic materials. However, if the Group does not plan to switch to alternative plastic, we will face risks in terms of reputation, stakeholder trust, and loss of domestic and international trade opportunities.

Prevention and Mitigation Measures

Charoen Pokphand Group has established a policy to promote and support the implementation of a circular economy in order to increase efficiency and reduce dependency on natural resources. We have also announced relevant goals including:

- By 2030, all plastic packaging used are recyclable, reusable and compostable.

In order to achieve plastic packaging goals, the Group has established the Sustainable Plastic Packaging Guidelines which focus on eliminating the use of non-recyclable plastics and seeks alternative or natural materials; promoting investment in research and development of socially and environmentally responsible product distribution innovations, safe food packaging innovations for consumers; supporting and endorsing the EPR principles (Extended Producer Responsibility) to extend the producer's scope of responsibility as well as the network of joint responsibility for managing and recycling post-consumer packaging waste; analyzing product life cycle to assess potential and identify improvement opportunities; supporting and cooperating with all sectors to determine eco-design standards for packaging; and focusing on the elimination of plastic waste across the value chain.

■ Risk related to Heart ■ Risk related to Health ■ Risk related to Home




More information available in[Corporate Governance](#)[Information on Capital is available on page 50-51](#)





Stakeholder Engagement







Stakeholder engagement is one of the key processes in Charoen Pokphand Group's business sustainability. The Group regularly reviews our stakeholder groups by considering the positive and negative impacts on each group as well as impacts on or interest of stakeholders. Furthermore, the Group has developed and regularly updates stakeholder engagement channels to ensure that the Group is equipped with comprehensive tools and systems that are transparent, verifiable and appropriate for all groups of stakeholders.

The interest, feedback and comments from all stakeholders have been integrated into the organization's strategies, risk factor analysis and materiality assessment. They have also been communicated to business groups to facilitate their collaborative effort in the development and creation of a "Better Tomorrow".

	Engagement Channels	Issues of Interest	Response Actions
Farmers 	<ul style="list-style-type: none"> • Knowledge sharing and discussions through meetings and representatives of relevant agencies • Collaboration through projects • Support and learning centers • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Farmer capacity building • Adequate and rapid access to resources • Income guarantee • Fair business practices 	<ul style="list-style-type: none"> • Supporting sustainable farming to reduce environmental impacts • Developing technology to improve product quality and increase diversity of distribution channel • Guaranteeing source of income • Making fair contracts in accordance with laws and regulations
Communities and Societies 	<ul style="list-style-type: none"> • Discussions through meetings with representatives of relevant departments • Collaboration through projects • Support and learning centers • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Participation in improving community quality of life • Employment promotion in the community • Impact from business operations on societies, communities and the environment 	<ul style="list-style-type: none"> • Organizing projects to improve the quality of life of communities, including vulnerable groups • Supporting employment and building businesses in communities • Conducting projects to take part in conserving and restoring ecosystems and biodiversity
Suppliers 	<ul style="list-style-type: none"> • Knowledge sharing and discussions through meetings • Collaboration through projects • Support and learning centers • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Supplier capacity enhancement for efficient and systematic business operations • Protection of human rights and reduction of environmental impacts in every step of the supply chain • Fair business operations with respect for the environment and society in the decision-making process 	<ul style="list-style-type: none"> • Formulating strategy for responsible supply chain management • Communicating and auditing suppliers according to the Sustainable Sourcing Policy • Announcing the implementation of the Supplier Code of Conduct to enable equal and fair treatment of all suppliers

	Engagement Channels	Issues of Interest	Response Actions
Creditors 	<ul style="list-style-type: none"> • Communication and discussions through meetings • Accounting reports • Collaboration through projects • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Good corporate governance • Transparent and effective disclosure of performance • Reinforcement of business competitiveness 	<ul style="list-style-type: none"> • Conducting business in accordance with the laws, good governance principle, objectives and regulations of the Company • Strictly compliance with creditors' conditions • Collaborating with relevant agencies to improve operational efficiency
Employees and Families 	<ul style="list-style-type: none"> • Communication through supervisors • Group announcement by Human Resources Department • Projects for employees • Annual satisfaction survey • Performance evaluation • Whistleblowing channel 	<ul style="list-style-type: none"> • Capacity development and career advancement support • Implementation of human rights principles, such as Equality and Diversity, etc. • Workplace environment, occupational health and safety 	<ul style="list-style-type: none"> • Continuously developing employee capacity according to Workforce 4.0 Strategy • Establishing and enforcing human rights guidelines, such as Diversity and Inclusion • Announcing the implementation of the Safety, Occupational Health and Environment Management Standards
NGOs 	<ul style="list-style-type: none"> • Communication and discussions through meetings with representatives of relevant departments • Collaboration through projects • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Impacts from business operations on societies, communities and the environment • Business for social development • Full, transparent and rapid disclosure of information to the public 	<ul style="list-style-type: none"> • Welcoming opinions and jointly discussing impact prevention measures • Supporting projects that are beneficial to the country and communities • Regularly and transparently communicating and disclosing useful information to related parties
Governments 	<ul style="list-style-type: none"> • Communication and discussions through meetings with representatives of relevant departments • Collaboration through projects • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Compliance with relevant laws and regulations • Example of socially and environmentally responsible business operations • Full, transparent and rapid disclosure of performance 	<ul style="list-style-type: none"> • Monitoring and strictly obeying relevant laws and regulations • Collaborating and supporting the development of projects that create benefit for the country and communities • Communicating and disclosing information fully, transparently and rapidly

	Engagement Channels	Issues of Interest	Response Actions
Competitors 	<ul style="list-style-type: none"> • Communication and discussions through meetings with representatives of relevant departments • Collaboration through projects • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Compliance with competition ethics, laws and trade regulations 	<ul style="list-style-type: none"> • Following the rules/ethics of good competition, setting up control systems to ensure that no action is taken to obtain trade secrets from competitors • Not damaging competitor's reputation through slander without truth
Media 	<ul style="list-style-type: none"> • Communication and discussions through meetings with representatives from relevant departments • Collaboration through projects • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Corporate governance • Transparent and rapid disclosure of performance • Social, community and environmental impacts from operations 	<ul style="list-style-type: none"> • Developing fair and good relations with media • Providing useful information based on facts and keeping up to date with circumstances
Shareholders and Investors 	<ul style="list-style-type: none"> • Communication and discussions through meetings with representatives from relevant departments • Accounting report • Collaboration through projects • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Corporate governance • Risk management • Transparent and up-to-date disclosure of performance • Increasing the ability to compete in business and business directions 	<ul style="list-style-type: none"> • Conducting business according to good governance, company regulations and shareholder meeting resolutions • Announcing the implementation of Risk Management Policy and Guidelines • Disclosing performance with transparency in compliance with international standards • Listening to opinions of shareholders and investors
Customers and Consumers 	<ul style="list-style-type: none"> • Communication and discussions through meetings with representatives from relevant departments • Products and after-sales services • Collaboration through projects • Annual satisfaction survey • Whistleblowing channel 	<ul style="list-style-type: none"> • Development of products and services that are healthy and safe for consumers • Product traceability • Product information and after-sales services • Personal data security 	<ul style="list-style-type: none"> • Developing products that promote good health and well-being for consumers of each age group • Developing a traceability system • Displaying accurate product information and labels • Formulating the Personal Data Protection Policy and Guidelines

Materiality Assessment

Charoen Pokphand Group has specified that a review of material sustainability issues shall be conducted annually. Such action allows the Group to implement the analysis results of issues that are material to the Group and are of interest to stakeholders in strengthening our sustainability strategies. In 2021, the Group assessed both internal and external material issues related to our business operations, covering all risk issues, stakeholder expectations, external experts' opinions, as well as sustainability trends and directions in relevant industries. The assessment was based on GRI Standards, Stakeholder Engagement Standard (AA1000), and International Financial Reporting Standards (IFRS) by International Sustainability Standards Board (ISSB), which are in line with the guidelines of the Task Force on Climate-related Financial Disclosures (TCFD), Task Force on Nature-related Financial Disclosure (TNFD) and the UN Sustainable Development Goals (UN SDGs). In addition,

risks and opportunities were also taken into consideration in accordance with Enterprise Risk Management principles and the Double and Dynamics Materiality concept. Accordingly, the Group adopted stakeholder impacts, expert opinions, and financial impact analysis to prioritize each material issue in order to formulate our sustainability goals and action plans.

The materiality assessment process and results are monitored by the Sustainability Committee. The Sustainability Committee reports the process and results to the Board of Directors and Executive Board to obtain suggestions for further improvement and enhance efficiency. Additionally, the suggestions can be used to uplift our ability to create long-term value for all stakeholder groups.

More information available in

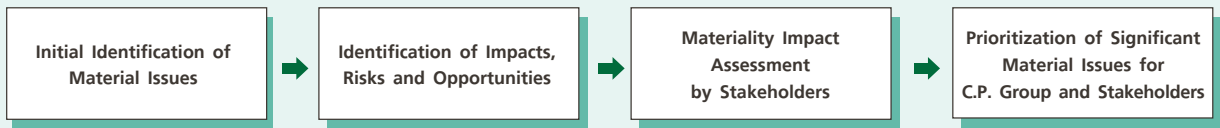
→ [Corporate Governance is available on page 30-31](#)



Charoen Pokphand Group's Materiality Assessment Process

The materiality assessment process requires assessing and determining the importance of environmental, social and governance (ESG) issues related to Charoen Pokphand Group's business activities and stakeholders.

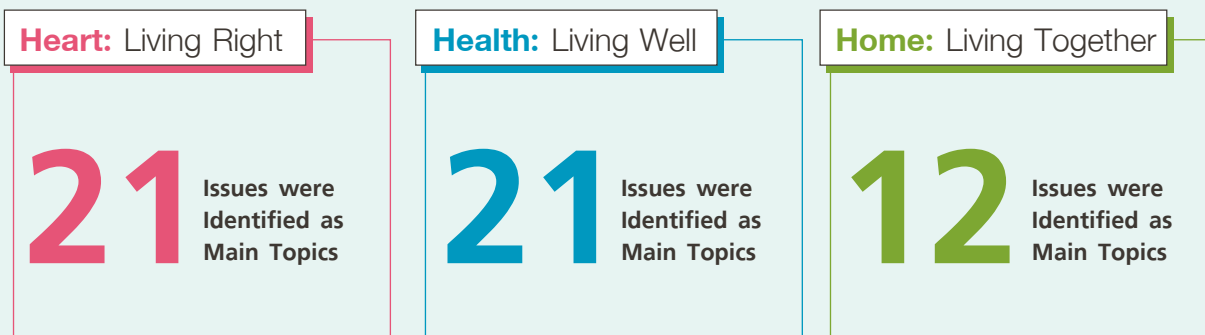
Therefore, in order to cover all relevant issues throughout the value chain, stakeholders' issues of interest as well as opinions from external expert, the Group implemented a newly established materiality assessment process in 2021:



Initial Identification of Material Issues

Upon identifying material sustainability issues, Charoen Pokphand Group analyzed the Group's value chain, activities related to the Group and stakeholders, global reporting standards and frameworks, reports of relevant associations and organizations, direction of relevant industries, and

comparable companies while also taking into account issues arising in public media in order to define the material issues. As a result, 54 material sustainability issues that are related to the Group's business operations and are of interest to stakeholders were identified as follows:



More information available in

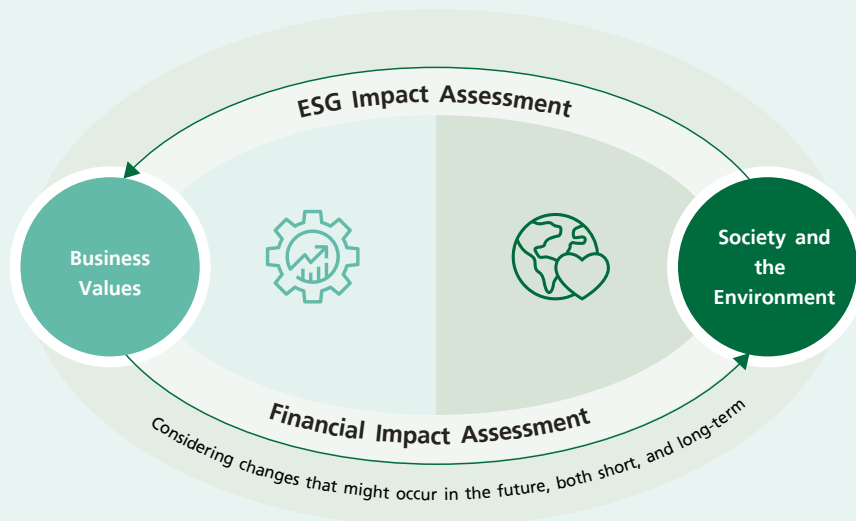
→ [Double & Dynamic Materiality Assessment Report 2022](#)

Identification of Impacts, Risks and Opportunities

In the second step, Charoen Pokphand Group conducted a study and analysis of impacts, risks and opportunities related to the Group's business operations in order to achieve a comprehensive analysis. Accordingly, the Group thoroughly inspected operations throughout the value chain, products/services, and usage process of consumers and customers. Furthermore, in order to understand potential ESG impacts, the analysis also considered both direct and indirect impacts, such as greenhouse gas emissions, resource utilization, waste generation, labor practices, human rights protection, community involvement, products/services procurement, and corporate governance guidelines.

In addition, Charoen Pokphand Group adopted the Double and Dynamic approach to assess material sustainability issues. This new methodology helped the Group to gain greater understanding of sustainability issues and changes that may occur during different circumstances and time periods.

Based on the Double Materiality concept, Charoen Pokphand Group assessed the Group's social and environmental impacts as well as social and environmental influences on the Group's growth ability. Meanwhile, the Dynamic Materiality approach empowered the Group to identify changes in material sustainability issues and stakeholders' concerns during each time period which may be a result of changes in terms of global trends, industrial risks, laws and regulations, and the Group's action plans. The assessment results have been integrated into corporate strategy revision process to ensure that the Group comprehensively considered risks and opportunities, and has the strategy that can effectively respond to changes.



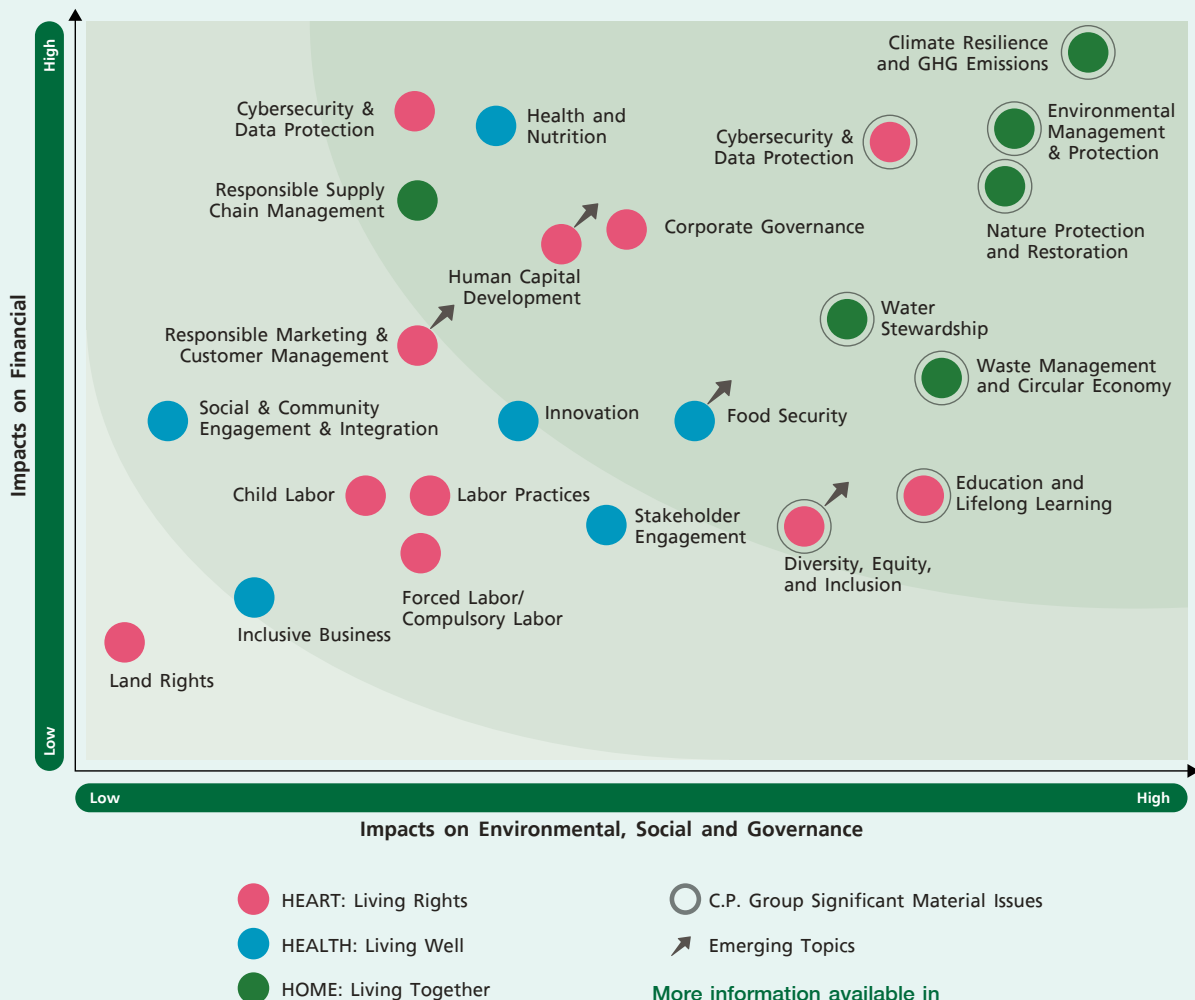
Double and Dynamic Materiality Assessment

Materiality Impact Assessment by Stakeholders

Charoen Pokphand Group has developed a materiality impact survey for stakeholders across the value chain. The survey considers the impacts of each material sustainability issue based on severity and likelihood. Upon assessing severity, the Group took into account economic, occupational health & environmental safety, and human rights dimensions as well as corporate reputation or image. In terms of likelihood,

the Group assessed both impacts that have already occurred and those that are likely to occur in the future. Additionally, to ensure transparency of the assessment process and results, the Group engaged independent third-party to conduct verification on the assessment process and results. The Assurance Statement can be found on page 256-257

Prioritization of Significant Material Issues for C.P. Group and Stakeholders



More information available in

→ [Double & Dynamic Materiality Assessment Report 2022](#)

Sustainability Strategy and Goals



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-Benefit 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 and Inequality Reduction



Leadership and Human Capital Development



Cybersecurity and Data Protection

Health: Living Well



Health and Well-being



Social Impact and Economic Contribution



Food Security and Access to Nutrition



Innovation



Stakeholder Engagement

Home: Living Together



Climate Resilience



Circular Economy



Water Stewardship



Ecosystem & Biodiversity Protection



Responsible Supply Chain Management

Enabled by Partnerships, Capability, and Culture of Sustainability

Charoen Pokphand Group conducts a review of the Group's 2030 Sustainability Strategy and Goals on an annual basis to provide assurance for the Group, subsidiaries and all stakeholders that our strategy and operations can accurately respond to global trends and stakeholder demands as well as create sustainable values and future for all. The Group has incorporated the opinions and concerns of all stakeholders, corporate vision and strategy, international sustainability standards and frameworks, analysis results of enterprise and emerging risks, and results of materiality assessment into our review process. These have enabled greater effectiveness for the Group in identifying the direction and strategy of current and future operations. In 2022, the Group's core sustainability strategy and goals focus on 3 main implementations as follows:



Actions towards 2030 Carbon Neutrality and 2050 Net Zero: The Group has taken action in the following areas:

1. Climate change operations focusing on energy efficiency, reduction of greenhouse gas emissions, reduction of air pollution, and increase of renewable energy use in production processes;
2. Ecosystem and biodiversity protection with emphasis on maintaining and increasing the forest population with no encroachment throughout the supply chain; and
3. Responsible supply chain management with focus on encouraging suppliers to align their operational directions with the Group's policies and goals as well as tracing high-risk raw materials to their sources.



Responsible Production and Consumption: The Group has taken action in the following areas:

1. Circular economy operations focusing on the reduction of waste generation from production processes, zero food waste, efficient use of natural resources, utilization of sustainable packaging to reduce plastic use and impacts from product consumption; and
2. Water stewardship highlighting on the reduction of water in production processes and water discharge to external sources.



Social Inequality Reduction: The Group has taken action in the following areas:

1. Human rights and labor practices focusing on human rights risk assessment of all business groups and tier-1 suppliers and the promotion of employee equality;
2. Education and inequality reduction focusing on raising the level of education for all genders and ages, enabling access to topics that are essential for their future lives;
3. Leadership and human capital development by providing equal opportunities for all employees to grow in their professional fields;
4. Social impact and value creation through projects that support knowledge to farmers, SMEs and vulnerable groups; and
5. Health and well-being, and food security and access to nutrition with focus on creating future products enriched with nutrition at an affordable price.

Value Creation Process

Input Factor

Financial Capital

- 1,975,000 million THB total expenses

Manufacturing Capital

- 363 production plants
- 989 animal farms and horticultural/crop farms
- 13,838 7-Eleven branches
- 2,736 hypermarkets/superstores

Intellectual Capital

- 91 R&D centers
- 28,753 million THB R&D expenses

Human Capital

- 441,606 employees
- 31 nationalities of employees
- 871 million THB training expenses
- 223,207 million THB employee-related expenses

Relationship Capital

- Relationship with stakeholders
- Membership in organizations

Natural Capital

- 52.16 million GJ energy use
- 392 million cubic meters of water consumption
- 328 thousand tons Natural renewable resources (biomass) used

Corporate Strategy

S1

New Business Platform

S2

Digital Transformation

S3

R&D/Excellence Center

S4

Global Talent & Leadership Development

S5

Investment for Growth & Competitiveness

S6

Sustainable Growth through Data & Analytic

S7

Sustainable Development & Corporate Governance

Sustainability Goals

Heart: Living Right



Health: Living Well



Home: Living Together



Analysis of External Impacts and Risks

- Rising sea levels and reduced water quality as a result of climate change on the Group's operations
- Shortage of personnel with skills matching the changing nature of future jobs
- Supply chain security
- Biodiversity loss
- Elimination of non-compostable plastic use

Value Creation Process through Charoen Pokphand Group's Operations



Values and Impacts

- + 2,902,000 million THB total sales
- + 19,186 million THB tax paid for government
- + 363 production plants certified with international standards
- + 100% of businesses certified for data security
- + 9,674 researchers and innovators
- + 646 patents and petty patents in 2022
- + 4,119 innovative products and services
- + 100% of businesses assessed for human rights risks
- + 100% of employees received training
- + 51.24% of female employees
- + 21.23 average employee training hours per year
- 29 fatalities of employee and contractor
- 82,607 employee resignations
- + 80% stakeholder engagement score
- + Establishment of a global sustainability network of more than 10 members
- + Job creation for 194,256 people
- Impact on corporate reputation
- + 1.32 million tCO₂e reduction in greenhouse gas emissions (Scope 1 & 2)
- + 1.06 million GJ increase in renewable energy use
- + 69 million cubic meters water reused/recycled
- + 0.04 tons per unit million of revenue reduction of waste from production processes
- Impact on soil, water, air and well-being of living things

Relevant Stakeholders



SDGs



Supporting the UN SDGs

In 2015, the United Nations (UN) established the Sustainable Development Goals (SDGs) with the main objective of encouraging countries around the world and the private sector to implement and accomplish the 17 goals within the specified period, between 2015 and 2030, in order to create sustainable development in all three dimensions, namely economic growth, social coverage, and environmental protection.

For Charoen Pokphand Group which operates in 21 countries and economies worldwide, the adoption and integration of the international sustainable development framework into our value chain and strategies is vital as such action not only promotes positive impacts on the global community, but also helps to ensure that the Group’s activities and operations are in accordance with established strategies. It also contributes to the comprehensive identification of risks and the formulation of effective loss prevention guidelines.

To enable Charoen Pokphand Group to continue our full support for the SDGs and answer to industrial trends, challenges and stakeholder expectations, the Group has prioritized the SDGs and targets by assessing their connection to the Group’s context. The prioritization criteria include:

- Charoen Pokphand Group’s activities along the value chain
- Charoen Pokphand Group’s strategies and plans
- Charoen Pokphand Group’s 2030 Sustainability Goals

Charoen Pokphand Group found that operations related to climate change management or SDG 13 is still behind the Group’s annual target. Furthermore, the Group recognizes the urgency of expediting education system improvement, well-being enhancement, access to quality food, and biodiversity protection. Consequently, the Group added SDG 3 Good Health and Well-being, SDG 14 Life below Water, and SDG 15 Life on Land, to the list of strategically Important Goals as well as relevant targets to cover all impacts across the supply chain.

More information available in

[Sustainable Development Goals Report 2022](#)

		CPG Activities, Strategy and Goals			Prioritization	Related Content
		CPG Value Chain	Corporate Strategy	CPG Sustainability Goals		
	SDG 1: No Poverty	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Social Impact and Economic Contribution</div></div>
	SDG 2: Zero Hunger	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Food Security and Access to Nutrition</div><div>• Health and Well-being</div></div>
	SDG 3: Good Health and Well-being	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Food Security and Access to Nutrition</div></div>
	SDG 4: Quality Education	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Education and Inequality Reduction</div><div>• Leadership and Human Capital Development</div></div>
	SDG 5: Gender Equality	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Human Rights and Labor Practices</div></div>
	SDG 6: Clean Water and Sanitation	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Water Stewardship</div></div>
	SDG 7: Affordable and Clean Energy	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Climate Resilience</div></div>
	SDG 8: Decent Work and Economic Growth	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Human Rights and Labor Practices</div><div>• Social Impact and Economic Contribution</div></div>
	SDG 9: Industry, Innovation and Infrastructure	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Innovation</div></div>
	SDG 10: Reduced Inequalities	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Human Rights and Labor Practices</div></div>
	SDG 11: Sustainable Cities and Communities	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Climate Resilience</div></div>
	SDG 12: Responsible Consumption and Production	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Climate Resilience</div><div>• Circular Economy</div><div>• Responsible Supply Chain Management</div></div>
	SDG 13: Climate Action	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Climate Resilience</div></div>
	SDG 14: Life below Water	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Ecosystem and Biodiversity Protection</div></div>
	SDG 15: Life on Land	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Ecosystem and Biodiversity Protection</div></div>
	SDG 16: Peace, Justice and Strong Institutions	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Corporate Governance</div></div>
	SDG 17: Partnerships for the Goals	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div>• Stakeholder Engagement</div><div>• Cybersecurity and Data Protection</div></div>

Strategically Important Goals

3 GOOD HEALTH AND WELL-BEING



The Group aims to upgrade health and hygiene levels with focus on food research and development as well as essential medical supplies

48,848 persons

have access to “MORDEE” platform

4 QUALITY EDUCATION



The Group focuses on expanding borderless communication networks along with developing knowledge and skills needed for the future world to enable equal growth for all

45,522,730 persons

Children, youths and adults supported with access to education and necessary skill development

8 DECENT WORK AND ECONOMIC GROWTH



The Group performs human rights risk assessment across the Group and plans to expand its coverage to the entire supply chain.

0 case

Complaints about illegal employment within the Group and supply chain

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



The Group provides opportunities for suppliers and partners to participate in developing products that are eco-friendly and reduces natural resources consumption

94.53%

Percentage of packaging that are reusable, recyclable and compostable

13 CLIMATE ACTION



The Group targets to achieve net-zero emissions by 2050. Relevant action plans include alternative energy transition, renewable energy in the organization, and reduction of GHG emissions in the value chain

1.32 million tons

Carbon dioxide equivalent to reduced GHG in 2022

14 LIFE BELOW WATER



The Group collaborates with partners from the public, private and community sectors on marine resources conservation

17 provinces

Coastal provinces in Thailand with marine resources conservation projects

15 LIFE ON LAND



The Group has announced the Zero Biodiversity Impact Target and has been accelerating the rehabilitation process and protection of forest resources through partnerships

8,294,180 trees

Number of trees planted worldwide

17 PARTNERSHIPS FOR THE GOALS



The Group places great importance on becoming a member of national and international sustainability networks in order to advance towards a sustainable and better future for all

10 organizations

Organizations on sustainability with which the Group has affiliation and continued cooperation

Sustainability Policy and Framework



Environmental

Charoen Pokphand Group has established policies and guidelines at the Group level, including various operational frameworks that cover materiality issues in the environmental, social and governance aspects to guide subsidiaries and employees of the Group towards a common direction towards executing sustainability operations and creating good operational standards for suppliers and business partners. The Group has employed various forms of communications to convey the principles specified in the policies, guidelines and operating framework to subsidiaries, employees, and suppliers for their acknowledgement and strict implementation, such as training, e-mails, meetings, persons in charge, and supervisors, and more. Furthermore, to boost stakeholder confidence and trust, the Group has assigned relevant internal departments or a third party to conduct regular reviews of guidelines and performance of the Group, subsidiaries and relevant suppliers. The process shall be carried out with transparency, accountability and in compliance with standards.

Charoen Pokphand Group has established the Environmental Policy and Guidelines covering a wide range of vital issues, such as climate change adaptation, water stewardship, reduction of food loss and food waste, sustainable packaging, circular economy, as well as ecosystem and biodiversity protection, to ensure that operations carried out by the Group, our suppliers and business partners do not cause negative impacts and are ready to support the achievement of the Group's Sustainability Goals as well as international environmental goals with full efficiency.

Environmental Policy and Guidelines

Charoen Pokphand Group has established the Environmental Policy and Guidelines based on international standards and practices to provide employees at all levels and suppliers with operating guidelines that take into account the environment, management processes for natural resources, the environment and climate, and proper management of waste and post-consumer products. In addition to the Environmental Policy and Guidelines, the Group has also established the following sub-policies to promote operational efficiency:

- [Climate Resilience](#)
- [Water Stewardship](#)
- [Reduction of Food Loss and Food Waste](#)
- [Waste Management](#)
- [Air Quality Management](#)
- [Circular Economy](#)
- [Ecosystem and Biodiversity Protection](#)
- [Sustainable Packaging](#)
- [Product Stewardship](#)
- [Hazardous Chemicals and Substances Management](#)



Social

Ensuring the safety and well-being, equal and equitable treatment, and strong mental and physical health of employees of Charoen Pokphand Group, suppliers and business partners is one of the Group's sustainability goals. Therefore, to enable all parties to respond to global trends under a common direction, social policies and guidelines have been developed and enforced throughout the organization and covering our contractors, suppliers and business partners.

- Human Rights and Labor Practices
- Safety, Occupational Health and Workplace
- Discrimination and Harassment Prevention
- Diversity, Equality and Inclusion
- Foreign Workers Recruitment
- Stakeholder Engagement

In addition, the Group has prepared related operational guidelines, management standards and rules to serve as clear and accurate guidelines for employees, contractors, suppliers and business partners in accordance with the established principles.

- Human Rights Impact Assessment Guideline
- Safety, Occupational Health and Environment Management Standards
- Life Saving Rules



Governance

Integrity and ethics are at the heart of Charoen Pokphand Group's business operations. The Group has established the Code of Conduct to enable employees at all levels to work with ethics, transparency and equality. We have also established the Supplier Code of Conduct to align the direction of supplier operations and prevent risks along the value chain. In order to reaffirm the Group's commitment to transparency, the Group has formulated the Code of Conduct as well as other policies and guidelines:

- Code of Conduct
- Supplier Code of Conduct
- Sustainability
- Conflicts of Interest
- Gifts and Benefits
- Whistleblowing
- Information Management
- Anti-Bribery and Anti-Corruption
- Anti-Money Laundering
- Personal Data Protection
- Risk Management
- Information Security
- Sustainable Procurement

Cooperation for Sustainable Development

Charoen Pokphand Group recognizes that collaboration and partnerships with the government, private and public sectors will empower and accelerate the achievement of our sustainability goals. The Group also promotes the creation of shared values to offer our nation, its people, the Group's operations and that of our partners a "Better Tomorrow". Throughout the course of our business operations over the past century, the Group has built partnerships in business and sustainable development with various sectors. In doing so, the Group carefully studies such partner's vision, strategies, goals and operational guidelines to analyze whether the Group and the partner share common operational goals and whether cooperation would benefit both our operations, enhance environmental integrity preservation and promote the equal well-being of the world's population.



United Nations Global Compact (UNGC)

Main Objective

UNGC is an the United Nations' initiative that aims to encourage companies around the world to become more sustainable and socially responsible. The principles of UNGC cover issues on human rights, labor, environment and anti-corruption.

Charoen Pokphand Group's Collaborative Approach

The Group participated in two UNGC Action Platforms, namely Decent Work in Global Supply Chains and Climate Change Impacts on Health. Furthermore, the Group is also the founding member of the Global Compact Network Thailand (GCNT) which aims further disseminate the principles of the UNGC.



The World Business Council for Sustainable Development (WBCSD)

Main Objective

WBCSD's primary objective is to promote sustainable business practices with emphasis on three main goals, which are mobilizing the business sector to focus on addressing the problem of inequality, building cooperation to identify problems and build collaboration for corrective actions, and creating a platform to exchange opinions and formally address the issue of inequality.

Charoen Pokphand Group's Collaborative Approach

To be a part of the global community in advancing towards a society by incorporating the three dimension of sustainable development, namely economic, social and environmental. The Group also joined The Business Commission to Tackle Inequality (BCTI) and the Food Reform for Sustainability and Health (FReSH).



World Economic Forum (WEF)

Main Objective

WEF is an international organization focusing on activities to suggest directions for economic, social and developmental policy-making at the national and global levels through a network of political, business and civil society leaders.

Charoen Pokphand Group's Collaborative Approach

To share and exchange knowledge and strategies on the topics of global economic direction, business strategy, digital technology development, and various aspects of sustainable development, especially the economic development of countries where the Group operates in order to increase access to essential resources and reduce social inequality.



Global Compact Network Thailand (GCNT)

Main Objective

GCNT was founded to bring sustainable practices to Thai businesses and stakeholders. Its work focuses on advancing the accomplishment of UN and SDG goals, with an emphasis on partnership development and innovation development.

Charoen Pokphand Group's Collaborative Approach

To be a member of Thailand's private sector in moving our society toward attaining the SDGs and to serve as a hub for mixing ideas and practices in order to create a more unified society.



Connex ED

Main Objective

Connex ED is a collaborative project between the government, private and public sectors in driving Thailand's education system to meet international standards and jointly build the foundation for the country's sustainable development.

Charoen Pokphand Group's Collaborative Approach

To collaboratively drive and raise the standards of basic education and leadership development, increase competitiveness and reduce inequality for people in the society sustainably through education which is considered the foundation of national development.



Digital Council of Thailand (DCT)

Main Objective

DCT was established to call for collaboration between public, private and people in the development of digital competitiveness, and upskill digital skill for human resources, to drive a sustainable development for the country.

Charoen Pokphand Group's Collaborative Approach

To work together to create a digital platform that can harness the power of ideas from both the business and public sectors. Ready to collaborate with the government to advance technology and Industry 4.0, which will benefit businesses. Capability to adapt to change and become the country's technological leader.

A close-up photograph of several hands of different skin tones coming together to form a heart shape. The hands are positioned in the center of the frame, with fingers and thumbs touching to create the heart's outline. The background is a soft, out-of-focus green, suggesting an outdoor setting. A white rectangular frame is superimposed over the hands, highlighting the heart shape.

HEART

Living Right

To reaffirm our commitment to drive all dimensions of sustainability for a “Better Tomorrow”, Charoen Pokphand Group has always prioritized in building a stable and strong foundation. A good governance process, structure, honesty, ethics and transparency are, thus, the heart of our business operations in 21 countries and economies worldwide. Another core mission is to uplift the standard of living for people, create equality and eradicate human rights violations throughout the value chain. To do so, the Group focuses on education and the enhancement of knowledge, abilities and new skills for youths. We also emphasize leadership and human capital development of our employees, contractors and suppliers in order to reduce inequality. Furthermore, we place importance in cybersecurity and data protection to enable us to grow sustainably together.

////////////////////

Corporate Governance	62
Human Rights and Labor Practices	74
Education and Inequality Reduction	88
Leadership and Human Capital Development	98
Cybersecurity & Data Protection	108

Value Creation Process

Input Factor

Manufacturing Capital

- 100% of businesses received information security certifications

Human Capital

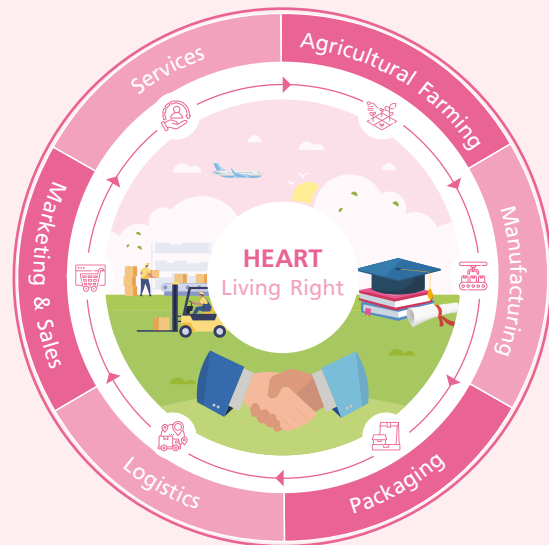
- 441,606 employees
- 31 employee nationalities
- 871 million THB training expenses
- 223,207 million THB employee-related expenses

Relationship Capital

- Establishment of a stable relationship between the Group and all stakeholders
- Partnership with various sectors to build a sustainable society and organization

Value Creation Process through Charoen Pokphand Group's Business Operations

Charoen Pokphand Group's Value Chain



Activities

Charoen Pokphand Group focuses on establishing good corporate governance standards both within and beyond the organization, covering suppliers and business partners, to yield maximum benefit for the country, the people and our employees. Furthermore, in order to reduce inequality and achieve social equality, the Group emphasizes protecting human rights, upgrading occupational health and safety, improving basic education, and supporting the development of new knowledge as part of our key mission to build a "Better Tomorrow". Besides establishing the basis of operations and developing human capital, another core mission of the Group in this age of digital and technology lies in data protection and security of the Group, suppliers, partners and other stakeholders.

Values and Impacts



Intellectual Capital

- + Number of employees with STEM knowledge **37,845 positions**



Human Capital

- + Number of complaints related to the Code of Conduct and ethics decreased by **50%** compared to 2021
- + **100%** of businesses assessed for human rights risks every 3 years, and 60% assessed on annual basis
- + **100%** of employees received training
- + **51.24%** of female employees in the Group
- + **21.23 average training hours** per employee per year
- **29** fatalities of employee and contractor
- **182,067 employee** resignations



Relationship Capital

- + Employee engagement score at **80%**

Relevant Stakeholders



Farmers



Communities and societies



Suppliers



Creditors



Employees and families



NGOs



Governments



Competitors



Media



Shareholders and investors



Customers and consumers

SDGs



3.6



4.1

4.3

4.4

4.5

4.7

4.A

4.B

4.C



5.1

5.2

5.5



8.5

8.6

8.7

8.8



9.C



10.1

10.3

10.4

10.7



12.6



16.2

16.5

16.7

16.B



17.6

17.8

Corporate Governance

Charoen Pokphand Group's business context is one of diversity as we operate in 21 countries and economies worldwide under complex and uncertain business environments that change constantly and rapidly. Accordingly, Charoen Pokphand Group must take into account the different laws and regulations imposed by each country and economy. As such, the Group faces a key challenge in ensuring stakeholders, especially the government sector, investors and the society, that our operations will not violate any pertinent laws and that we are ready to create a "Better Tomorrow" for all sectors. In order to enable operational efficiency and the equal delivery of long-term sustainable value to all stakeholders, the Group has always adhered to ethical, transparent, honest and responsible corporate governance practices. The Group has also integrated corporate governance, risk management and compliance operations in order to enable systematic and efficient management, increase competitiveness and promote positive performance in the long run. At the same time, we aim to create value for the environment, society and other stakeholders in order to navigate our business towards sustainable growth.



Supporting the SDGs



12.6



16.5
16.7
16.B

More information available in

→ [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Executive Board Performance Evaluation

Full Board Evaluation

86%

Individual Evaluation

84%

Raising Awareness on the Code of Conduct for: Directors, Executives and Employees of Subsidiaries

Communicated

100%

Acknowledgement and Complied

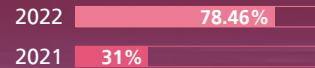
100%

Tested

100%

Goals and Progress

All businesses implement
a corporate governance
impact scoring assessment



Future Workplans



Integrate the digital platforms of corporate governance, risk management and compliance systems to enable information sharing on a common system, leading to operational efficiency.



Extend risk management performance to cover all business units.



“Corporate Governance is the heart of business operation at Charoen Pokphand Group. It is a foundation for development of quality product and creation of credibility. These promote continuous and sustainable growth until present.”

Soopakij Chearavanont

Chairman, Charoen Pokphand Group

Corporate Governance for Sustainable Growth

Charoen Pokphand Group believes that good corporate governance is the cornerstone of business operations. It will establish an efficient management system, increase competitiveness and create stakeholder trust and confidence, which will lead the business to long-term growth.

The Board of Directors determines the Group's operational strategies in accordance with the established vision. This also includes the implementation of corporate governance and sustainability principles across the Group. The Board of Director assigns the Executive Board to oversee that business operations, corporate governance, risk management and internal control, compliance and audits meet the established goals. Meanwhile, the Corporate Governance, Risk and Audit Steering Committee assists in screening operations relating to corporate governance, risk management and internal control. Additionally, the Compliance Steering Committee is in charge of inspecting compliance-related operations.

Board of Directors

The Board of Directors consists of 11 directors, 10 of whom are non-executive directors, and 1 executive director who holds the position of Chief Executive Officer. All directors are diverse in terms of skills, knowledge, experience, expertise, age, gender, ethnicity, nationality, and domicile. This diversity is crucial to strategy planning, corporate management and decision-making on various issues, including sustainability.

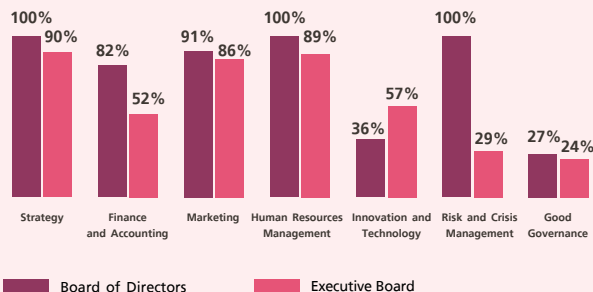
Executive Board

Besides the Board of Directors, Charoen Pokphand Group has also appointed an Executive Board to ensure that the Group's operations are in accordance with the established strategies, guidelines, policies and guidelines. The Executive Board is composed of the Chief Executive Officer and the top management of Charoen Pokphand Group Company Limited as well as our listed and non-listed subsidiaries. Like the Board of Directors, the Executive Board is diverse in terms of skills, knowledge, expertise, age, gender, ethnicity, nationality, domicile and experience in various fields of work. This enables them to supervise the Group's multifaceted business operations with efficiency.

Knowledge and skill of the Board of Directors and the Executive Board

In order to reassure stakeholders that Charoen Pokphand Group is capable of handling new challenges and is equipped with strategies that are in line with global trends and relevant industry trends, the Group has developed the Board Skill Matrix for both the Board of Directors and the Executive Board. Based on the Board Skill Matrix, 100% of the Board of Directors possess knowledge, competency and skills that are relevant to the Group's business operations.

Skill Matrix of the Board of Directors and the Executive Board

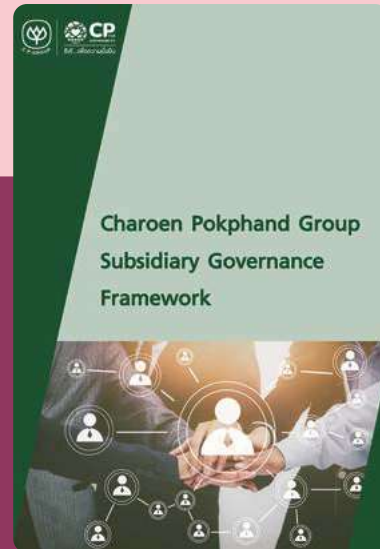


CASE STUDY

Charoen Pokphand Group Subsidiary Governance Framework

Charoen Pokphand Group has formulated the Charoen Pokphand Group Subsidiary Governance Framework as a guideline for our subsidiaries in developing their own corporate governance system. The Framework also enables them to acknowledge their duties and responsibilities towards the parent company. The Group has held training for 350 employees from our subsidiaries in Thailand, China and other countries with focus on the topics of:

- Charoen Pokphand Group corporate governance
- Corporate governance system
- Governance of parent company
- Governance of subsidiaries



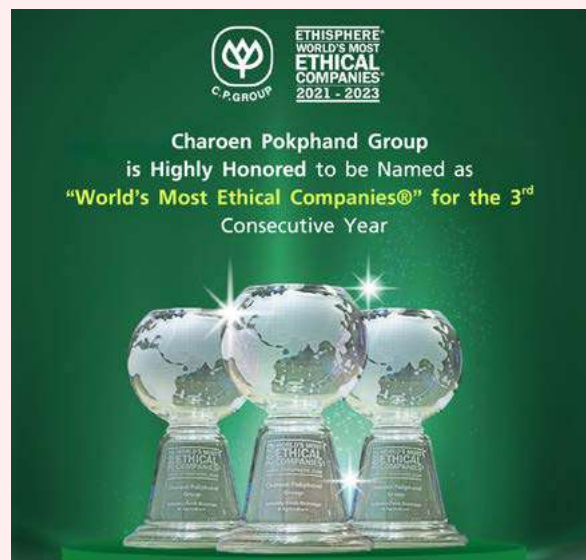
Corporate Governance

Charoen Pokphand Group is committed to aligning our corporate governance with international standards. We also ensure that it is implemented under a common standard throughout the Group and subsidiaries, while emphasizing the establishment of a governance structure and process. In 2022, the Group has taken the following actions to achieve tangible outcomes:

- **Formulating the Charoen Pokphand Group Subsidiary Governance Framework** and organizing training to educate and enable subsidiaries to adopt the Framework in establishing their own governance structure, leading to the alignment of corporate governance, risk management and compliance under a common framework across the Group.
- **Establishing and reviewing eight Group policies and guidelines** to ensure alignment with the Group's strategy, target and sustainability direction. Opinions of executives and representatives from all subsidiaries were integrated into policy and guidelines development processes, in order to create understanding, acceptance and ability to implement the policy in accordance with roles and responsibilities as stated in the policy. The policy can be used to establish strategies, targets and action plans for subsidiaries, as well as monitoring and auditing the compliance with the policy. Moreover, subsidiaries must develop performance reports, in order to promote continuous improvement and achievement of corporate and sustainability strategies and targets.
- **Organizing training on Group policies and guidelines for trainers from subsidiaries (Train the Trainers)** in Thai, English and Chinese, as well as providing a handbook for trainers to facilitate communication with executives and employees of our subsidiaries. This is to enhance understanding and the ability to efficiently and tangibly implement the policies and guidelines.

- **Developing a digital platform** to enable the Group to efficiently monitor the implementation of policies and guidelines of the subsidiaries. This leads to systematic governance, and allows employees to learn and effectively implement policies.
- **Supporting knowledge in improving corporate governance to subsidiaries**, such as providing the form to evaluate the performance of the governance body, arranging workshops on fraud and corruption risk assessment, and developing ethics and compliance performance survey forms as information for improving corporate governance operations in subsidiaries, and more.

Charoen Pokphand Group constantly instills a corporate culture of ethics and compliance by fostering ethical and honest work behaviors among executives and employees. In addition, the Group also communicates with stakeholders along the value chain to raise awareness of ethical business practices. As a result, the Group was named one of the "World's Most Ethical Companies®" for the third consecutive year by Ethisphere.



More information available in

→ [Corporate Governance Report 2021](#)

CASE STUDY

Train the Trainer: Group-level Policy

Charoen Pokphand Group has organized training sessions on various policies and guidelines for representatives of subsidiaries in order to facilitate knowledge and understanding on their content and enable the knowledge to be passed on to employees of each subsidiary. In 2022, the Group held trainings on the following policies and guidelines:

Policies and Guidelines	Conflict of Interest	Sustainability	Environment	Human Rights & Labor Practices and Sub-policies	Supplier Code of Conduct and Sustainable Sourcing
Participating representatives from subsidiaries in Thailand, China and other countries	461 people	302 people	389 people	354 people	525 people



Managing Risks to Achieve Group Objectives

Enterprise Risk Management Process

Operating a business amidst various risk factors, including global economic downturn, international political conflicts and raw material scarcity, may result in business disruption which has widespread negative impacts on sufficiency of food for living and employment from upstream to downstream, among other impacts. In order to manage unpredictable incidents, Charoen Pokphand Group has implemented Enterprise Risk Management (ERM) consistent with business factors and context based on the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

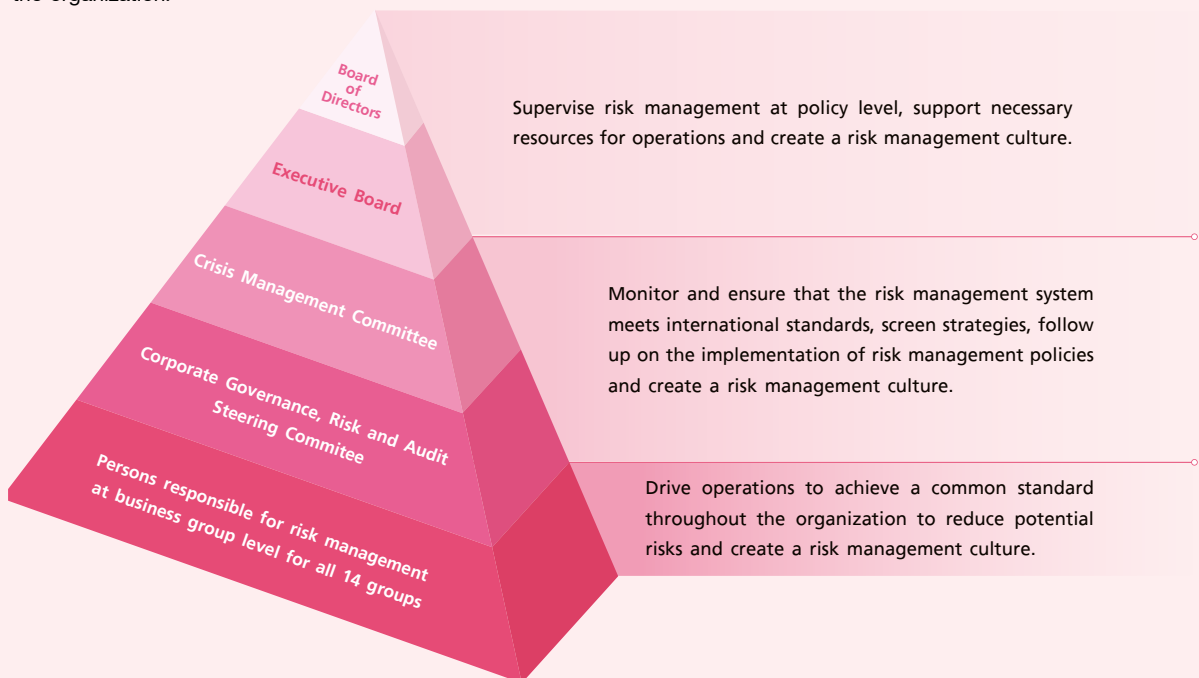
Furthermore, the Group has also conducted an analysis of risk factors covering all aspects of operations as well as the Group's current and future value chains:

- **Enterprise Risk:** Strategy, finance, operations, compliance, and corporate reputation
- **ESG Risk:** Environmental restoration, ecosystem protection, human rights, and labor protection

In addition, to manage the risks that are related to the Group's activities, roles and business processes, and at the same time reducing the lost from the risks, the Group has responsible departments to conduct risk-based assessments on a regular basis.

Enterprise Risk Management Structure

Charoen Pokphand Group's enterprise risk management structure is overseen at the policy level by the Board of Directors and the Executive Board. Furthermore, the Group has appointed a specific committee to offer advice on corporate risk management operations as well as assigned persons responsible for risk management at the business group level to drive operations throughout the organization.



Establishing a Risk Management Culture

Charoen Pokphand Group faces a variety of risks. Therefore, each and every risk must be systematically managed in accordance with risk management policies and framework throughout the organization in order to ensure that all risks are maintained at a level that is appropriate to the business size and type. There must be no risk of illegal conduct contrary to laws and regulations, or these related to corporate reputation. Meanwhile, business risks that have been managed must be carefully monitored so that their levels do not exceed the specified risk appetite.

The established risk appetite serves as a framework in fostering a culture and organizational behaviors in dealing with risks. It will enable Charoen Pokphand Group to overcome challenges and achieve corporate goals. Furthermore, the Group has emphasized building a risk management culture throughout the organization with the participation of executives and employees at all levels by continuously reinforcing awareness and understanding of risks and management. Likewise, the Group has also incorporated sustainability risks into raw material sourcing, placing importance on the acquisition of raw materials from a reliable and verifiable source that does not violate any requirements or laws, especially those relating to the environment and human rights. In addition, risk are considered in the development and production of new products in order to reduce social and environmental impacts along the value chain as well as to accurately respond to the needs of the market and consumers.

Charoen Pokphand Group provides employees at all levels with channels to submit complaints or observations about incidents or actions that could pose risks to the organization. Employees can submit complaints via the Group's complaints channels, directly through their supervisors or to staff from the enterprise risk function.

CASE STUDY

Risk Assessment and Risk Control Self-assessment Workshop

Charoen Pokphand Group held a workshop on risk assessment and risk control self-assessment to enable executives and heads of units responsible for risks to analyze the root cause of risks and evaluate control points throughout relevant processes, such as procurement process, sales process, and more.



Compliance for Transparency



Compliance Governance Process

Charoen Pokphand Group emphasizes that our employees operate in accordance with the Six Core Values in order to allow the Group to sustainably yield benefits to the country, the people and our employees. Among the Six Core Values are ethics and honesty. For over a century, the Group has conducted our business with transparency, fairness and accountability. We intend to continue improving our practice and enable all stakeholders to equally benefit from our operations.

Charoen Pokphand Group has composed the Code of Conduct to serve as a guideline of good and ethical operations for directors, executives and employees. We have communicated the Code of Conduct to employees at all levels who have signed their acknowledgement and commitment to adhere to such operational rules. In addition, the Group has also encouraged all employees to abide by pertinent laws and regulations in the strictest of manners.

Fostering a Culture of Organizational Fairness

Charoen Pokphand Group places utmost importance on operating with fairness and transparency. For this reason, the Group has continuously communicated information relating to changes in regulations, laws and other relevant issues to provide employees with sufficient knowledge and the ability to apply such knowledge correctly. Nevertheless, incidents of non-compliance can still occur. In such cases, penalties are clearly defined in the Code of Conduct or in relevant policies and guidelines.

Furthermore, in order to support a culture of organizational fairness, the Group maintains records of employee non-compliance and employs them as a factor of consideration in the annual performance evaluation of all employees. The results of the evaluation will determine career promotion and compensation for each individual employee. In addition, the Group also encourages all employees to take part in whistleblowing when they encounter any incidents of non-compliance.

Compliance Governance Structure

Charoen Pokphand Group has appointed the Compliance Steering Committee to oversee, regulate and monitor the organization's performance in compliance. Furthermore, the Group has also established the Corporate Compliance Office (CCO) to take charge of monitoring changes in the requirements, regulations and laws of each country where the Group operates and communicate such changes to executives and employees to ensure operational consistency

throughout the Group and build stakeholder confidence. Charoen Pokphand Group has also established and performed regular reviews of procedures relating to the management of personal information, grievances and investigations. In addition, various information have been communicated to employees and relevant individuals, such as the Personal Data Protection Act, conflict of interest, and whistleblowing.

10 Guidelines to Prevent Conflict of Interest



1. Do not influence or use authority to seek benefits
2. Do not use asset, personnel and business opportunity
3. Do not accept or offer gift
4. Do not take advantage over work hours
5. Do not disclose company's confidential information
6. Do not participate in activities that belong to competitor companies
7. Do not disseminate company's information that has not yet been publicly disclosed
8. When conducting transaction with affiliated companies, it must be made under general marketing term and as general third party
9. Do not participate in consideration of agenda related to one stake, and abstain from voting
10. Disclose conflict of interest information on annual basis, or whenever changes occurred.

Example of Conflict of Interest



1. Using authority to assist friend or conduct business transaction with the company
2. Using company's asset for own benefit
3. Accepting gift or benefit from company's competitor
4. Accepting part-time job or doing personal work during work hours
5. Using internal information for own benefit
6. Providing consultation to competitor
7. Participating in the selection of supplier with whom he/she is involved

Anti-Corruption

Charoen Pokphand Group recognizes the significance of anti-corruption practices. Not only do fraud and corruption damage corporate reputation, but it also damages stakeholder confidence and trust which directly affects the Group's growth. For this reason, the Group has developed and communicated the **Anti-Bribery and Anti-Corruption Policy and Guidelines** to reassure all stakeholders that the Group implements zero tolerance on all forms of fraud and corruption.

In order to prevent potential fraud and corruption risks, all Group directors, executives and employees must adhere to the guiding principles prescribed in the Anti-Bribery and Anti-Corruption Policy and Guidelines:

- Do not offer or accept gifts that may affect any decision making.
- Do not make facilitating payments to expedite operations.
- Charitable contributions and sponsorships must be transparent and verifiable.
- Political contributions must be transparent and verifiable.

Grievances

Receiving complaints is an important aspect of compliance. Charoen Pokphand has launched a complaints channel for all stakeholders on the Group's website. Furthermore, the Group has also formulated the **Whistleblowing Policy and Guidelines** to provide instructions for both complainants and complaint recipients. The Policy and Guidelines specifies a clear, honest and transparent complaint handling process that meets international standards.

In addition to our online channel, stakeholders can also submit complaints by telephone or correspondence to the Group. Information on the complainants will be protected according to international non-retaliation standards.

In 2022, Charoen Pokphand Group received 17 cases of complaints relating to the Code of Conduct, ethics and other relevant issues. Out of this total, seven cases were proven guilty and were penalized in accordance with the Code of Conduct and the Zero Tolerance Policy, such as verbal warnings or dismissals.

Charoen Pokphand Group attaches great importance to operating in line with laws, regulations and requirements relating to the environment as well as strictly monitoring and controlling impact on communities and society. As a result, there have not been cases of significant violations* of environmental regulations or laws.

* Violations of environmental regulations or laws with fines exceeding USD 10,000.

Number of Complaints Relating to Employee Misconduct and Management Measures in 2022

	2022				Management Measures			
	No. of Cases	Under Investigation	Substantiated cases	Non-Substantiated cases	Verbal Warning	Written Warning	Suspension	Dismissal
Complaints Relating to Ethics and Morality (case)								
Fraud	3	2	-	1	-	-	-	-
Conflict of Interest	5	3	-	2	-	-	-	-
Non-compliance	7	-	5	2	3	2	-	-
Discrimination	-	-	-	-	-	-	-	-
Harassment	1	-	1	-	1	-	-	-
Corruption	1	-	1	-	-	-	-	1
Insider Trading	-	-	-	-	-	-	-	-
Anti-competitive Behavior	-	-	-	-	-	-	-	-
Complaints Relating to Information Security (case)								
Violation of Customer Personal Data	-	-	-	-	-	-	-	-
Total (case)	17	5	7	5	4	2	-	1

Remark: The number of complaints showed in the table are the numbers that received through Charoen Pokphand Group's website:
<https://grc.cpgroupsustainability.com/GRC/Whistleblower/WBForms/GlobalWB>

More information available in

➔ [Details on Violations of the Code of Conduct and Ethics](#)

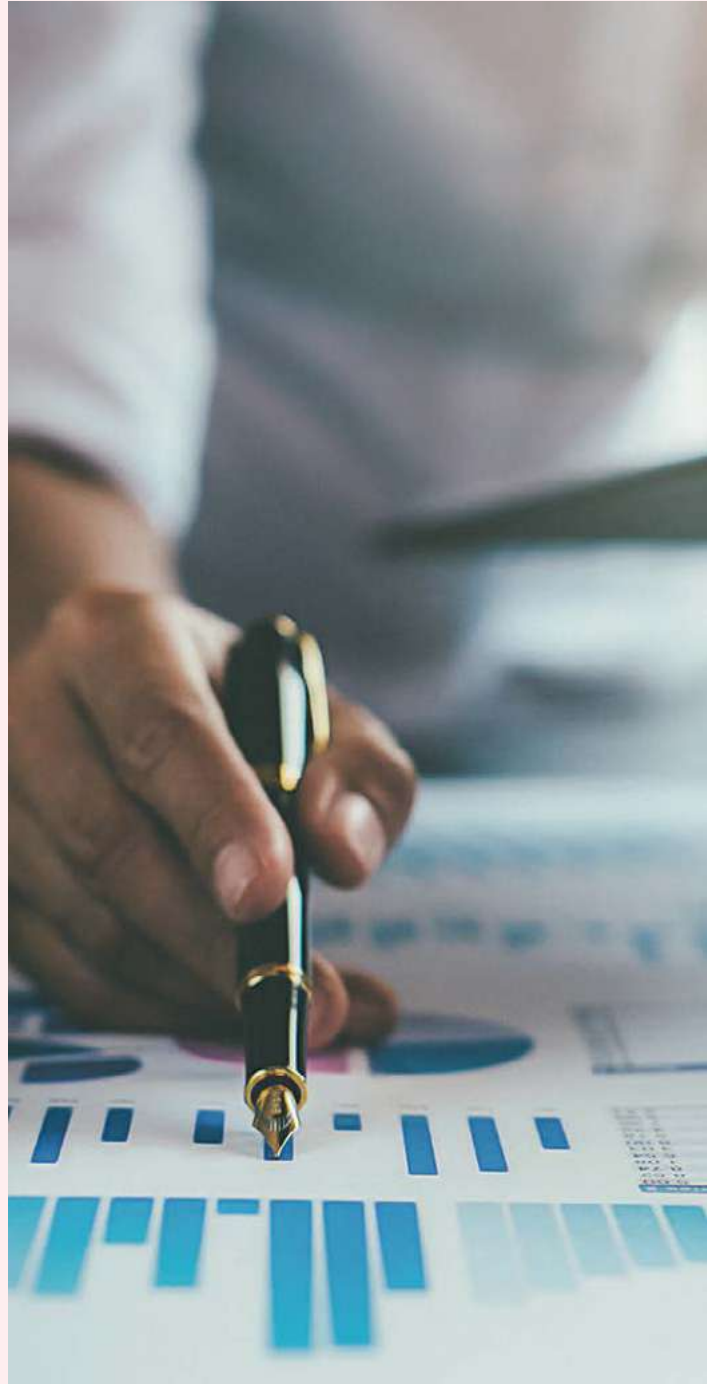
Auditing for Transparent and Fair Corporate Governance

Charoen Pokphand Group Compliance Audit 2022

Charoen Pokphand Group recognizes the importance of a Group-wide anti-corruption effort and does not limit it to only our listed subsidiaries. Therefore, during the first and second quarter of 2022, the Group has audited the effectiveness of the implementation of the Anti-Bribery and Anti-Corruption Policy and Guidelines by our non-listed subsidiaries. The audit results were reported to the Corporate Governance, Risk and Audit Steering Committee to enable continuous improvements in compliance at all levels through to the Group's operational level as well as enhance third party management in order to effectively tackle corruption and be ready to take on the challenges of today's fast-changing world.

In this regard, the key points of improvement in terms of compliance include:

1. Assessing and reviewing corruption risks in Thailand and overseas where the Group operates.
2. Training to enable proper and effective practice at all levels.
3. Controlling, verifying, promptly reporting, establishing and enforcing preventive measures.
4. Strict enforcement within the Group and in third party management to deter corruption and demonstrate its magnitude by the top management (Tone from the Top).



Human Rights and Labor Practices

Over the years, Charoen Pokphand Group has been faced with challenges from various factors, such as climate change, resource scarcity, etc., which have resulted in new human rights impacts, including community rights and pollution, labor rights and access to clean technology, and access to appropriate natural resources for living. As such, preventive actions alone may not be sufficient; therefore, human rights remedies must be integrated across multiple dimensions of sustainability to correspond with impacts that have become more complex. Accordingly, the Group has revised relevant policies and guidelines as well as extended human rights governance to suppliers and partners to reduce human rights impacts along the value chain and enhance social equality. In addition, ensuring that the Group's employees and contractors have knowledge, competency and skills that are suitable to carry out operations with full efficiency and safety is still a critical goal in an era where more new technologies are being employed. This will no doubt affect labor-based work. Thus, developing workers to possess skills in line with future work characteristics and improving occupational safety measures are key missions in achieving a Just Transition.

Supporting the SDGs

3 GOOD HEALTH AND WELL-BEING



3.6

5 GENDER EQUALITY



5.1

5.2

5.5

8 DECENT WORK AND ECONOMIC GROWTH



8.5

8.6

8.7

8.8

10 REDUCED INEQUALITIES



10.3

10.4

10.7

More information available in

→ [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Employee Gender Diversity

Male **49%**
Female **51%**

Lost Time Injury of Employees and Contractors

for employees declined by **2%** from 2021
for contractors increased by **35%** from 2021

Occupational Fatalities

for employees declined by **21%** from 2021
for contractors increased by **50%** from 2021

Fatalities of freight vehicle drivers of the Group and suppliers

14 case

Goals and Progress

All businesses conduct human rights impact assessment and Tier 1 high-risk suppliers periodically

2022 **100%**
2021 **100%**

Future Workplans



Strengthen human rights risk management and remedies.



Promote a safety culture by allowing leaders to be role models in safety operations.



Expand scope of fleet safety management to other countries.

Protecting Human Rights Throughout the Value Chain



Human Rights Management Framework

Charoen Pokphand Group has been working intensively to protect human rights along the value chain. Among our numerous endeavors is the formulation of a comprehensive **Human Rights and Labor Practices Policy and Guidelines**, which features fair labor practices, such as prohibiting forced labor and child labor, providing safe working environment, and respecting labor rights to freedom of association and collective bargaining, and more. Furthermore, the Group has also implemented **human rights due diligence, human rights risk assessment**, and human rights risk management and remedial measures.

Nevertheless, the Group continues to encounter cases of human rights violations over the past years, most of which occurred within the operations of our raw material suppliers. Therefore, in order to efficiently increase the intensity and extend the scope of our human right efforts to non-tier 1 suppliers, the People Steering Committee, comprising representatives from various business groups, assigned the Human Rights Working Group to improve the Supplier Governance Guidelines and the Diversity & Inclusion Best Practices in 2022.

Furthermore, the Working Group has set a supplier assessment criteria that is in line with the human rights impacts that have occurred as well as potential future risks:

- Forced labor and foreign workers
- Environmental pollution affecting human rights
- Occupational health, safety and work environment
- Diversity, equity, and inclusion
- Discrimination

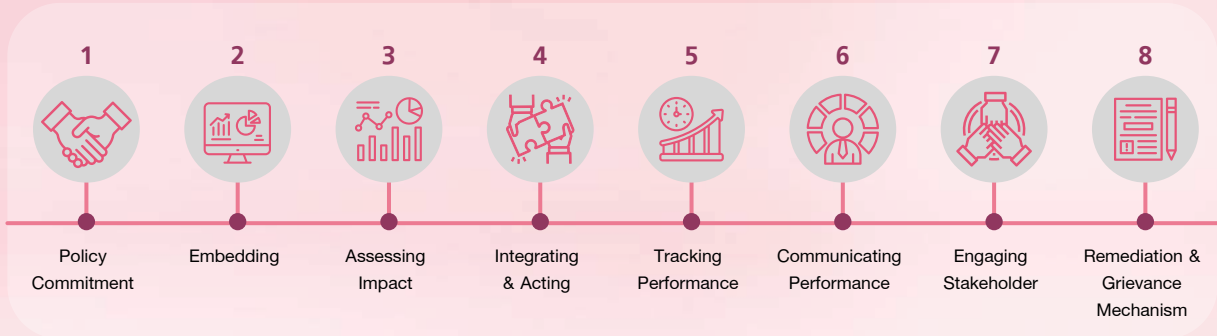
The Working Group has assigned the relevant departments to conduct trainings for suppliers to create understanding of this new assessment criteria. In the future, suppliers will be required to use the new assessment form. Meanwhile, the Group will perform supplier audits on a three-year basis.

To meet international practices and the Group's guidelines on human rights protection, all stakeholders are able to submit complaints relating the Group's human rights violations and that of our suppliers at: <https://grc.cpgroupsustainability.com/GRC/whistleblower/WBforms/GlobalWB>

More information available in

- [Human Rights and Labor Practices](#)
- [Human Rights and Labor Practices Policy and Guidelines](#)
- [Human Right Impact Assessment Guideline](#)

Human Rights Due Diligence Process



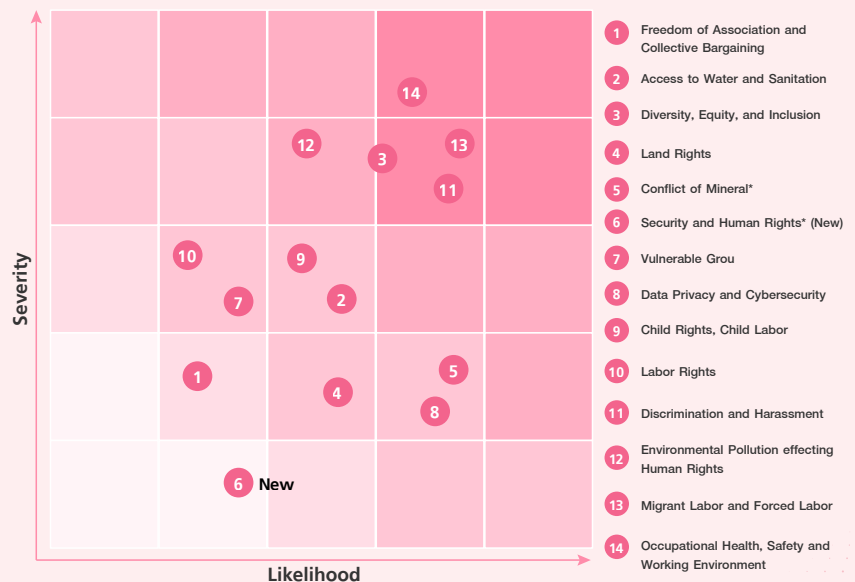
In 2022, Charoen Pokphand Group has upgraded the efficiency of our human rights due diligence process, especially the human rights impact assessment process. We have also released the impact assessment handbook to the public so that they may be adopted by the Group's internal functions as guidelines in assessing impacts relating to their business. In addition, the Group has conducted a review of existing policies and announced the implementation of four new policies to address significant emerging human rights risks. These four policies include Human Rights Policy and Guidelines, Discrimination and Harassment Prevention Policy, Diversity, Equity, and Inclusion Policy, and Foreign Workers Recruitment Policy.

Human Rights Risk Review 2022

Charoen Pokphand Group performs a human rights risk assessment on an annual basis to assess opportunities and impact levels that may change in accordance with the situations of the world and of the industry.

More information available in

→ [Human Rights and Labor Practice](#)



Remark: *Issue that has been changed

Human Rights Risk Management Measures

In 2022, 100% of business units under Charoen Pokphand Group were assessed for human rights risks. 10% of the business units were found with human rights risks. The Group has worked with business units to develop measures to mitigate the impacts of such risks. 100% of the business units are equipped with risk management measures. The Group has developed measure to tackle the five following identified human rights salient issues.



Risk Identified: Occupational Health, Safety, and Work Environment

Mitigation Measures

- Communication Group level's Safety Management Standards and Life Saving Rules
- Define safety KPI as part of annual performance evaluation

Impacted Stakeholders

C.P. Group employees, contractors and workers in the supply chain

Key Outcomes

- Gradual decline in the number of work-related injuries and fatalities

Business Units at Risk

9 business units



Risk Identified: Forced Labor and Foreign Workers

Mitigation Measures

- Develop and communicate the Foreign Worker Recruitment Policy to recruitment agencies
- Audit recruitment agencies

Impacted Stakeholders

C.P. Group employees, contractors and workers in the supply chain

Key Outcomes

- Systematic and equal foreign worker recruitment process
- Decrease in complaints from foreign workers

Business Units at Risk

1 business unit





Risk Identified: Diversity, Equity, and Inclusion

Mitigation Measures

- Diversity equity, and inclusion policy
- Pride month project
- Benefit improvement project for LGBTQ+

Impacted Stakeholders

C.P. Group employees, contractors and workers in the supply chain

Key Outcomes

- Decrease in number of complain on discrimination
- Higher score of employee engagement survey

Business Units at Risk

8 business units



Risk Identified: Discrimination and Harassment

Mitigation Measures

- Training on how to behave under situations of harassment such as “Unconscious Bias”
- Offer more diverse and inclusive welfares to employees and their families

Impacted Stakeholders

C.P. Group employees, contractors and workers in the supply chain

Key Outcomes

- Lower complaints relating to harassment

Business Units at Risk

9 business units



Risk Identified: Environmental Pollution Affecting Human Rights

Mitigation Measures

- Environmental policy
- Environmental sub-policy (12 topics)

Impacted Stakeholders

Communities surrounding operating sites and vulnerable groups

Key Outcomes

- Higher participation for communities
- No complaint on environmental or pollution violation

Business Units at Risk

3 business units

Data on Employee Diversity

Total Employees

441,606 persons



Female Male

Number of Employees by Employment Type

Permanent Employees

357,523 persons



Temporary Employees

84,031 persons



Full Time Employees

440,276 persons



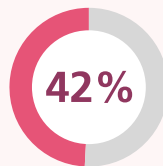
Part-time Employees

1,330 persons



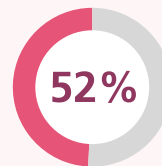
Number of Employees By Age Group

<30 years



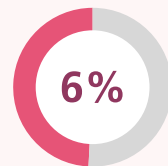
186,596 persons

30-50 years



227,776 persons

>50 years



27,234 persons

Female Male

Number of Employees by Level

Top Management ■ **0.26%**

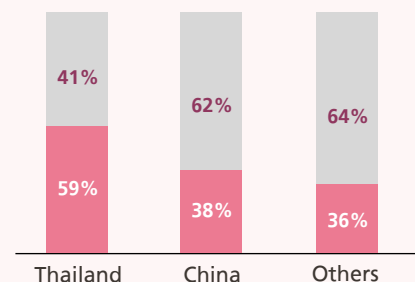
Middle Management ■ **1.17%**

Management ■ **16.89%**

Employees/Officers ■ **81.68%**

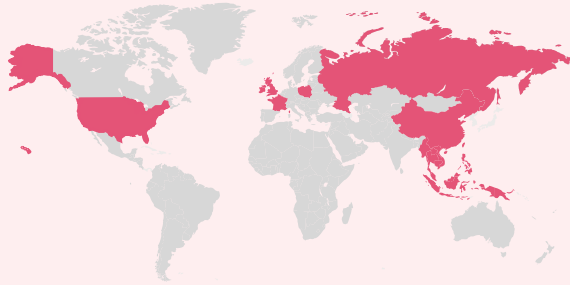
Number of Employees by Geography

(percentage)



Female Male

Data on Occupational Health and Safety



Thailand



China

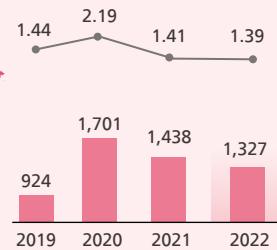


Others



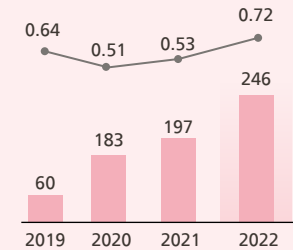
Employees
Contractor

Lost Time Injury (Employees)

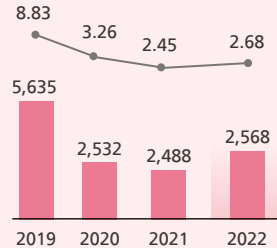


Employees Number of Injured Cases
Contractors Injury Rate case/1,000,000 hours worked

Lost Time Injury (Contractors)

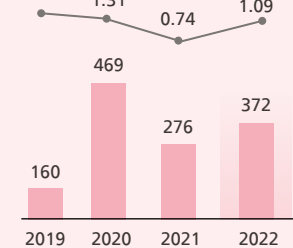


Recordable Injury (Employees)

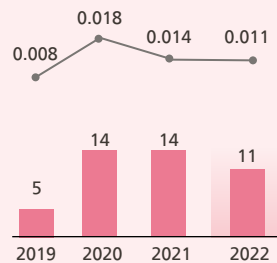


Employees Number of Injured Cases
Contractors Injury Rate case/1,000,000 hours worked

Recordable Injury (Contractors)

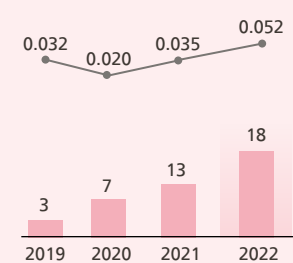


Occupational Fatality (Employees)

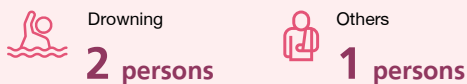


Employees Number of Injured Cases
Contractors Injury Rate case/1,000,000 hours worked

Occupational Fatality (Contractors)



Number of Fatalities in 2022 by Cause



Equal Labor Practices

Creating a Culture of Equality

For many years, diversity, equality and inclusion have become one of the top priorities for many countries. Equality and acceptance of diversity do not only promote happy coexistence in the society, but it is also another means to provide everyone with equal access to opportunities. Meanwhile, organizations that attach importance to diversity, equality and inclusion are rewarded with various benefits, such as attracting and retaining talents, obtaining new creative ideas, promoting well-being, and building corporate reputation, and more.

Charoen Pokphand Group recognizes the importance of this issue and commits to building a culture of equality within the organization. Therefore, the Group has formulated and published the **Diversity, Equity, and Inclusion Policy**, which contains comprehensive guidelines that correspond to international standards.

Examples of the guidelines include:

- Provide equal respect and treatment for all employees
- Respect differences
- Promote coexistence
- Care for the health and safety of employees and contractors
- Be open to diverse applicants and provide opportunities for equal growth
- Ensure equal compensation

In terms of equal compensation, our subsidiaries, such as Charoen Pokphand Foods Public Company Limited (CPF), have adopted the 12 Fair Wage Dimensions of the Fair Wage Network to determine employee compensation.

In addition, Charoen Pokphand Group intends to expand the scope of operations regarding diversity, equality and inclusion to our suppliers and partners with the main objective of establishing a common operational norm throughout the supply chain and to reduce any potential risks from operations of suppliers and partners.

CASE STUDY

Collaborating to Eliminate Inequality

Charoen Pokphand Group has joined the Business Commission to Tackle Inequality (BCTI) established by the World Business Council on Sustainable Development (WBCSD). The BCTI's three main goals are encouraging businesses to recognize the need to address the problem of inequality, building partnerships to identify problems and solutions, and creating a platform to exchange opinions on how to effectively deal with inequality.



Creating a Happy Working Environment

Employees are the main driving force that enables Charoen Pokphand Group to achieve our goals with efficiency. Therefore, taking care of our employee's physical and mental health and keeping them happy in the workplace is one of the Group's key missions. The Group has taken action to provide a variety of facilities to meet the different needs or lifestyle of each age group, such as flexible working hours, work-from-home or work-from-anywhere, suitable working equipment, appropriate workspaces for employees with disabilities, breastfeeding rooms, and gyms.

In addition, Charoen Pokphand Group has also extended the scope of employee care, such as medical benefits and paternity leave, to their families.

In order to create a continuous development process, Charoen Pokphand Group evaluates the performance of all employees on an annual basis. The evaluation criteria considers performance, compliance with corporate values, regulations and policies. Employees can also discuss the evaluation results, operational guidelines and assignment type with their supervisors.

CASE STUDY

Balanced Workspace

Work-life balance is essential to creativity and productivity. Therefore, the Head Office of Chia Tai Company Limited has designed its space to encourage a balance between work and personal life to achieve employee happiness, enabling them to enjoy work every day in a setting where they can relax from work fatigue, such as fitness center, golf simulator with coaching, exercise classes, such as yoga or zumba, and more. Furthermore, it also houses a library and a restaurant. The Company also takes into account employees' families and has, thus, set up a Kids Room to accommodate children of employees.



Relationship Capital

Employee engagement level in 2022
was **89%**

Occupational Health & Safety in the Workplace

Occupational Health and Safety Management

Charoen Pokphand Group places utmost importance in the safety of our employees, and contractors who operate on the Group's premises suppliers and surrounding communities. Therefore, the Group has established the **Safety, Occupational Health, and Workplace Policy and Guidelines** and **the Safety, Occupational Health and Environment Management System** to enable all our business groups to adopt such practices in their operations with full efficiency and reduce work-related injuries and fatalities as well as impacts on surrounding communities and society.

During 2021-2022, the Group has continuously upgraded the Safety Management Standards System and the Technical Standards on Occupational Health and Environment at the Group level. The aforementioned standards have been published in three languages, namely Thai, Chinese and English, so that all business groups, which are distributed across 21 countries and economics worldwide, can adopt the same set of standards to prevent accidents. The Group has also prepared E-Learning courses to enhance knowledge and understanding as well as develop employee and contractor capacity for work safety.

Building a Safety Culture within the Organization

Charoen Pokphand Group has established the zero fatality and zero accident goals involving the Group's employees and relevant parties. Therefore, the Group has developed safety indicators for all executives and employees. We have also defined the **Life Saving Rules** at the Group level which are to be strictly implemented by all business groups. Furthermore, the Group has provided explanations and E-Learning materials for employees and contractors to study, understand and implement for their own safety and to prevent hazard in the workplace.

In 2022, more than 88% of employees and contractors received such training. Additionally, we have emphasized that all our subsidiaries should prevent fatalities and loss from accidents according to the Fatality Prevention Strategy which raises awareness of safety, promotes learning and develops safety standards. Meanwhile, the top management should act as a role model to promote safety and create a safety culture in the Group.

Life Saving Rules

Do

1. Obtain authorization before overriding or disabling safety critical equipment
2. Disconnect energy source before commencing work
3. Obtain authorization before entering a confined space
4. Take appropriate precautions against a fall
5. Work with a valid work permit when required
6. Wear a safety belt while driving
7. Wear a safety helmet and use chin strap when riding a motorcycle, for both rider and passenger

Don't

8. Do not use the phone while driving and do not exceed the speed limit
9. Do not drink alcohol or use drugs while working, operating machinery, or driving
10. It is prohibited for unauthorized person to work with high risk machinery, equipment or vehicles

Caring for Employees' Mental Health

In addition to safety and occupational health in the workplace, Charoen Pokphand Group also attaches importance to employees' mental health as we believe that being happy at work will raise the level of employee engagement, enhance work efficiency, reduce medical expenses and lower the number of employee resignations. Furthermore, the Group also provides benefits and various programs to promote employee happiness, such as offering appropriate holidays, providing adequate health insurance and medical expenses, promoting good health, arranging exercise clubs, encouraging employee participation, and organizing ergonomic work settings, and more.

CASE STUDY

6 Safety Management Principles of Food Factories in China

The Food Business Group in China, including CP Qingdao, CP Qinhuangdao, CP Yiwu, and CP Chengdu, is strictly operating its businesses in accordance with laws, regulations and standards related to safety in workplace, as well the Group's safety management strategy. The following 6 Safety Management Principles have been implemented in all factories to strengthen production safety standards management. The 6 Principles are:

1. Establishment of management team to provide safety training
2. Management of risk and control of production system to meet standards
3. Detection system to assess hidden danger, and revision of hazard detection information system in accordance with GB13861-2022 (Classification and Code for the Hazardous and Harmful Factors in Process)
4. Assessment of SHE system to ensure alignment of standards
5. Promotion of engagement culture
6. Organizing safety knowledge competition to engage all employees to perform their tasks responsibly and accordingly, which will help achieve the target of changing mindset from "I need to be safe" to "I want to be safe"

The 6 Safety Management Principles help build a good working environment for employees, promote safety culture, care for the environment, maintain production quality, and maintain a continuous and smooth business operation.



Fleet Safety Management

Enhancing Fleet Safety

Charoen Pokphand Group's business operations involve transportation from upstream to downstream. Therefore, optimizing transportation and logistics systems with maximum safety and care for the environment is an important agenda. In 2022, the Group has increased the use of electric vehicles (EV), appointed a safety working group, and formulated EV safety measures. We have specified that the Group's business units and our transportation suppliers must procure transportation vehicles and parts that meet standards with regular inspection, maintenance and repair to be ready and safe for daily operations. We also require that they identify

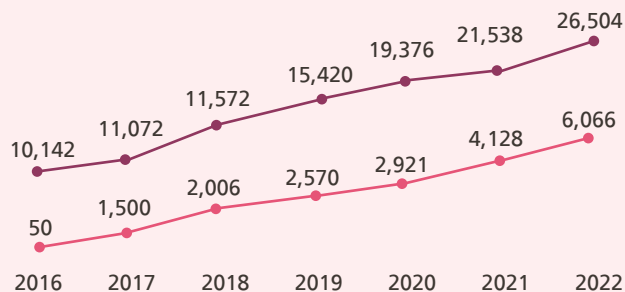
hazards and assess risks, define operational scope and procedures, pinpoint all aspects of potential impacts on individuals, communities, the environment, properties and corporate reputation. The Group has implemented appropriate control measures to proactively prevent vehicle accidents by monitoring driving behaviors through GPS and vehicle camera system via a central control center to prevent and reduce risks from potential accidents. The Group encourages all transportation operators and employees to strictly abide by the safety requirements and standards to lower the statistics of serious accidents and fatalities from transportation to zero.

Data on Fleet Safety

Total number of fatalities of freight vehicle driver of the Group and suppliers



14 cases



- Number of drivers who passed training and were issued the Group's driving licenses (persons)
- Number of business partners who passed the Group's driving safety training (persons)

CASE STUDY**Driving Safety Enhancement
for Business Partners**

Charoen Pokphand Group requires that freight vehicle operators and motorcyclists transporting goods are aware of potential hazards in order to avoid car and motorcycle accidents. For this reason, the Group has arranged a safe driving training course for suppliers to offer drivers correct knowledge and understanding as well as raise their awareness on driving safety. The Group has continuously carried out this program to reduce accidents which are the cause of road fatalities and serious injuries among employees, suppliers and the society.



Human Capital

6,000 employees of business partners
received training

CASE STUDY**Using Electric Vehicles
in Transportation from
the Group and Business
Partners**

Relationship Capital

More than
800 vehicles are electric
vehicles use in Group and
suppliers' transportation



Natural Capital

GHG emissions reduction of
2,914 tons carbon per
year or equivalent to planting
278,000 trees per year



Charoen Pokphand Group has announced the goal to achieve net-zero emissions by 2050. Therefore, reducing greenhouse gas emissions from the transportation sector relating to the Group's business is one of our critical action plans. The Group and our business partners have jointly laid out a transportation strategy based on a green logistics system using electric vehicles (EV) as part of the effort to conserve energy. We also place importance in a sustainable and eco-friendly transportation system in accordance with future market directions. In 2022, the Group and our business partners have switched to a higher proportion of EV transportation vehicles to reduce environmental impacts from transportation.

Education and Inequality Reduction

At present, educational inequality is a critical global issue that affects the development of the quality of “people” who are the main driving force of a country’s development. Such social predicament has intensified after the COVID-19 outbreak, which has widened the gap in education. Charoen Pokphand Group recognizes the significance and urgency of such problem. Therefore, the Group has set a goal to support access to quality education and promote lifelong learning under the belief that quality education creates a learning process for the prosperity of individuals and the society while also building jobs, careers, and a good quality of life. Accordingly, the Group has cooperated with various sectors in improving structures and access to basic education for youths and vulnerable groups in order to transfer knowledge, offer trainings, upgrade skills and knowledge, sustain academic progress, and build knowledge by arranging an environment, learning society and other supporting factors that lead to lifelong learning.

Supporting the SDGs



More information available in

→ [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Number of Children and Adults with Access to Quality Education and other with Access to Knowledge and Information Sources

44 million people

Number of Students Receiving Internships (cumulative data)

103,000 people

Number of Youths and Adults who have Received Education and Professional Skill Development (cumulative data)

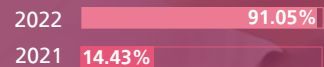
1.26 million people

Number of People Awarded with Scholarships (cumulative data)

0.14 million people
 Increased by 26.5% from 2021

Goals and Progress

50 million people received support in the form of access to quality education, lifelong learning or upskilling



Our Way Forward



Increase access to education, knowledge and skills needed in the 5.0 era.



Provide technological devices/digital media to promote integrative learning consistent with the current way of life.



Develop prototype model for government sector and expand into Domino Impact for other 30,000 schools nationwide.



Develop School Management System that can store and report student performance, individually. Also can be implemented with other schools nationwide.

CONNEXT ED Foundation

Charoen Pokphand Group is determined to raise the quality of Thailand's basic education. We have set the goal to encourage children and youths to develop their potential to become "good and smart children". The Group has implemented five key strategies to uplift the quality of education management and achieve clearly measurable outcomes in collaboration with the CONNEXT ED Foundation.

In addition, the Group has formulated a work plan, while continuing to implement development plans in order to deliver knowledge through technological innovations, promote various forms of learning and strengthen children and youths' ability to develop their potential. This will bring about good opportunities and create a future for Thai children to grow into quality members of the society.

Performance of Strategy Implementation and Enhancement of Education Management Quality in 2022 (Cumulative data)



Transparency

Displayed information on
5,570 CONNEXT ED schools
via www.connexted.org/foundation/



Market Mechanisms

642 School Partners
Public ICT Talent **200 people**
Private ICT Talent **1,800 people**



High-quality Principals & Teachers

Training for **82,000** school principals and teachers



Child Centric Curriculum

Established **15** learning centers



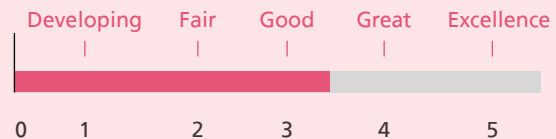
Digital Infrastructures

- **3,351** schools with high-speed internet
- **39,839** classrooms with IT devices and media
- **451** computers from 7-Eleven outlets

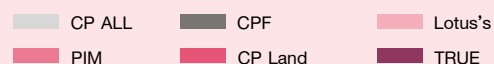
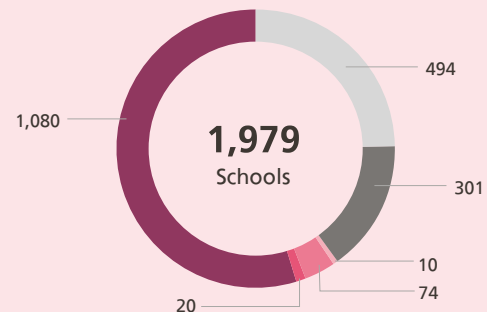
Assessment of **5,570** Schools in Academic Year 2022



3.45



Number of Schools under CONNEXT ED Foundation Supported by Charoen Pokphand Group's Affiliated Companies





School Partners to Collaborate on Formulation of School Development Plans

CP ALL Public Company Limited (CP ALL) has developed a child-centric program, while conducting follow-ups, evaluations and workshops to provide technical advice in developing a school model and upgrading it to a learning community center.



Promoting Infrastructure for Access to Quality Education

Donated computers from 7-Eleven outlets to CONNEXT ED schools nationwide.

Donated **451** computers



for 25 CONNEXT ED schools nationwide.

Promoting Child-centric Learning

True Corporation Public Company Limited (TRUE) has assigned over 300 people from the fourth generation of “School Partners” to be “Collaborators” in formulating school development plans with administrators and teachers of CONNEXT ED schools under the Company’s supervision across the region. At present, there are more than 3.6 million people that received support from the company (cumulative data).



Corresponding with Global Economy in 5.0 Era

Charoen Pokphand Foods Public Company Limited (CPF) has jointly driven CONNEXT ED into its eighth year, while promoting learning and introducing new skills that are relevant in the 21st century, such as coding, active learning, and knowledge integration between subjects in tandem with the development of professional skills.



Promoting Education by Charoen Pokphand Group

Charoen Pokphand Group recognizes the opportunity to leverage our expertise and understanding in business operations to support educational institutions in raising the level of education to match the needs of both domestic and international markets. As such, the Group focuses on creating talented people, developing leadership, enhancing skills for teachers, and building quality knowledge for children and youths, while encouraging them to pursue careers according to their aptitude. The Group also emphasizes community involvement as well as harnessing our expertise in digital technology to enhance education and provide access to information and learning sources for the benefit of all stakeholders and a better quality of life.



Number of children, youths and adults with access to quality education and necessary skill development through the support of Charoen Pokphand Group

Scholarship

0.1%

Internship

0.1%

Upskilling

2.8%

45.5
million people

Access to quality education,
and knowledge and
information sources

97%

Total

45,522,730 people

Online **34,414,699** people (76%)

Offline **11,108,031** people (24%)

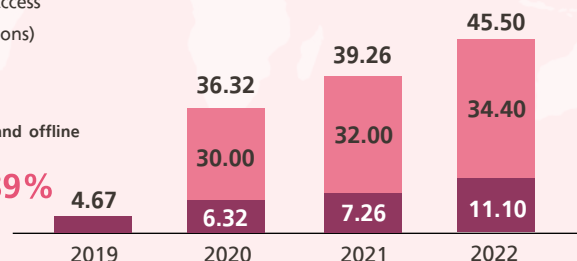
Offline People Support Through Education

Online Access

(million Persons)



Online and offline
growth

15.89%

Shaping the Future of Education to Match the Global Economy in 5.0 Era

Charoen Pokphand Group has collaborated with the Forum for World Education (FWE) to organize the Forum for World Education 2022 to brainstorm ideas on how to shape education to meet future trends and the demands of the business sector worldwide under the concept of “Shaping The Future of Education to Match Global Economic Trends”.



FWE Forum for
World Education

“Education is the development of people. The prosperity of the country depends on education”

Dhanin Chearavanont
Senior Chairman, Charoen Pokphand Group



CASE STUDY

True Plookpanya: Promoting Access to Education with Technology

The shortage of learning materials and digital devices for schools in remote areas results in the lack of access to knowledge which also affects academic achievement and quality of education. Thus, True Corporation Public Company Limited (TRUE) is committed to providing children, youths and Thai people across the country with equal access to education and broaden their horizons in order to inspire their sustainable learning.



Human Capital

Number of visits to True Plookpanya website (cumulative)

34 million people



School of Nursing, Panyapiwat Institute of Management

The School of Nursing offers international standard teaching with a commitment to educate and develop healthcare management professionals to provide services in the world of innovation and technology. Students learn and practice nursing skills in a fully equipped, modern and professional laboratory.



School Adoption Program

Lotus's Malaysia, in collaboration with PINTAR Foundation, supports lifelong knowledge and skill development for disadvantaged children in more than 63 schools across the Malaysian Peninsular.



More than

750 volunteer hours

Supporting Education Scholarships

Education is the key factor in the development of the nation's youths. Therefore, Charoen Pokphand Group has a policy to support students with good behavior, academic excellence, determination and leadership who lack funds by awarding scholarships for their entire course duration. All youths are equally entitled to apply for this scholarship with no required commitments. Furthermore, we also provide scholarships for employees with good performance as well as children of employees who have demonstrated academic excellence. Understanding on the importance of access to quality education, the School of Nursing was established under Panyapiwat Institute of Management, offering free scholarships throughout the course to nurture professional nurses with a service mind, morality and ethics as well as skills, competence and expertise to become healthcare managers in the world of technology in response to the needs of society.



“The opportunity that I received on that day, allowed me to learn nursing education as I had wish.

simulations rooms at P2M are equipped with mannequins, allowing us to learn both practically and theoretically. We have an opportunity to put our learning to action.”

(Pop) Achariya Ketpanich

Scholarship student, Bachelor of Nursing Program
Faculty of Nursing, class 1



People Awarded with Scholarship

141,079 people

Total Value of Scholarships

1,295,124,349 THB



“After submitting my application, I was called in for an interview and was finally selected on that year (2016),

about 80 students nationwide received scholarships. When I found out that I was one of them, I was overjoyed because I was able to ease my parents' burdens like I had intended.”

(Nam) Apaporn Jekklad

Training and Career Promotion Officer
CP Foundation for Rural Life

Promoting Lifelong Learning Opportunities



Technical and Professional Skills Training

Charoen Pokphand Group has set the goal to play a part in community development and the reduction of social inequality. Therefore, the Group supports a continuous learning process, promotes career guidance to generate income, offers knowledge and competence development as well as training to build skills and capabilities while enhancing experience to increase opportunities in starting one's own business and in employment. Such efforts are aimed at ending poverty and enabling disadvantaged communities to live sustainably in the society according to the basic necessities, which is in line with the Group's aspiration to make today a "Better Tomorrow".

CASE STUDY

Developing Career in Nursing Care

Providing professional training in elderly care, giving youths and the people an opportunity to receive skills training and knowledge in nursing care which is an important alternative career in an aging society.



Human Capital

Number of graduates **152** people



CASE STUDY

Promoting Entrepreneurial Skills and Knowledge

Chia Tai Foods Yinhai Store provides job skills training in collaboration with entrepreneurs and Nanning Social Security Services. Besides offering knowledge and training skills, it also assigns job positions to disadvantaged individuals in order to nurture expertise.



Human Capital

Generated an income of over
250,000 THB/person/year



CASE STUDY

Social Enterprises by People with Disabilities

Educate, train and develop agricultural careers for people with disabilities in an integrated manner, from planting quality raw materials, trimming through to delivery to factories.



Relationship Capital

Generated an income of over **12** million THB



CASE STUDY

Fighting Fish Business Development

Co-founded the world's first fighting fish school to share knowledge about fighting fish, while developing product brands and distribution channels to generate income for community enterprises.



Relationship Capital

Community income of **188,450** THB/month



CASE STUDY

Makro Horeca Academy

An integrated source of knowledge for professional entrepreneurs, enabling business growth and creating new entrepreneurs in a continuous manner.



Relationship Capital

Membership **130,000** people
(cumulative data)



Relationship Capital

More than **690,000** online views



Leadership and Human Capital Development

In the midst of rapid changes, Charoen Pokphand Group is committed to the development of leadership and human capital in order to equip our workforce of more than 440,000 people with knowledge, competence and skills to drive our sustainable growth. The Group plans career progression paths for employees and offers capacity building programs to provide all with opportunities to take part in activities that promote a learning culture, build experience and strengthen quality leadership in line with the Group's Human Resources Strategy. We also emphasize on learning alongside practice. The C.P. Leadership Institute serves as the center of leadership development. The Group has also leveraged technology as the medium of communication to connect employees from around the world via the E-Learning system. Furthermore, the Group constantly supports and encourages participation in the creation and development of new innovations to create innovators in the organization.

Supporting the SDGs

4 QUALITY
EDUCATION

4.3



4.4

4.5

8 DECENT WORK AND
ECONOMIC GROWTH

8.5

More information available in



[Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Employee in Science, Technology, Engineering and Mathematics (STEM)-related Positions

37,845 positions

The Group targets to expand STEM-related positions to 15%

Average Training Hours

21.23 hours/person/year

↑ Increased from 2021 by 11%

Performance Appraisal

100% of total employees

Goals and Progress

100% of employees received trainings on sustainability every year

2022 **100%**

2021 **87%**

100% of employees participated in sustainability activities or projects every year

2022 **44%**

2021 **16%**

Future Workplans



Develop new generation leaders through the C.P. Leadership Institute's curriculum.



Focus on enhancing core values for all levels of employees.



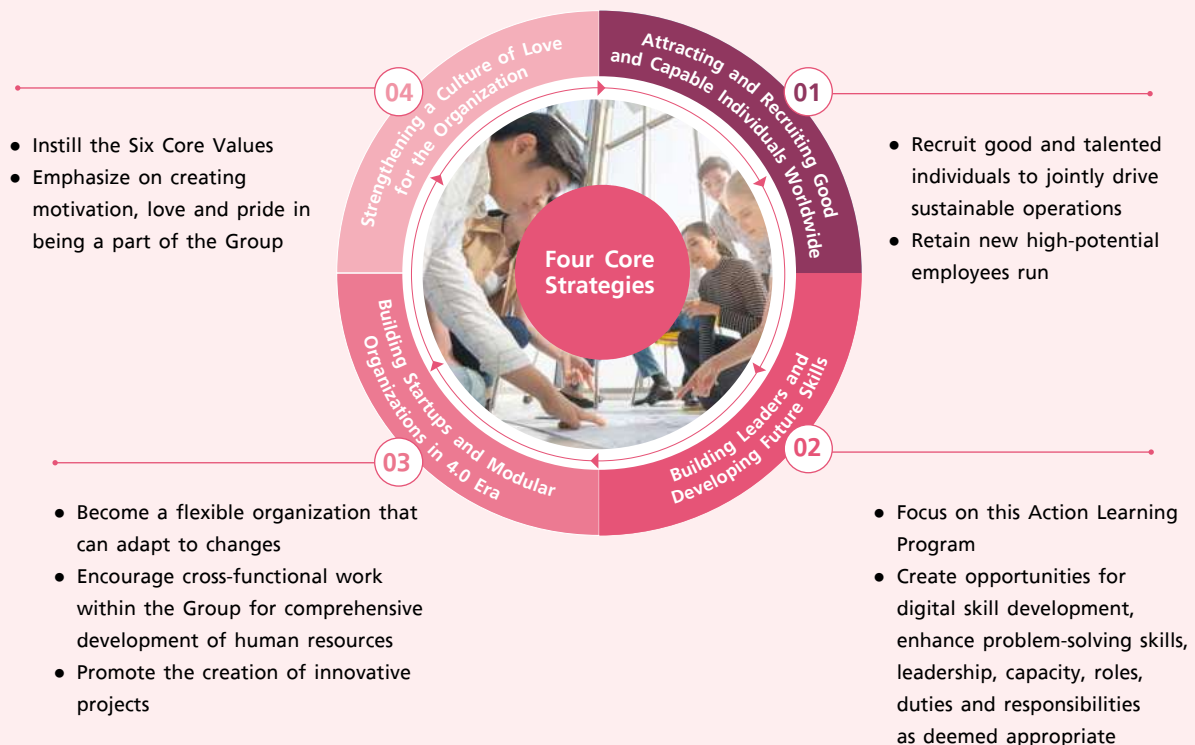
Develop a curriculum that is in line with business changes and integrate sustainability into business.

Developing Leaders and Human Resources

Charoen Pokphand Group's Human Resources Strategy

With a diversified business context and a large pool of personnel spread across in 21 countries and economies worldwide, human resources strategy is therefore the core of human capital development. The Group places emphasis on strengthening employee capacity to enable their response

to rapid changes as well as enhancing specific skills necessary to mitigate impact from potential replacement of human labor with technology. For this reason, the Group has implemented personnel development according to the Workforce 4.0 Strategy which focuses on four key areas:



Driving Strategy into Action

In order to effectively drive leadership and human capital development, Charoen Pokphand Group has appointed the People Steering Committee to govern human resources operations to meet human resources strategy and support corporate goals. The Committee is headed by the Group's Chief Executive Officer and comprises executives from relevant fields. Its main roles include:

- Formulating and reviewing the people strategy at the Group level to address issues that affect the overview
- Drive the implementation of the Group's people strategy throughout the organization
- Drive human capital development in all business groups to meet world-class standards

In 2022, the People Steering Committee discussed and took action on key issues, such as proposing and encouraging business groups to implement the Group's core people policy to join forces to create high-potential personnel, driving HR asset purchase decisions at the Group level, and encouraging business groups to share human resources management best practices.



CP Group is a multi-business organization with over 440,000 employees worldwide. Therefore, managing human resources to yield productivity is crucial.

“Employees must adapt and possess skills that are relevant to the global context and challenges”

in order to leverage their capacity to create maximum benefit for the country, society and organization according to the Three Benefit Principle, which is one of the corporate values upheld by employees.

Pimonrat Reephattanavijitkul
Chief People Officer, Charoen Pokphand Group

Attracting and Recruiting Good and Talented Individuals Worldwide

Recruiting Talent for Charoen Pokphand Group

For the organization to be successful and achieve established goals and objectives, one of the key factors is good, knowledgeable and talented people who possess qualifications that are in line with our corporate values. Therefore, Charoen Pokphand Group has incorporated the corporate values into our recruitment process to search for good and talented individuals who are ready to grow sustainably with the organization. The Group pays special attention to recruiting new generations from around the world as we recognize the value of diversity in races, cultures, experience and ideas. The Group is committed to developing new generations with an entrepreneurial attitude, wisdom, courage to think and act, and discipline while collaborating to develop the Group's personnel through the CP Future Leaders Development Program (FLP). Recruitments are announced publicly via social media, by referral among friends, through bilateral cooperation with third-party agencies and partners, roadshows at leading educational institutions and target countries, projects, association, and more. Additionally, the Group was selected as world's best employer 2022 in conglomerate sector, by Forbes. Moreover, to reaffirm our position as a leading employer, company within the Group, such as Chia Tai Co., Ltd., Ek-chai Distribution System Co., Ltd., and Siam Makro Public Company Limited received HR Excellence Awards 2022 from Human Resources Online Institution, Singapore. This award reflected excellence in human resources management, including employee recruitment, engagement, and strengthening corporate culture.

CASE STUDY

Recruiting Talent from Domestic and Overseas Educational Institutions

Charoen Pokphand Group attaches importance to the creation of a stable career for the people. Therefore, the Group publicly announces the recruitment of new generations from leading educational institutions in Thailand and abroad.



Human Capital

2,064 new generation leaders
recruited through the CP Future Leaders
Development Program (FLP)



Retaining Good and Talented Employees

In the past several years, Charoen Pokphand Group has experienced a relatively high rate of employee turnover and relocation. The main reason for this stems from the Group's association with retail business, which is a sector with high turnover rate compared to other industries. Changes in attitudes about life and work of the new generation, who are not attached to one place for a long time, also influence employees' decisions. Therefore, to enable the Group to cope with such circumstances and define effective guidelines for long-term employee retention, the Group focuses on developing necessary knowledge, abilities and skills of each individual.

We also offer opportunities and equal rights for all employees to grow in the career of their interest. Accordingly, a Working Group has been appointed to prepare and establish guidelines. In addition to trainings, the Group also arranges welfares to allow our employees to lead a comfortable and quality work life. We also conduct an employee engagement evaluation annually. The result from 2022's survey revealed that 80% of employee feel engaged with the Group. The Group will apply the results for further improvement on the Group's human resources management.



CASE STUDY

Hybrid & Flexible Working Hours and Living Wage Review

Charoen Pokphand Group's Siam Makro retail business group strives to create an environment that is conducive to efficient employee performance and suitable for current business changes. Therefore, it developed various formats of hybrid & flexible working hours to enable employees to appropriately manage their own working hours with the ultimate goal of accomplishing assignments. Such a move supports the transition towards a digital era. Furthermore, as employee wages and compensation in each area are being reviewed regularly, the business group also reassesses compensation, financial support and medical welfare benefits to ensure that the overall income of employees at all levels is sufficient to cover the cost of living. Siam Makro also offers other forms of monetary welfare to employees, including medical expenses, fuel expenses, housing allowance, diligence allowance, scholarships for children of employees, marriage, funeral, etc. Additionally, it collaborated with Korn Ferry Hay Group to conduct a survey of employee wages and welfares. The survey results will be implemented in planning appropriate wages and compensation that are consistent with the cost of living.



Human Capital

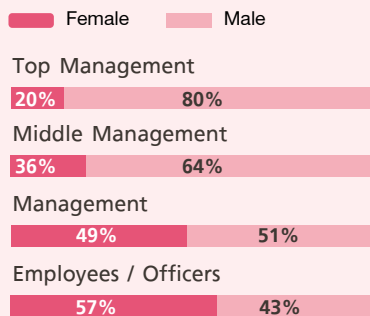
Employee turnover rate
decreased by

3.6%

Equitable Empowerment of Employees

Charoen Pokphand Group values employee diversity and equality. The Group encourages employees of all genders, ages and levels to demonstrate their ability to drive operations towards the established goals and vision. More importantly, we do not block growth opportunities. Such an approach is not practiced only within the Group, but has also been communicated to suppliers, partners and interested parties along the value chain.

Proportion of Employees by Level



Management Positions in Revenue-generating Functions

46,106 people



Employee in Science, Technology, Engineering and Mathematics (STEM)-related positions

37,845 people



Charoen Pokphand Group provides opportunities for and encourages female executives and employees to showcase their talents, skills, abilities and attitude as well as management of people with equality.



“All men and women can differ in character, personality, and strength. I believe that if we are committed to cultivating good character, whether men or women, we can achieve success and happiness.”

Lê Nhật Thùy
Senior Vice President,
Head of Compliance & Risk Management Office,
CP Vietnam Corporation



“Equality of women and men with the Group, allow women to have an important role in driving the organization towards success and creating value to society.”

Anchalee Torvorapanich
Assistant Managing Director
Finance Shared Services Centre, CP China

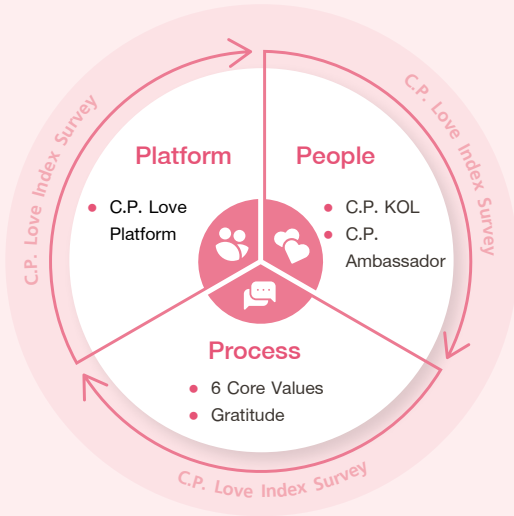


“What I am proud of is being a plant breeder. There has never been gender discrimination in working in this field, which is thanks to great support from the company. If we are determined, committed, dedicated and able to working as a team as well as happily, then we can be successful in all career paths.”

Jarunee Buaboocha
Assistant Vice President
Research and Development,
Chia Tai Company Limited

Strengthening a Culture of Love

Charoen Pokphand Group has established guidelines for creating and implementing a corporate culture of love for the Group among employees at all levels. The guidelines consist of three important factors:



- **Developing People** through C.P. Key Opinion Leader (C.P. KOL) and C.P. Ambassador programs which select representatives from each business group to be role models and demonstrate behaviors that are consistent with the Group's values.
- **Developing Process** through systematic communication of the Six Core Values, the concept of gratitude, and the ability to transfer knowledge, experience and corporate vision to employees at all levels.
- **Developing a Platform** called C.P. Love Platform which will help to communicate organizational culture and love throughout the Group, encourage engagement, and listen to employee opinions.

CASE STUDY

C.P. Love Platform: Communicating Organizational Culture and Love



In 2022, Charoen Pokphand Group developed the C.P. Love Platform to encourage employee engagement from all business groups. Furthermore, we also used the C.P. Brand Love Index to measure the success of the project implementation, which reflects the love, faith and trust of employees in the C.P. Brand.



Building Leaders and Developing Future Skills by CP Leadership Institute



Employee Capacity Development

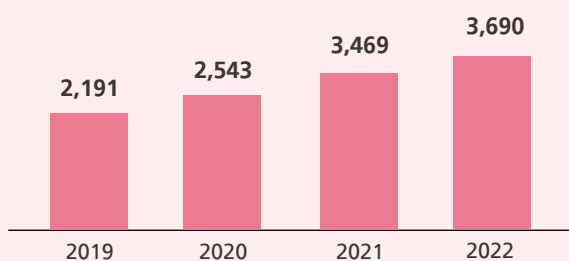
Charoen Pokphand Group is committed to cultivating and developing the capacity of our people to create quality leaders through the Leadership Development Program organized by the CP Leadership Institute. This Action Learning Program is based on various projects conducted by the Group's businesses to create career advancement opportunities, enhance problem-solving skills, leadership and competence in roles, duties and responsibilities. The training is divided into four levels:

- CP Future Leaders Development Program (FLP)
- CP Potential Leaders Development Program (PLP)
- CP Leaders Development Program (LDP)
- CP Senior Leaders Development Program (SLP)

More information available in

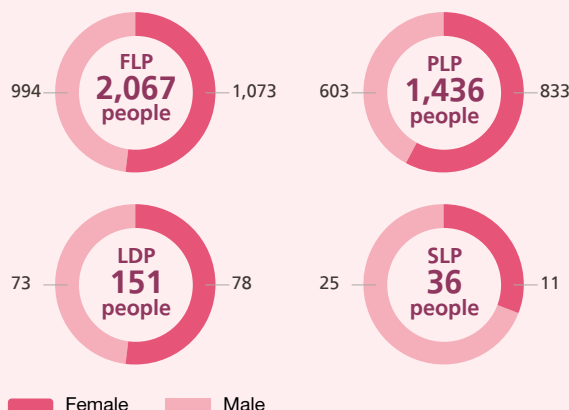
→ [Leadership and Human Capital Development](#)

Executives and Employees Participating in 2022 Leadership Development Programs (people)



3,690
people

Proportion of Employees Participating in Leadership Development Programs



The CP Senior Leaders Development Program (SLP) is designed to train senior management in strategic planning through the “learning by action” approach. The Program joins forces with various businesses and countries to drive and develop businesses to achieve success. Examples of success include:

CASE STUDY

Smart Fruit Export Tracking Platform

According to an analysis of fruit export to China, the quality of some fruits did not meet customer demands in terms of fruit type and degree of ripeness. In order to solve this problem and respond accurately to demands, the SLP team jointly developed a smart platform to comprehensively track fruits imported into China. This smart platform also employs artificial intelligence to analyze and monitor customer needs as well as a blockchain traceability system to ensure the safety of fruits.



Relationship Capital

Matched **2** million customer demands



The CP Leaders Development Program (LDP) is designed for executives of each business group. It focuses on reforming and streamlining processes to enable convenience, speed and accurate response to customer needs.

CASE STUDY

24-Hour Free Pharmacist Consultation with “ALL PharmaSee”

Nowadays, people are more conscious about the consumption of healthy food and beverages as well as access to quality medical systems and medicine. Charoen Pokphand Group also aims to reduce social inequality. Therefore, CP ALL’s LDP team transformed eXta pharmacy outlets, which are available in all communities, into community health centers. Furthermore, the team also developed the “ALL PharmaSee” smartphone application to provide a platform for patients to easily and conveniently access 24-hour online pharmacist consultation, locate the nearest eXta outlet, or place purchase orders through delivery channels.



Relationship Capital

Accumulated use of ALL PharmaSee in 2022

400,000 times



Cybersecurity & Data Protection

Nowadays, information technology plays a significant role in the daily lives of the people as well as in business operations. Besides making one's daily life and business operations run smoothly and conveniently, information technology also increases the opportunity for the society to access necessary information, such as knowledge base and news, in a more convenient and rapid manner. Charoen Pokphand Group deploys information technology extensively across our business processes, such as Cloud Computing, Artificial Intelligence (AI), Internet of things (IoT) and Big Data. These tools help to enable efficiency in the Group's operations. Nevertheless, the more accessible the data becomes, the higher the risk of data leakage, which is considered a severe business risk. The Group recognizes that it is crucial to provide protection for data on our suppliers, partners, customers, employees and operational processes. Therefore, it has supported and enhanced cyber data protection for all our stakeholders. Accordingly, the Group has defined workplans and organized a variety of activities to address potential threats.

Supporting the SDGs

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



9.C

17 PARTNERSHIPS
FOR THE GOALS



17.6

17.8

More information available in

→ [Sustainable Development Goals Report 2022](#)

trueIDC

Key Performance in 2022

IT Infrastructure Certified with International IT Standards

100%

Business Groups with self-assessment Based on NIST

100%

Achievements Based on the Information Security Policy Improvement Plan

100%

Number of Employees who Received Training on Personal Data Security

180,415 people

* Employees from listed and non-listed companies

Goals and Progress

100% of businesses certified with international standards on data and information security



Future Workplans



Implement relevant cybersecurity policies and guidelines throughout the Group.



Enhance self-assessment criteria according to ISO 27001.



Upgrade cybersecurity software used within the Group.

Cybersecurity & Data Protection

Cybersecurity Management and Data Protection Governance Structure



The protection of Charoen Pokphand Group's data and that of all relevant stakeholders is one of our core missions to build stability and a better future. In order to ensure that operations in such area meet international standards and employ tracking and auditing systems, the Group has established the Information and Cyber Security Working Group which comprises representatives from the Risk Management Department Charoen Pokphand Group, and IT Department of each business group. In the past year, the Working Group was responsible for defining internal standards on information and cyber security as well as reporting progress to the Corporate Governance, Risk and Audit Steering Committee (GRA Committee). Key tasks that were completed by the Working Group in 2022 included reviewing policies and guidelines relating to information and cybersecurity, developing a self-assessment framework based on NIST to enable self-assessment by all business groups, and centralizing cybersecurity software procurement.

Information and Cybersecurity Policies and Guidelines






Relevant Guidelines

1. Asset Management Standard
2. Cyber Supply Chain Management Standard
3. Physical & Environment Security Standard
4. Identity & Access Management
5. Password Management
6. Information Security Incident Management
7. Log Monitoring Standard
8. Secure SDLC Standard
9. Operation Security Management Standard
10. Human Resource Security Standard
11. Cyber Risk Management
12. Compliance Standard
13. Bring Your Own Device (BYOD) Standard
14. Endpoint Security Standard
15. Vulnerability and Threat Management Standard
16. Cryptography and Key Management Standard
17. Network Security Standard

Cybersecurity & Data Protection Management Strategy

Charoen Pokphand Group's cybersecurity governance and management strategy sets guidelines for managing cybersecurity and data protection based on international guidelines, specifically the NIST Framework. The strategy incorporates standards and processes, starting from risk identification (Identify), protection of digital assets (Protect), investigation (Detect), response to damaging situations (Respond), through to recovery from damage (Recover).

Such guidelines have been implemented on all the Group's businesses. In addition, the Group has developed a self-assessment system as a tool for business groups in assessing their progress and in formulating plans to address cybersecurity issues that have been identified. The self-assessment is conducted quarterly. Its results and progress are reported to the GRA Committee.

				
Identify	Protect	Detect	Respond	Recover
Property management	Personal data management, authentication, and data access control	Anomalies and incidents	Communication	Recovery plan
Business environment	Training and awareness raising	Regular security checks		Development
Governance	Data security	Detection process		
Risk management strategy	Data protection processes and procedures			
Risk management in supply chain	Maintenance			
	Protection technology			

“ The Group acknowledges the importance of dealing with cyber threats which are continuously rising. Therefore, we have developed plans to address such threats in terms of policies, standards, processes and employee awareness raising. We have also established the Security Operations Center (SOC) which has been certified with ISO/IEC 27001:2013. The SOC employs machine learning to provide accuracy in threat detection and an automated threat incident management system that immediately stops threats to prevent any potential damage. ”

Tithirat Siripattanalert

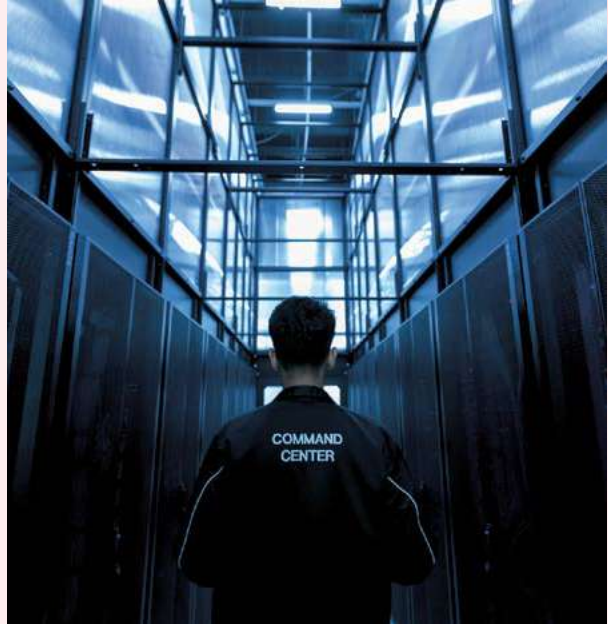
Chief Information Security Officer and Chief Data Officer,
True Digital Group Company Limited



Cyber Risk Prevention and Data Protection

Cyber Risk Prevention and Data Protection Measures

Besides requiring self-assessments based on cybersecurity and data protection management guidelines or NIST Framework in the past year, Charoen Pokphand Group has also reviewed cybersecurity-related policies and guidelines to enable efficient implementation by employees. In doing so, the Group has invited internal functions and specialists to join the Cyber Security Forum and review such policies and guidelines. We have also improved and centralized cybersecurity software procurement in order to align standards among all business groups. Meanwhile, the department that serves as the Group's IT center has been certified with ISO 27001. Furthermore, the Group has educated employees about personal data protection to raise awareness and knowledge among those who are in charge of the personal data of employees, partners and customers.



Compliance

Processes related to

- Customers
- Suppliers
- Employees

Important Practice

- Obtaining consent and legal bases (7 bases)
- Personal data security measures
- Owner's rights of personal data
- Penalty

Definition and Type of Data

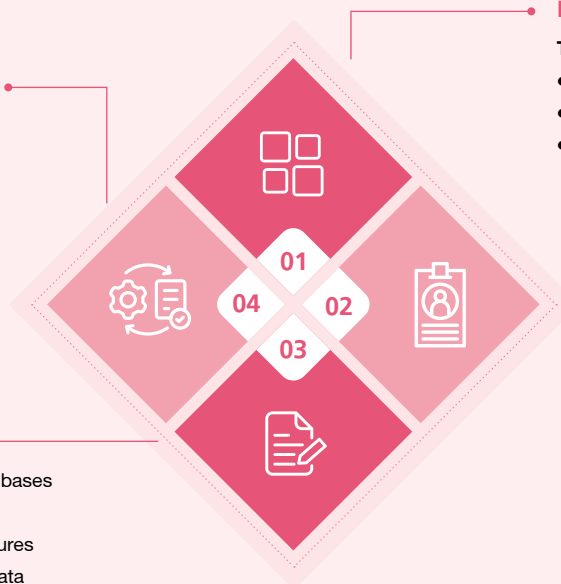
Type of personal data:

- General personal data
- Sensitive personal data
- Definition: "Processing of personal data"

Roles

Roles of

- DS: Data Subject
- DC: Data Controller
- DP: Data Processor
- DPO: Data Protection Officer



CASE STUDY

Cyber Threat Awareness Training

Training to raise awareness and understanding of information security are crucial in reducing the risk of cyber threats. Therefore, our affiliated companies offer training courses regularly. For instance, Charoen Pokphand Foods Public Company Limited organizes an E-Learning course for employees on an annual basis. The course covers topics such as fundamental knowledge of cybersecurity, ransomware, hacker scams, text and call scams, and cybersecurity practices.



Human Capital

100% of employees that attended the course passed the test

CASE STUDY

Phishing Test

In addition to providing knowledge through trainings, our affiliated companies appropriately conduct cyber threat response simulations by using fraudulent e-mails, or so called “phishing”, according to a predetermined frequency. CP ALL Public Company Limited (CP ALL) performs phishing tests on a quarterly basis covering all employees. The random testing aims to observe the behaviors of both users and administrators. Feedback from the tests are taken into consideration while further advice will be offered to those who still have an incorrect understanding on how to appropriately respond to or manage risks from such threats.




Intellectual Capital

97.8% of employees passed the phishing test



HEALTH

Living Well



Charoen Pokphand Group envisions ourself as a leader in innovation and technology that creates food for the body and mind as well as the health and well-being of all. We also focus on establishing food security and enabling access to nutrition. Accordingly, the Group is determined to invent, research and develop products and services that are enriched with quality and values in order to deliver long-term growth to all stakeholders. In addition, the Group recognizes the importance of developing and engaging stakeholders, especially farmers, SMEs and vulnerable groups, to support them in terms of career and income generation as well as enhance their knowledge and abilities that are adequate and suitable. Furthermore, we offer opportunities for all parties to collaborate on the development of eco-friendly products and services that respond to market needs, in order to advance towards a “Better Tomorrow”.

////////////////////

Health & Well-being	118
Social Impact and Economic Contribution	130
Food Security & Access to Nutrition	142
Innovation	150
Stakeholder Engagement	162

Value Creation Process

Input Factor

Manufacturing Capital

- **100%** of food production plants certified according to international standards
- Expansion of sustainable production sources to maintain food security

Intellectual Capital

- **91 R&D centers**
- **28,753 million THB** of R&D expenses

Human Capital

- **33,486 employees** received training and development in innovation and technology

Relationship Capital

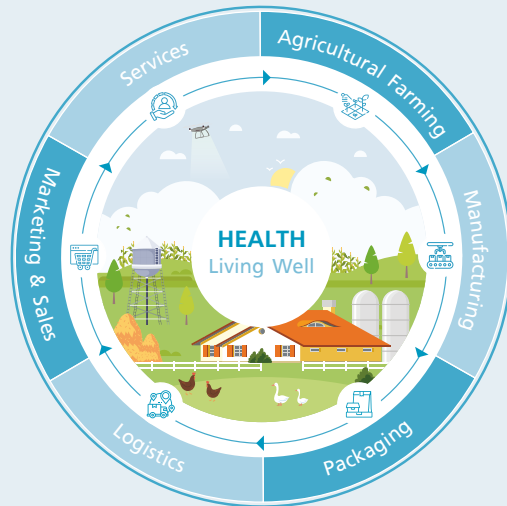
- Establishment of a stable relationship between the Group and all stakeholders
- Partnership with various sectors to build a sustainable society and organization

Natural Capital

- Focus on creating environmentally friendly products
- Actions to reduce food waste

Value Creation Process through Charoen Pokphand Group's Business Operations

Charoen Pokphand Group's Value Chain



Relevant Activities

As a leading company in industry, food, retail and pharmaceutical businesses, the enhancement of the Charoen Pokphand Group's production process as well as that of our suppliers to meet international standards will support the Group's ability to sustainably produce and deliver products and services of the future to consumers and customers. In addition to improving production processes and supporting employees, suppliers, farmers, SMEs and vulnerable groups, our effort to provide opportunities for cooperation between different third-party sectors will encourage innovation that improves the well-being of the people and reduces impacts on the environment.

Values and Impacts



Manufacturing Capital

- + 901 products focusing on nutrition, health and well-being



Intellectual Capital

- + 9,674 researchers and innovators
- + 646 patents and petty patents received in 2022
- + 4,119 innovative products and services



Human Capital

- + 2,315,008 farmers, SMEs, members of vulnerable and other groups supported



Relationship Capital

- + Stakeholder engagement score at 80%
- + Establishment of a global network for sustainability comprising more than 10 member organizations
- + 168,244 people supported with job creation



Natural Capital

- 56,590 tons of food waste from operations

Relevant Stakeholders



Farmers



Communities and societies



Suppliers



Creditors



Employees and families



NGOs



Governments



Competitors



Media



Shareholders and investors



Customers and consumers

SDGs



1.2 1.4



2.1 2.2
2.3



3.8 3.B



4.4



8.2 8.6



9.3 9.5
9.B



10.1



16.7



17.6 17.17

Health & Well-being

The world population is estimated at 8 billion as of 2022 and is expected to reach 8.5 billion by 2030. The steadily growing population coupled with the intensifying and erratic impact of climate change pose the risk of vegetation and livestock scarcity. Vegetation and livestock are the main raw materials required for food production as well as the establishment of a sustainable food system. Consequently, countless people across the globe may face with malnutrition due to a lack of quality food. Such matters have not escaped the attention of international organizations which call for collaborative actions between governments and the private sector in ensuring food security. As a leader in technology and innovation, Charoen Pokphand Group acknowledges that it is our responsibility to drive food security. While operating under the concept of “For a Better Tomorrow”, the Group focuses on the creation of healthy products that are safe and reduce environmental impacts. We also place emphasis on the full disclosure of nutritional information for the health and well-being of all.

Supporting the SDGs



1.4

2 ZERO HUNGER




2.1
2.2

3 GOOD HEALTH AND WELL-BEING



3.8
3.B

More information available in

 [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Proportion of Total Sales from Health and Well-being Products and Services

34.7%

↑ Total sales of health and well-being products and services increased from 2021 by 16.8

Healthier Products

5.8%

↑ Increase in proportion of products that promote good health and well-being from 2021

Safe and Quality Production Process

8.7%

↓ Decline in proportion of product recalls compared to 2021

Promotion of Nutritious Food

38%

of marketing budget to promote healthy food products

↑ Increased from 2021 by 2.7%

Goals and Progress

70% of proportion of total sales volume from B2B and B2C products and services that promote health and well-being

2022 **34.7%**

2021 **36.2%**

Future Workplans



Research and develop raw materials to create food that contributes to reducing environmental impacts and provides health benefits.



Support and encourage suppliers and farmers in the Contract Farming Scheme to abide by animal welfare policies and requirements.



Employ technology, robotics and automation in production, storage, transportation and services; enhance traceability of raw materials and products using blockchain technology to provide customers and consumers with accurate, transparent and rapid access to information.

Promoting Good Health and Well-being for All

Integrating Innovation into Production Processes

As a leader in agro-industry & food, retail and pharmaceutical businesses, Charoen Pokphand Group upholds our commitment to constantly improve our production processes. In doing so, we rely on innovation as the key to creating quality products and services that can promote good health and well-being for people of all genders and ages. At the same time, we must also ensure that our production processes can promptly respond to changes. Therefore, the Group has integrated innovation into the production processes of food products and the invention of new services. Furthermore, the Group has incorporated sustainable development

practices to create positive social and environmental contributions from upstream to downstream. Likewise, all stakeholder groups can rest assured that all of our products are of high quality, safe and certified with domestic and international standards, such as ISO 9001, GMP, HACCP, GAP and BAP, and more. The Group has continued to work closely with farmers and key business partners to develop and introduce high-quality and safe products to the market. Besides boosting stakeholder confidence, such collaboration has also contributed to the development of a traceability system across the supply chain.

CASE STUDY

“Blockchain” Product Traceability: Building Confidence and Delivering Safe Food



100%

of fresh chicken and
pork products are in
the traceability system



Charoen Pokphand Foods Public Company Limited (CPF) in collaboration with AXONS, a leading agricultural technology (Agri-Tech) developer, has leveraged “Blockchain Traceability” to enhance its traceability system. The technology has been widely recognized for data accuracy in many businesses, including finance, procurement and supply chain management. It provides customers and consumers with rapid access to accurate and transparent information. CPF began adopting “Blockchain Traceability” in the fresh chicken & pork product group and plans to apply it to the fresh shrimp and egg groups in 2023. CPF intends to expand its application to all product groups in the next phase.



Relationship Capital

Number of hill tribe farmers participating
in the project **1,125** households



Manufacturing Capital

Sales of agricultural products
10,000 tons

CASE STUDY

“For Better Life of Hill Tribe Farmer” Project

Siam Makro Public Company Limited (Makro) is committed to ensuring a consistent quantity of food for consumers, while supplying them with safe and traceable food from a sustainable source. Accordingly, Makro collaborated with Maejo University, Kasetsart University and other network partners on a project called “For Better Life of Hill Tribe Farmer”. The project aims to raise cultivation standards for hill tribe farmers, enabling them to produce safe products that are qualified for GAP Standards and traceable through the Makro i-trace system, in order to deliver safe products that meet standards from the hills to the city, such as cabbage and Chinese cabbage. This alliance has promoted the involvement of farmers, independent organizations, the private sector, and the public sector in an integrated manner, while also focusing on environmental conservation.

CASE STUDY

“Ocean Hong Kong Kale”: Safe, Tasty and Healthy

Chia Tai Co., Ltd. is dedicated to safe agriculture throughout the entire process, from upstream, midstream to downstream. Kale is among the top vegetables used for cooking thanks to its plentiful benefits, availability and affordable price. Therefore, Chia Tai has promoted the cultivation of safe and high-quality “Ocean Hong Kong Kale”. In doing so, Chia Tai has carefully selected seeds as well as provided advice and knowledge on how to obtain high-quality crop yields that meet GAP standards and are safe for farmers, consumers and the environment.



Manufacturing Capital

Sales of agricultural products
10.73 tons

Responsibility towards Animal Welfare and Consumer Health

Rearing Animals according to the Principle of Animal Welfare

Charoen Pokphand Group has always given priority to animal welfare in our business, we conduct as it is directly related to food quality and safety as well as social and environmental responsibility in all aspects. Therefore, the Group upholds the international practices of the Farm Animal Welfare Committee (FAWC), which takes into account the Five Freedoms of Animals in raising animals throughout their lifespan. Such is the foundation for strengthening animal health, which leads to zero use of growth acceleration hormones and antibiotics to treat illnesses. Furthermore, the Group has appointed an Animal Welfare Committee to systematically and efficiently

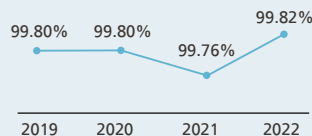
drive policies and guidelines pertaining to animal welfare in accordance with international principles. Additionally, the Group has also centered our focus on research and development, in order to enhance animal welfare promotion across the supply chain. We have also adopted innovation and technology in conjunction with raising animals according to international animal welfare standards. As a result of our endeavors, Charoen Pokphand Group became the only Thai company to be classified in Tier 3 for Animal Welfare by the Business Benchmark on Farm Animal Welfare Report (BBFAW) for the second consecutive year in 2022.

Data on Animal Welfare Promotion

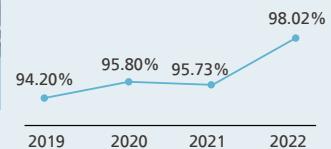
Welfare Outcome Measures (WOMs) to assess whether the animals are receiving high welfare standards according to the Animal Welfare Principles which directly affects their physical and mental health.



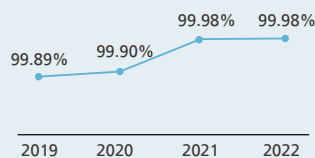
Transport Livability (%)



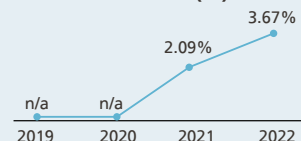
Sow Livability (%)



Transport Livability (%)



Black Scar Lesion (%)



Transport Livability (%)



CASE STUDY**Elevating Animal Welfare Promotion**

In addition to rearing animals according to international welfare principles, Charoen Pokphand Group also focuses on research and development of our operational processes, in order to raise animal welfare levels across the supply chain, covering broilers, layers, swine and shrimps. In doing so, modern and eco-friendly innovations and technologies have been implemented to drive operations by incorporating the “Smart Farm” system to our animal farming business. The Group’s vast online data inventory has contributed to the achievement of Big Data for analysis and processing. Meanwhile, blockchain technology has also been employed to upgrade and reinforce data confidence. In this regard, the “Smart Farm” system does not only assist in the management of farms and animal welfare, but also tracks training and sales activities.



More information available in

→ [Health and Well-being](#)

Responsible Use of Antibiotics

Charoen Pokphand Group acknowledges that the improper use of drugs in animals can cause extensive consequences on animals, consumer health and the environment. In particular, it can lead to drug resistance and leave antibiotic residues in animal products. In order to mitigate any potential issues or impacts, the Group has strictly abided by the guidelines for antimicrobial use in animals across our food production chains worldwide, covering farms under the Group’s subsidiaries and the Contract Farming Scheme. Accordingly, antibiotics shall be used for therapeutic purposes only in order to uphold animal welfare and administered under veterinary prescription only in response to the demands of society according to the “One Health” principles.

Longitudinal Monitoring of Colistin-Resistant *E. Coli* in a Swine Farm

This study monitors the mobilized colistin resistance (*mcr-1*) gene found in *Escherichia coli* (*E. coli*) bacteria in employees, swine and the environment of a sample swine farm under the Group’s swine business in Thailand, which stopped the use of colistin between 2017. According to the study, no *mcr-1* gene was found in the sample, including swine and the farm’s environment. This create trust among consumers and communities surrounding the operating sites that the company is valuing safe food production. (More information is available in [Longitudinal monitoring reveals persistence of colistin-resistant *Escherichia coli* on a pig farm following cessation of colistin use](#), Nwai Oo Khine et al., 2021.)

More information available in

→ [Health and Well-being](#)

Animal Husbandry

Charoen Pokphand Group is committed to delivering food security and safety for the good health of the global population. Therefore, we place utmost importance in the safe production of food in tandem with the preservation of animal welfare and the environment, which is in line with sustainable production and consumption guidelines. With regards to animal husbandry, the Group has worked continually to research and develop efficient and high-quality feed and animal husbandry innovations. We have also enhanced disease prevention and control protocols in accordance with international standards in both broiler and layer chicken and swine farms to provide

the animals with quality care according to animal welfare principles. Furthermore, the Group has supported and encouraged suppliers and farmers in the Contract Farming Scheme to strictly abide by the Group's animal welfare policies and requirements. Meanwhile, we have also worked to build cooperation and networks with business partners, government agencies, civil society organizations, research & academic institutions, and other relevant stakeholders to create awareness and collaboration to improve animal farming in accordance with animal welfare principles.

CASE STUDY

Enhancing Animal Welfare with 3C PLATFORM to Produce Safe Food for the Sustainable Growth of the Thai Broiler Industry



100%

of CPF's broiler farms are raised in accordance with the Five Freedoms of Animal Welfare



Charoen Pokphand Foods Public Company Limited (CPF) emphasizes research and development to upgrade animal welfare across the supply chain. At present, 100% of CPF's broiler farms are supervised by Poultry Welfare Offer (PWO), which also promote animal welfare. In addition, CPF has adopted the 3C PLATFORM, which consists of

1C–Consolidation, 2C–Contribution, and 3C–Collaboration, to support the aspirations of the Thai broiler industry to achieve sustainability as well as to produce quality, clean, safe and traceable food using modern technology to create consumer confidence.

More information available at:

→ <https://www.wearecp.com/cpf-2022-02-22/>

Aquaculture

Besides animal husbandry, Charoen Pokphand Group also attaches importance to aquatic animal farming. The Group supports research and studies as well as the introduction of new innovations and technologies to improve production efficiency, reduce loss and add value to the supply chain. In addition to process management, farm and data management as well as breeding and transportation planning to meet market demands are key factors of consideration for the Group, in order to offer quality products to customers and consumers.

Charoen Pokphand Group has adopted probiotic farming in aquaculture. This method emphasizes on cleanliness in each process in order to ensure that aquatic animals are comfortable and healthy, while growing naturally. Such practice will produce high quality products. Additionally, the Group has collected data to facilitate traceability in order to obtain high-quality aquatic animals. We have also shared knowledge on aquaculture processes and standards with farmers, which has enabled greater production efficiency and enhanced food safety throughout the value chain.

CASE STUDY

CARE Aquaculture Model

Charoen Pokphand Foods Public Company Limited (CPF) has developed a freshwater aquaculture system based on scientific principles called “CARE Aquaculture Model”, which is a model that prioritizes the efficiency of production processes and uses modern technology to produce products that are fresh, clean, and safe, traceable, and environmentally-friendly. Moreover, animal welfare is also taken into consideration from delivering fish larvae, raising fish to be healthy and comfortable, to delivering to consumers. CPF has also shared knowledge on modern aquaculture to farmers and educational institutions, while encouraging their involvement in the development of such system in order to achieve a more modern and suitable system for each area.



Manufacturing Capital

Production yield increased by **10** times
when compared to conventional model
Reduce water consumption by **70%**



CARE Aquaculture Model

- C - Consumer Need
- A - Achieve Easily and Consistently
- R - Reliable System
- E - Environmental Friendly

More information available at:

→ <https://www.wearecp.com/cpf-02-02020309/>

Responsibility towards Consumer Safety

Communicating through Product Labels

Creating awareness and enhancing knowledge for consumers is the key to preventing illnesses and, in particular, risky behaviors, while also creating an environment that encourages healthy behaviors. Therefore, Charoen Pokphand Group has developed a proactive approach in communicating and displaying information on food and other products to offer correct, accurate and up-to-date consumption knowledge, such as product labels, printed media, online media and direct calls, and more. Key information that the Group has displayed

or conveyed to consumers, include main ingredients, nutritional information, recommended serving amount, storage instructions, usage instructions, consumption information for children and pregnant women, and packaging disposal to reduce environmental pollution. Besides our internal efforts, the Group has also collaborated with suppliers to coordinate and align the direction of our operations for the safety, hygiene and well-being of everyone.

34.6%

of products with easy-to-understand and noticeable front-of-package labelling according to regulations and voluntary schemes.



CASE STUDY

CP Selection: Organic Chicken



Raised with specially selected natural probiotic supplements that prevent illnesses in swine and poultry, without antibiotics and is thus 100% free of chemicals.

**Raised in BIOSECURITY
HIGH TECH FARMING system**

Raised in a closed Biosecurity Hi Tech Farming system with 100% disease prevention



Certified by NSF, a world-class institute, that chickens are raised without antibiotics throughout their lifespan and is therefore 100% free of chemical residues.

CASE STUDY

Communicating through Product Labels

Charoen Pokphand Group uses the Guideline Daily Amounts (GDA) nutrition label showing energy, fat, sugar, and sodium levels to achieve 100% compliance with regulations as well as on a voluntary basis. GDA labelling is applied to some groups of ready-to-eat food and beverages in order to provide nutritional information in terms of energy, sugar, fat, and sodium, which are contributors to chronic non-communicable diseases. The company plans to cover other group of products in the future.



Enhancing Health and Well-being for All

Promoting People Well-being

Besides our commitment and efforts to deliver good and safe products to consumers, Charoen Pokphand Group has also conducted a variety of projects to promote health and sports. The Group aims to offer consumers with full and equitable access to good health through programs and activities, such as mammogram breast cancer screening and preliminary diabetes screening, running to promote exercise, supporting youth football, promoting public access to health insurance rights through “MorDee” mobile application and “eXta” pharmacies, providing knowledge and raising awareness of diseases, such as depression, breast cancer, and more.

Furthermore, the Group has joined forces with various sectors in Thailand and overseas to increase consumer’s access to good health through the “C.P. Group 100 Years: Giving Back Through Blood Donations” program, executed by the Special Project Management Offices under the supervision of Mr. Wanlop Chearavanont, C.P. Group Senior Vice Chairman, in collaboration with the National Blood Center of the Thai Red Cross Society. Since 1991, the project has encouraged employees of all business groups to give back to the society by donating blood. Up until 2022, the project received 559,713 units of blood, which is equivalent to 208,256,400 c.c. In 2022 alone, 244 business units held blood donation activities, acquiring 24,626 units, or approximately 9,850,400 c.c. of blood.

CASE STUDY

Supporting Thai National Teams in International Competitions

Charoen Pokphand Group, in collaboration with Charoen Pokphand Foods Public Company Limited, CP ALL Public Company Limited, and True Corporation Public Company Limited, has been entrusted by the Olympic Committee of Thailand, the Paralympic Committee of Thailand, and the Sports Authority of Thailand to cater food to the Thai national teams participating in international competitions throughout their training period in Thailand. Furthermore, True Move H has provided communications support in the form of international roaming services while True Health has utilized 4.0 health innovations, such as “MorDee” mobile application, to offer online medical consultation services anytime, anywhere. In addition, the Group also sponsored C.P. hygienic masks, “Fah Talai Jone” herbal capsules for COVID-19 prevention throughout the 31st SEA Games in Hanoi, Vietnam and the 11th ASEAN Para Games in Solo, Indonesia.



 Relationship Capital

Catered food to **1,700** athletes and officers of Thai National team during 2022 competitions

Collaborating with Partners to Enhance People Well-being

In order to enhance the well-being of people living in countries where we operate, Charoen Pokphand Group has engaged in concerted efforts with partners from different industries to leverage knowledge and expertise in various fields to develop technology and innovation for health; for example, the collaboration on digital technology and innovation development for health between PTT Public Company Limited and True Digital Group, the cooperation with P&G Health for the good health of Thai people through preliminary self-assessment for peripheral neuropathy.

In addition, the Group has collaborated with Ramathibodi Hospital in launching the “Ramathibodi Health Center” to provide digital health services as well as joined Siriraj Hospital in developing a smart ambulance using data transmission over the 5G network.



CASE STUDY

“SAVER: Smart Approach for Vital Emergency Responses” Project

True Digital Group Co., Ltd. has partnered with Siriraj Hospital to conduct the “Siriraj World Class 5G Smart Hospital” project. True Digital Group has leveraged IoT and artificial intelligence (AI) to develop and connect operations via the True 5G Smart Network, enabling the staff of Siriraj Emergency Medical Services (SiEMS) in ambulances to provide rapid and effective assistance to patients. As part of the project, a standard ambulance was converted into a 5G Smart Ambulance, equipped with a vital sign monitor, a high-resolution camera for real-time transmission of clear and accurate data with a platform to display results that allows immediate treatment by doctors, a telemedicine system and an emergency patient data storage for uninterrupted medical care. This project is the model of implementing 5G and other cutting-edge technologies in emergency medicine and public health. Not only has it increased safety and reduced fatalities, but it has also rendered more convenience and speed in patient care.



Human Capital

Provided assistance to more than

970 emergency patients since the initiation of the project



Social Impact and Economic Contribution

The sustainable development of societies and communities has constantly been one of Charoen Pokphand Group's core missions. This coincides with the Group's Three Benefit Principle as well as the UN Sustainable Development Goals. The Group's strategy to drive a better future entails providing support and encouragement to target groups across the supply chain, alleviating and resolving social challenges that may vary from region to region, and conducting operational impact assessments with transparency. A key challenge lies in communicating with all groups of stakeholders, especially about the negative impacts that the Group may contributed to communities, such as business operations that may affect other suppliers and cause uneven competition for small business partners. Thus, we have taken utmost care to systematically mitigate such impacts by establishing mitigation policies, guidelines and operational standards as well as remedial measures, leading to stakeholder confidence. Nevertheless, the Group also recognizes the opportunity to create value and improve operations in order to render optimal benefits to the communities and societies while increasing opportunities to conduct business that gives back to societies and communities.

Supporting the SDGs

1 NO POVERTY



1.2

2 ZERO HUNGER



2.3

4 QUALITY EDUCATION



4.4

8 DECENT WORK AND ECONOMIC GROWTH



8.6

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



9.3

10 REDUCED INEQUALITIES



10.1

More information available in

→ [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Farmers Supported

1,061,524 people

SMEs Supported

892,715 SMEs

Vulnerable Group Supported

192,525 people

Other Supported

168,244 people

Goals and Progress

5 million people receive job promotion to generate income for people in need, e.g., farmers, SMEs and vulnerable groups along our value chain.



Future Workplans



Support employment and increase income distribution to local communities.



Create positive contributions to societies and communities along the value chain.



Promote digital platform technology to communities and SMEs.

Social Value Creation Strategy

Charoen Pokphand Group has enhanced our social value creation strategy to focus on proactive operations and joint value creation between the Group and communities in all areas where we operate. To do so, we have set three main targets: promoting jobs and income for farmers, supporting knowledge and increasing distribution channels for SMEs, and supporting a better quality of life for vulnerable groups.

3 Benefit Principle for Sustainability



Impact Valuation of Social Value Creation Operations using
Social & Human Capital Protocol

More information available in

→ [Economic, Social and Environmental Impact Valuation Guideline](#)

Supporting and Improving Livelihoods of Farmers and Fishers

Supporting Farmers

Alongside the steady growth of our agro-industrial business, Charoen Pokphand Group has been accumulating knowledge on agriculture, which is an upstream business, in order to develop skills and personnel in the agricultural sector. Such effort is beneficial to communities and societies at large. Meanwhile, the Group has systematically promoted and supported all groups of farmers to build competitiveness in Thailand's agricultural sector while also supporting SDG 2 and SDG 4.

Despite our best efforts to create positive contributions to support farmers along the value chain, negative impacts remain a challenge. Therefore, impact assessment is crucial. Other important processes include encouraging farmers to leverage technology to improve product quality to meet market demands and increasing diverse distribution channels. Additionally, the Group has promoted sustainable agriculture practices in order to reduce environmental impacts and raise farmer's awareness about resource efficiency.

CASE STUDY**Developing Pig Farming and Agricultural Lands to Solve Poverty in Guangxi**

Farmers in Siyu Village, Nanning City had been suffering from poor soil quality which affected the amount of output and income. Charoen Pokphand Group, therefore, intervened to alleviate such problems by focusing on establishing cooperation between companies, cooperatives and farmers to develop an end-to-end crop cultivation and swine breeding industry, which currently raises 8,000 pigs and cultivates economic crops, such as dragon fruits. This project has created stable jobs and dividends for farmers.



Relationship Capital

Generated higher income of
800,000 THB/year for
 the community

Improving Livelihoods for Fishers

Charoen Pokphand Group is aware of human rights issues along the value chain, especially in the fishing sector, which is in the Group's upstream business. The Group has continuously collaborated with the Fishermen Life Enhancement Center (FLEC) by supporting the latter's endeavors to solve labor problems according to human rights principles and to

prevent human trafficking both in Thailand and in the region. Furthermore, the Group has also cooperated with partner organizations to establish action plans and goals to improve the quality of life of fishers and their families. Accordingly, the Group has imparted human rights knowledge and improved the quality of life of migrant fishers and their families in order to prevent human trafficking and labor rights violations in the fishing industry. Besides reducing labor exploitation, such efforts have provided workers with a center that can offer them advice regarding work, health and daily life, assisting the workers and their families in gaining access to basic healthcare rights and standardized treatment. Meanwhile, their children also have greater access to age-appropriate education, knowledge and skills, helping to prevent child labor. At the same time, the fishers and their families also have access to improved health, basic medicines and greater work safety.

CASE STUDY

Reinforcing Safety on Fishing Vessels



Relationship Capital

Educated workers on

61 fishing boats

Human Capital

Covering

1,200

migrant workers

Charoen Pokphand Group and partner organizations have jointly organized activities to educate fishing crews about safety on board, treatment of basic illnesses, first aid, and basic life support. Through such cooperation, medicine and medical supplies have been handed out to fishing boats for use while at sea with clear instructions on their correct usage.



CASE STUDY

Fourth Skill Development for Migrant Children to Create Food Security and Self-reliance

Charoen Pokphand Group and the Fishermen's Life Enhancement Center (FLEC) have held skill development activities for migrant fishers and their families in Songkhla province. This includes an activity that allowed children to receive outside-the-classroom experience and vocational training in Thai cuisine and desserts. The activity encouraged the children to learn how to make preparations and cook safely. Such effort will contribute to the improvement of their well-being and self-reliance as well as the prevention of human trafficking.



Intellectual Capital

Youths participated

200 households

Supporting SMEs

Supporting SMEs

The COVID-19 pandemic has caused negative impact on business operators who were unable to adapt in time. With every intention to support, encourage and strengthen these operators to grow sustainably, the Group has operated under a challenging situation and implemented a risk assessment process which allowed us to recognize development opportunities to support SMEs. For example, creating a business platform to expand cooperation with business operators and promoting access to international markets for Thai operators, and more. Not only has this helped business operators to regain a steady income, but it also supports SDG 9.



CASE STUDY

Creating an Ecosystem to Enable Strong and Sustainable Growth for Thai SMEs



CP ALL Public Company Limited (CP ALL) has taken part in the creation of an ecosystem that allows Thai SMEs to grow strongly and sustainably using a key strategy called “3 Giving”, which comprises:

1. giving distribution channels,
2. giving knowledge through frequent seminars for SME operators, and
3. giving network connection through public-private cooperation.

At present, SME products are available at more than 6,000 outlets nationwide.



Relationship Capital

8,000

SMEs products selected
for online and offline
distribution

CASE STUDY

Platform of Opportunity



Number of entrepreneurs
that attended the activities

3,800 entrepreneurs



CP Seeding Social Impact, a subsidiary of Charoen Pokphand Group, aims to support and propel Thai entrepreneurs and farmers through its “Platform of Opportunity.” This platform focuses on economics, social impact, and partnerships to help Thai entrepreneurs improve their opportunities and introduce Thai products to both national and international markets. This will not only promote the circular economy, but will also stimulate community and societal support, as well as encourage sustainable and stable development. CP Seeding Social Impact organized the following activities in the first half of the first operating year: business matching activities to

provide entrepreneurs with the opportunity to present their products directly to purchasing departments both in Thailand and abroad; educational activities such as bringing products to China in collaboration with partners such as EXIM Bank, market trends and distribution channels for processed agricultural products with the Thai Chamber of Commerce. CP Seeding Social Impact seeks to assist all groups of Thai entrepreneurs and farmers in order to be a driving force for the country and create an ecosystem of efficient support, as well as to make a positive and long-term impact on society.

Supporting Vulnerable Groups



Supporting Vulnerable Groups

Creating equality in the society is one of Charoen Pokphand Group's main goals. Equality is also regarded as a key agenda by the United Nations and has been incorporated into SDG 1 and SDG 10. Accordingly, the Group has conducted projects to assist and support vulnerable groups, which include people with disabilities, the elderly and the socially disadvantaged by promoting careers, offering knowledge as well as sources of funding to enable business ownership while also building a stable career and sustainable income. This will improve the quality of life for members of these vulnerable groups as well as create equality in the society.

CASE STUDY

Community Bank for Autism

True Corporation Public Company Limited (TRUE) supported the formation of the Community Bank for Autism to create a sustainable self-reliant mechanism for people with autism by encouraging association through savings. A community hearing was conducted to agree on the bank's establishment, regulations, welfares, appointment of the chairman and the executive committee to oversee the interests of members. It also decided on offering savings in the form of stocks, setting minimum deposit and consecutive monthly deposit requirements, providing low-interest loans to members as a source of funding for their careers in order to sustainably strengthen and create self-reliance among group members. Meanwhile, the Parent of Autistic Children Group can adopt this community banking system to improve the quality of life, welfare and finance of families with autism. This is the key foundation in establishing a social enterprise in the future. Currently, six Community Banks for Autism are operating in Bangkok, Phitsanulok, Chonburi, Sakon Nakhon, Trang and Nakhon Si Thammarat with a total deposit amount of over 4 million THB.



 Relationship Capital

Over

500 households
participated in the program

Charoen Pokphand for Rural Lives Development Foundation

Over the course of its 35 years of operation based on His Majesty the King's philosophy, the Charoen Pokphand for Rural Lives Development Foundation has held as its core mission to better the quality of life of the underprivileged. The Foundation focuses on "creating 4 goods, developing 4 areas", which include children and youth development, community and farmer development, quality of life development, and environmental protection and restoration. Currently, 12 projects are under operation:

1. Raising Layer Chickens for School Lunch
2. Scholarships for Students under the Royal Patronage
3. Agricultural Youth Vocational Training Center
4. Foster Family in Cultural Communities
5. Huai Ongkhot Royal Development Project, Kanchanaburi
6. Chang Hua Mun Royal Initiative Project, Phetchaburi
7. Cooperative Village Royal Project
8. Park Rore Sub-district Career Development Project
9. Royal Integrated Agricultural Project, Buriram
10. Elderly Health Development Center
11. Nursing Career Development Project
12. Omkoi Reforestation Project



2022 Performance



19.5 million eggs

from 905 participating schools



1,616 persons

Farmers supported



182,000 persons

Children and youths have access to food security, education and care



2,015 communities

Communities supported



3,845 persons

Elderly and members of vulnerable groups supported



72,500 seedlings

Seedlings for planting in 3 communities



Worldwide Projects



Ban Lao Su Coffee Social Enterprise



Xiangyang Integrated Swine Production and Cultivation Project



Egg Distribution to Alleviate Poverty



Illinois Food Donation Project



Synergy Home



Sufficiency Economy Learning Center



Supporting Veterans to Cultivate Fresh Vegetables for Sustainable Income and Career



Assistance for People with Disability, Lanzhou City, Gansu District



Food Donation for the Poor



Light Up the Highland and Border Area



Scholarship Program for Children and Youth



Credit Assistance for Broiler Contract Farmers



Raising Layer Chickens for Lunch at Orphanage School



Typhoon Odette Victims Project



True Money Supports Local Merchants to Provide Financial Services

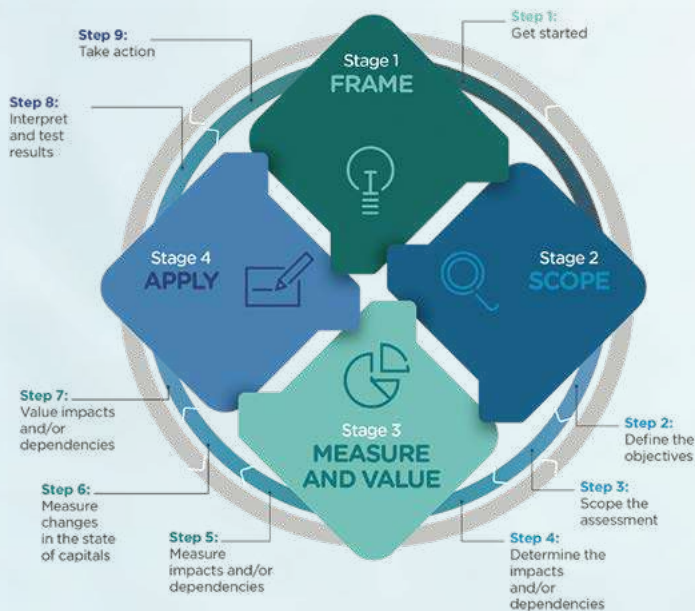


7-Eleven Creating Jobs and Income for Local People

Assessing the Performance of Ban Thammachat Lang Drinking Water

Charoen Pokphand Foods Public Company Limited (CPF)'s Eastern Shrimp Hatchery in Trat province is located in an area with limited drinking water supply. The hatchery had to purchase drinking water from local vendors. Nevertheless, it still faced the issue of inadequate supply and delivery distance as the vendors were situated far from the hatchery. In order to resolve such problems, CPF surveyed Ban Thammachat Lang Community and discovered its potential to produce drinking water. The community already had a Reverse Osmosis (RO) unit installed; however, the locals faced difficulties in driving the project to completion. Therefore, CPF intervened in an effort to solve this problem and provided support by collaborating with the community to reestablish a drinking water production plant that meets standards and safety requirements. As a result, the community was able to produce drinking water for commercial distribution. This became a supplementary occupation that can generate income for families and financial circulation in the community.

Impact Valuation Method



Upon evaluating the economic, social and environmental value of the Ban Thammachat Lang Drinking Water Project, the impact valuation method according to the WBCSD's Social & Human Capital Protocol was adopted to assess its positive and negative impacts. The assessment consists of four phases:

1. Frame: Understanding natural capitals, social capitals and their implications in business
2. Scope: Defining objectives, outlining assessment scope and determining impacts
3. Measure and Value: Measuring and evaluating impacts
4. Apply: Interpreting results and taking action

Benefits

Economic Value

The Ban Thammachat Lang Drinking Water Project has contributed directly and indirectly to the development of the local economy in terms of creating employment, generating income to the village fund and reducing water purchasing expenses for the locals. The value of its economic contribution stands at

461,394 THB

Social Value

The project's social contribution derives from the valuation of impacts on the locals who have gained access to clean and safe water supply as well as the reduction of medical expenses due to back pain caused by lifting drinking water containers. The social value stands at

19,688 THB

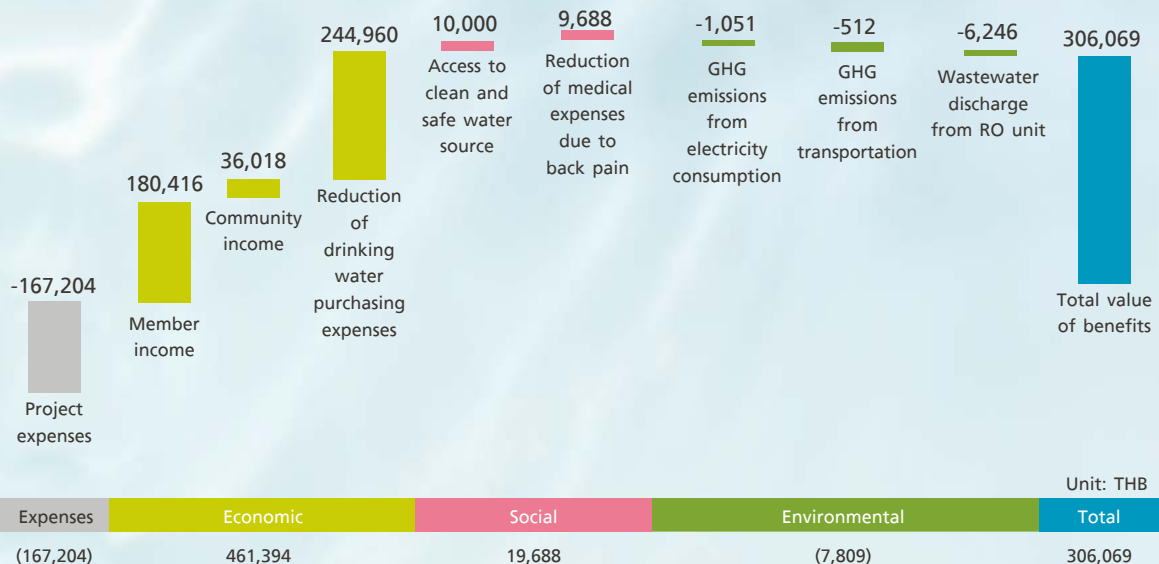
Environmental Value

The project's negative impact is a result of greenhouse gas emissions from electricity-consuming activities, fuel consumption from transportation, and wastewater discharge from drinking water production processes, causing an impact worth

7,809 THB

Upon comparing the project's economic, social and environment valuation to the 167,204-THB expense incurred from the entire project implementation, it was found that the Ban Thammachat Lang Drinking Water Project has directly and indirectly generated positive contributions worth

306,069 THB



Graph depicting the economic, social and environmental values of Ban Thammachat Lang Drinking Water Project

Food Security & Access to Nutrition

The crisis of food insecurity continues to produce severe and extensive consequences across the globe. The main causes of food insecurity include climate change, which leads to ecosystem deterioration, natural disasters, local and global conflicts, and epidemics which trigger further conflicts, competition for food sources and natural resources as well as health impacts which can cause widespread social instability. Without the cooperation between international organizations, the situation of food insecurity may intensify and continue to spread. Food insecurity is, therefore, a challenge and risk for Charoen Pokphand Group as our priorities lie in technology and innovations that produce food for the body and the mind as well as in creating opportunities to promote equal access to such value for the better health and well-being of all.

Supporting the SDGs

2
ZERO
HUNGER



2.1
2.2

More information available in

→ [Sustainable Development Goals Report 2022](#)



Key Performance in 2022

Accumulated Number of Children, Youth, the Poor, and Vulnerable People Given Access to Safe and Nutritious Food (cumulative data)

5,218,867
people

Percentage of People in Need of Assistance or People in Risky Situations who have Gained Access to Safe and Nutritious Food

47.4%

↑ Increased from 2021

Number of Meals Donated to Unfortunate People, Especially Children, Youth, the Poor, and People in Risky Situation

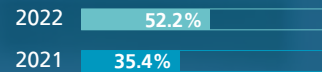
2,658,376 meals

Percentage of Marketing Budget to Promote Healthy Food Products

38%

Goals and Progress

10 million children, population and people in need receive access to safe and nutritious food



Future Workplans



Extend sustainable agricultural practices across the organization and to agricultural partners.



Establish an efficient food availability and sufficiency management system.



Coordinate with other agencies and organizations to initiate a food surplus distribution program.

Ensuring Food Security for the Future

Food Security Management

Nowadays, food shortages in many countries have become a matter of concern for international organizations, especially in the midst of international conflicts and climate change, which have worsened the situation. Therefore, producing a sufficient amount of quality and nutritious food and beverages to meet global demands is one of Charoen Pokphand Group's operational goals. Under the concept of "Making Today a Better Tomorrow", the Group remains committed and dedicated to delivering quality, safe, and nutritious food to all genders and ages. We also focus on conserving the environment by using

resources efficiently in food production and promoting regenerative agriculture practices. In addition, the Group has applied principles from the Sustainable Sourcing Policy in our operations as well as that of our partners to enhance the well-being of communities, suppliers, and consumers, while promoting equal access to sufficient and affordable health products. Furthermore, the Group has coordinated with various organizations to mitigate the impacts of limited access to food through a wide range of programs and activities.

Food Security Management

Food Stability

An efficient food availability management system to provide access to quality, safe, and adequate food even under critical or emergency situations.

Food Availability

Analyze and plan production in accordance with both domestic and overseas demands.

Food Utilization

Everyone has access to nutritious food that strengthen bodily health and boost immunity against diseases.

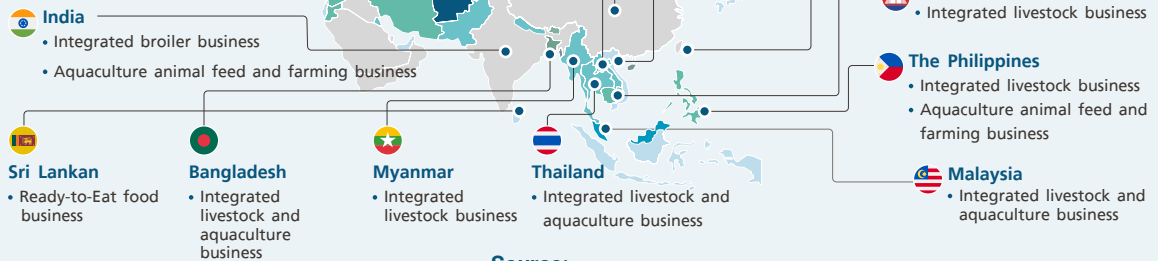
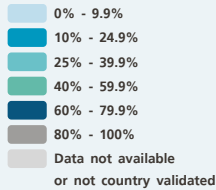
Food Access

Each and every citizen can obtain safe, nutritious food that is suitable for them in terms of nutrition, value for money, and price. This principle has been applied to our entire processes, from raw material procurement, invention and research through to communication.

**To Contribute to the Establishment of Food Security,
Charoen Pokphand Group has Continuously Invested in Food-insecure Economies.**

Percentage prevalence of moderate or severe food insecurity in the total population

Percent of total population



Source:

www.fao.org/fileadmin/templates/SOFI/2022/docs/map-fies-print.pdf

Reforming the Food System for Sustainable Production and Consumption

Developing Food Products to Boost Immunity

Emerging diseases and the global transition into an aging century have urged people to pay more attention to their health. Therefore, a core mission of Charoen Pokphand Group is the development of new alternative food products and healthy food. Currently, the Group produces 901 food products focusing on health, nutrition and well-being, which can be classified into three main categories; low-fat, low-sugar, low-sodium products, nutritionally adjusted products, and improved formula products.

Developing Products for Sustainable Consumption

Besides the commitment to produce safe food for better health, Charoen Pokphand Group has also introduced the concept of creating future food that cares for the world and creates food security as well as environmental sustainability. Accordingly, the Group has developed various raw materials to enable a new style of food that will reduce environmental impacts, while offering good taste and health benefits, such as alternative proteins using raw materials from high-protein plants and replicating the taste, smell and color of animal products. Products that have been released to the market include MEAT ZERO and VG for Love product groups.

Developing Products for Sustainable Production and Consumption & Immunity-Boosting Products



Charoen Pokphand Foods (UK)

TASTE INC – BBQ Chargrilled Chicken Fillet

- High protein
- Low fat
- Low salt
- Grilled with charcoal from a sustainable source



Bellisio Foods Inc. (USA)

ATKINS PLUS – PROTEIN & FIBER SHAKES

- No synthetic growth hormones
- Enriched with protein
- Fiber
- Contains 20 vitamins and minerals



Charoen Pokphand Foods (USA)

Japanese-style Fried Chicken

- No artificial colors or flavors
- Gluten-free
- No MSG
- No preservatives



CPRAM (Thailand)

VG for Love Plant-based Pork Ball Spaghetti

- Plant-based
- Vegetarian food with milk and eggs
- Natural protein with no synthetic or artificial meat
- Traceable throughout the supply chain



Charoen Pokphand Foods (Thailand)

BiFIO Probiotic Plus

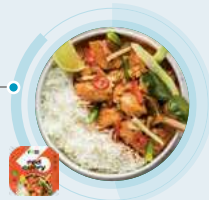
- Enriched with 5 strains of "probiotics" microorganisms
- Boosts immunity and improves gut balance
- Promotes functioning of the nervous system and boosts immune system
- Bronze medal from Research Expo 2021



Top's Foods (Belgium)

Chicken Red Curry with Rice

- 100% natural ingredients
- Gluten-free
- Lactose-free
- Packaging that reduced plastic use by 80%



SuperDrob (Poland)

Bacon-wrapped Chicken Roulade Stuffed with Prune

- No antibiotics
- Raw materials for chicken feed contain vitamins, minerals, garlic and herbal extracts, helping to boost natural immunity of chickens
- Chicken growth rate is 30% slower than general chickens
- Naturally soft and juicy chicken meat



Charoen Pokphand Foods (China)

Lutein Fresh Eggs

- 100 grams of eggs contains $\geq 1,600$ micrograms of lutein
- No antibiotics
- No growth promoters
- Golden award from MONDE SELECTION by INTERNATIONAL QUALITY INSTITUTE 2022



Charoen Pokphand Foods (China)

Rye Bread Stuffed with Low-Fat Chicken Breast

- 20% rye cereal added
- Low fat and long satiety
- Nutritional balance of meat, vegetables and cereals
- No preservatives, artificial colors or flavors



Charoen Pokphand Foods (Singapore)

Charcoal Grilled Chicken Inner Fillet

- Low fat
- Low calorie
- High protein
- No preservatives



Access to Nutritious Food

Public Accessibility to Nutritious Food

The problem of food security is becoming more acute as a result of environmental degradation that is causing reduced agricultural productivity, human and animal epidemics, local and national conflicts. These are the roots of the global food crisis and increasing food prices. Consequently, people with low income are suffering more than others.

Charoen Pokphand Group is determined to promote the good health and well-being of the people in order to reduce food inequality and provide equal access to sufficient and affordable health products for all. Accordingly, the Group has conducted projects and activities to promote hygienic consumption and nutritional principles as well as encouraged learning and skill development processes in food production in an effort to contribute to alleviating malnutrition.

CASE STUDY

Creating a Learning Process and Promoting Access to Quality, Safe and Nutritious Food for Youths

In order to improve quality of life and promote hygienic consumption for children and youths, Charoen Pokphand Group has sponsored high-quality ingredients and food to schools that are in need. The Group has also developed a learning process and promoted access to quality, safe and nutritious food for youths through various projects and activities, such as Raising Layer Chickens for School Lunch, CPF Growing Happiness, Growing Futures, Good Food and Happiness for Children in Surin, Sharing Good Food, CPRAM Junior Chef, and Healthy Chinese Youth, both Body and Mind Project by Chia Tai Food Company Limited (Xiangyang) etc. In 2022, 15,051 youths participated in the projects.



CPRAM Junior Chef
by CPRAM

With over a decade of operations, this project has provided children and youths with useful cooking experiences while also incorporating knowledge on food safety and nutritional value.



Raising Layer for
Student's Lunch

This project contributes to the effort to alleviate deficiency of protein which is beneficial for bodily and intellectual growth of youths in rural areas. The project also supports food security and good nutrition for school children.



Food for those in Need
by Lotus's

This project delivers meals to students in schools that are experiencing shortages or have limited access to quality food. It also promotes knowledge of eating healthy and nutritious food.



Healthy Chinese Youth, both
Physical and Mental,
by Chia Tai Food (Xiang Yang)

This project has been implemented to support national strategy of "Healthy Chinese", which focuses on building foundation for education and innovation of food safety. Workshops were organized to help youth to have an understanding in safety production of food throughout the supply chain as well as field trip to safety and modern food production facilities.

Collaborating with Partners to Reduce Social Inequality

Charoen Pokphand Group is a leader in agro-industrial, food and retail businesses, and is also a global food producer that drives business towards sustainability. We have been working to create food security by developing sustainable food systems across all value chains in Thailand and other countries where we have invested. The Group has joined forces with various parties, including raw material farmers, animal farmers, business partners, the education sector and the government sector in tandem with leveraging innovations and advanced

technologies to guarantee the production of quality, safe, clean and nutritious food that meets standards and reduces environmental impacts. The collaborations focus on the efficient use of resources in food production and the promotion of regenerative agriculture practices in order to protect and revive the environment. Furthermore, the Group has coordinated with various agencies and organizations to deliver food to people in need in order to establish food security and access to good nutrition throughout the society.

CASE STUDY

Collaborating with Partners to Drive “National Food Bank”

Charoen Pokphand Group is committed to ending hunger and promoting access to safe and nutritious food, which is in line with SDG 2 and SDG 3 by delivering safe and edible food surplus to disadvantaged groups or those in need in order to promote access to food for vulnerable groups in countries where we operate. In doing so, the Group has joined hands with subsidiaries and partner networks in various countries, such as the Scholars of Sustenance (SOS) Thailand, Food Aid Foundation, and Kechara Soup Kitchen (Malaysia), Food bank (Vietnam) as well as government and private sectors. The Group believes that such effort will contribute to reducing social inequality in terms of access to food and will eventually lower food waste to zero.



Relationship Capital

Amount of food surplus
donated to over

1,918,373 people

CASE STUDY**Solving Saline Soil,
Increase Cultivation
Land in Inner
Mongolia (China)**

Manufacturing Capital

Increased output by

458 kg./Mu of land

More than 1.5 billion Mu of land in China face the problem of soil salinity. Therefore, in order to improve and utilize soil, which will play a crucial role in establishing China's food security, Chia Tai Co., Ltd. (Inner Mongolia) has collaborated with the Inner Mongolia Agricultural University to develop and experiment soil amendment using swine manure liquid fertilizer. It was used with corn, oat, green beans, and other crops, and the result revealed that the swine manure liquid fertilizer can increase organic matter in the soil, reduce crop damage from soil salinity, and allow a better germination rate of corn sown on land. This helps increase income of up to 120 RMB/Mu of land. This is a new method of solving soil salinity, increase germination rate and the knowledge will be imparted to farmers in the future.



Manufacturing Capital

Approximately **25,750** tons

of food were sold which can support farmers at up to **8** million Rais, provide better a production rate that can procure corn for animal feed of more than **7** million tons

CASE STUDY**Concerted Efforts in Research with
Partners to Create Food Crop Security**

Charoen Pokphand Produce Company Limited focuses on creating benefits for the agricultural society through product innovations in order to obtain the most efficient and highest-quality corn variety. The Company has joined forces with Kasetsart University, Khonkaen University, and the National Science and Technology Development Agency (NSTDA) on the research and development of plant varieties using bio-technology. Furthermore, it has collaborated with Bayer, the United States Department of Agriculture, the International Maize and Wheat Improvement Center (CIMMYT), and KeyGene from the Netherlands, among others, to develop a variety of animal feed maize that boosts immunity with insect resistant and drought tolerant features, and more. Such collaborative progress, which will create food crop security, has successfully expanded the market into 10 countries in Southeast Asia and South Asia.

Innovation

Nowadays, digital and technological advancement as well as the changing demands of consumers have driven each organization to develop new products in order to retain competitiveness and the ability to generate income, while improving the well-being of the society. Many organizations have developed new business models using cutting-edge technology, such as producing food from plant proteins, employing blockchain in data management, applying artificial intelligence to create experiences, and more. Likewise, innovation can respond to business needs in a significant manner, whether by developing new business channels or models, or establishing a new S-Curve for the organization. Accordingly, Charoen Pokphand Group has continuously invested in innovation as well as the study of new innovations and technologies to keep up with global changes and to create a “Better Tomorrow”. Furthermore, the Group has adopted innovation and technology as an important tool in managing any potential future risks that may affect the Group, such as climate change mitigation, actions towards Net Zero in 2050, water management, traceability, and more. This enables greater efficiency in various aspects of management.

Supporting the SDGs

8 DECENT WORK AND ECONOMIC GROWTH



8.2


9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



9.5

9.B

More information available in

 [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Accumulated Patents
and Petty Patents

3,658 patents

↑ Increased from 2021
by 646 patents

Proportion of Revenue from
New Products and Services

8.48%

R&D spending

28,753 million THB

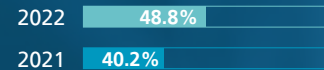
↑ Increased from 2021
6,065 million THB

Number of R&D Personnel

9,674 people

Goals and Progress

7,500 patents and petty patents
registered



Future Workplans



Establish the R&D Center of Excellence in four areas to research, develop and conduct feasibility tests with partners and various business groups at True Digital Park.



Aim towards becoming a tech company by focusing investment on technology and digital technology.



Build the foundation of an innovative organization by urging employees to learn about the Group's innovations through the innovation platform.

C.P. Innovation Exposition

The objectives of Charoen Pokphand Group's C.P. Innovation Exposition are to exchange, share, and scale innovations conceived within the Group, while honoring the Group's innovators, encouraging their association, and fostering a spirit of creativity to form an internal network for exchanging knowledge and experiences. The C.P. Innovation Exposition was established in 2009 with the objective of creating an exchange of knowledge within the Group, a total of 224 projects were submitted. This became the starting point of the C.P. Innovation Exposition. The Group still provides continuous support for the event and determined that it should be held every two years. Over the course of 13 years, the Group has not ceased to support the creation of innovation in tandem with the C.P. Innovation Exposition. At the same time, the Group also organizes the CP Symposium to exchange knowledge between business groups.

The COVID-19 pandemic over the past two years had not stopped Charoen Pokphand Group from driving and developing innovation. On the contrary, the Group continues to promote innovation by organizing the 6th and 7th C.P. Innovation Exposition simultaneously. 3,690 innovations were submitted, while 120 innovations won the Chairman Award. Additionally, CP Symposium was also held with a total of 156 entries from the Group submitted. Both the C.P. Innovation Exposition and the CP Symposium were held using a hybrid format that allowed online participation, which permitted employees from around the world to learn about the innovations more conveniently without the need to travel, thus lowering carbon dioxide emissions. In addition, the Group also developed a platform to compile innovations submitted by business groups around the world. Through this platform, employees from across the world are able to study and exchange knowledge about innovation.






















“Innovation is one of Charoen Pokphand Group's core values. We utilize advanced technology and innovation to further enhance efficiency of our works, as well as develop good quality products and services to drive C.P. Group towards becoming “Innovative Organization”.”


Soopakij Chearavanont

Chairman, Charoen Pokphand Group




Innovations Submitted and Awarded at the C.P. Innovation Exposition 2009-2022


Key Highlight	2009	2011	2013	2016	2019	2021+2022
Number of Innovations Submitted	-	525	464	941	1,908	3,690
Number of Innovations Projects, categorized into innovation type	-	 112	 94	 237	 577	 911
	-	 80	 55	 108	 1,113	 2,100
	-	 312	 292	 560	 218	 367
	-	 21	 23	 36	-	 312
Number of Participated Countries	1	2	6	8	15	15
Number of Innovations that Received Chairman Award	5	27	26	43	54	120
Number of Symposium	86	-	87	-	91	156
Economic Value (million THB)	-	-	-	4,058	7,921	16,583

 Product


 Service


 Process

 Business Model

 Economic

 Technology

 Social & Environmental

 New Normal


รางวัล CHAIRMAN AWARD

นวัตกรรมนวัตกรรม เครื่องจักรกลเกษตร



Developing Infrastructure to Support Research

Innovation Development Approaches

In response to our growth strategy, Charoen Pokphand Group has never ceased to invest in infrastructure to support the research and development of technology and innovation, including the protection of the Group's intellectual property rights. Therefore, the Group continues to develop our infrastructure framework to support research based on the following six approaches:

1. User Experience
2. Digital Workplace
3. Automation
4. Data & Analytics
5. Next-Gen Technology
6. Cybersecurity

Charoen Pokphand Group has conducted an in-depth analysis of the implementation results in order to further improve products and services.

Transforming the Organization with Digital Technology

User Experience

- TRUE Money
- 7 Delivery
- CP Fresh food (China)
- Dr. Pig (China)

Digital Workplace

- Connect Application
- C.P. Love

Automation

- Smart Feed mill
- Smart Farm
- Smart Factory & Food
- Smart Solution
- Smart Retail

Data & Analytics

- Dashboards

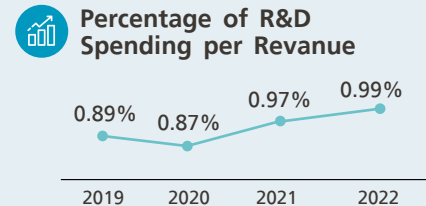
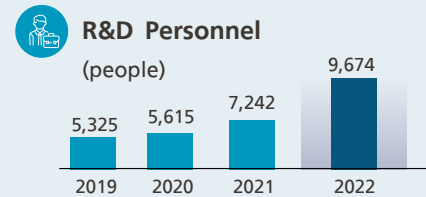
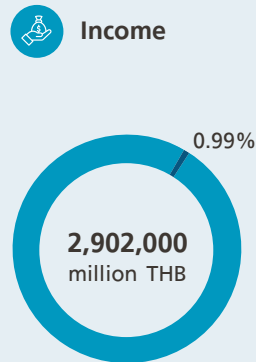
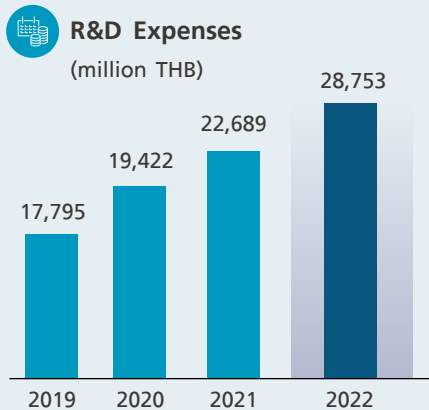
Next-Gen Technology

- Cloud Solution
- Blockchain

Cybersecurity

Self-assessment according to NIST guidelines,
Centralize purchasing of cyber security software

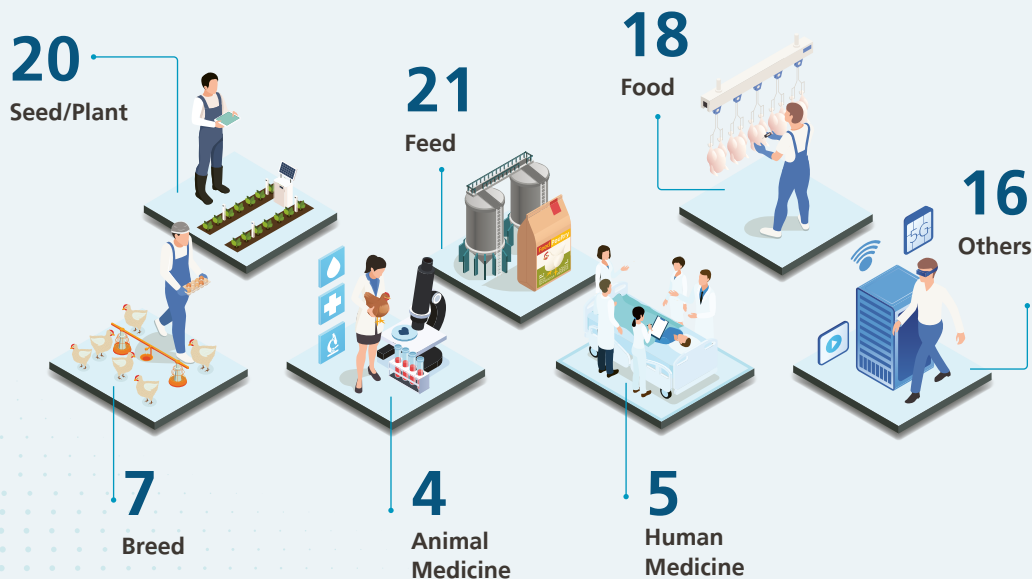
Research & Development



Charoen Pokphand Group continuously invested in Research & Development. Research & Development provides the key direction in expanding revenues from new products and services. Moreover, the introduction of new technology to enhance the research and development will enable the Group to create new business models that are at the level of new S-curve. The Group has research and development units distributed across every business group along the

value chain, in order to research and develop new products and services that respond to consumers' demands, care for the environment, and align with the Group's growth direction. The Group has the Research and Development Policy Committee, and the R&D Committee to provide research direction at the Group level and ensure that research is done effectively and align with the Group's targets.

Types of R&D Center



Developing Process Innovation

Process Innovation

Charoen Pokphand Group places utmost importance in the quality of the products and services we deliver to consumers. Not only do our products and services improve consumers' quality of life, but they also establish long-term trust in the Group. In addition to the quality control of products and services, the Group also focuses on achieving greater production efficiency in order to reduce natural resources consumption and environmental impacts. For this reason, process innovation and technology play an important role in research, innovation, production as well as other supporting processes. They enable the Group to manage production costs with efficiency while also increasing our competitiveness.

CASE STUDY

Digital Egg

Cracked eggs are one of the most common problems in transporting eggs from farms to hatcheries. Therefore, Charoen Pokphand Foods Public Company Limited (CPF) has developed the “digital egg”, which is an egg-shaped tool that is added to each and every step of transportation from farms to hatcheries. The tool analyzes and collects information on risk factors that may cause cracked eggs. The digital egg collects data on impact, speed, temperature, time and location of the egg, helping to effectively improve any weak points that cause eggs to crack.

Cost Saving from Process Innovation

2022

0.95%



Natural Capital

Reduced loss by **6.57** million THB

CASE STUDY**Integrated ASF Management in Swine**

Manufacturing Capital

Fatalities in swine from ASF in 2022 is less than

0.05%



African Swine Fever (ASF) is a serious disease found in swine farming, including Thailand. ASF is not zoonotic disease, but it is a significant disease, because the outbreak can cause 80-100% fatality in infected swine. In order to prevent ASF from entering swine farms, Charoen Pokphand Foods Public Company Limited (CPF) has developed an Integrated ASF Management method using the “know fast, act fast, end fast”

approach. CPF also conducted several researches to tackle ASF, such as development of chemicals to isolate the dead and live virus, changing the sample collection method from blood to saliva, improvement of sample collection and testing processes to reduce the waiting period from two days to two hours. Consequently, the infection can be rapidly managed within 24 hours of its detection.

CASE STUDY**Digital Data Management**

Financial Capital

Rate of return on investment increased by

77.89%

Connecting strategies, operations, decision-making data and success evaluation are the four elements to achieving greatest efficiency in business. Our Chinese subsidiaries have, therefore, developed the Digital Data Management to enhance management efficiency and to connect data from different systems, such as data on sales, production, agriculture, real estate, pharmaceuticals. Business data from all industries will be submitted for analysis, while results will be displayed and monitored, covering more than 390 dashboards and 14 business groups.

Developing Innovation for Products

Product Innovation

Businesses under Charoen Pokphand Group have made continuous investments in research and development to create new products that respond to customer needs and business growth. The Group has taken into account the voice of customers and market trends as information for inventing and developing new products. Once an idea is achieved, the development of the prototype will focus on product quality and production process. The new product will be submitted through intensive inspection processes both in terms of properties and benefits in preparation for the full production process prior to market release.

Revenue Generation from New Products and Services

2022

8.48%



CASE STUDY

Ready to Bake Ready to Bright Business



Manufacturing Capital

Reduced baking time at 7-Eleven outlets by

62%



Financial Capital

Generated income of

416.3

million THB/year



With the current trend where a large number of freshly-baked bakeries are opening up and quickly expanding, it is an opportunity for the Group to introduce freshly-baked bakery in the 7-eleven stores. A mini scale bakery corner has been installed in the 7-eleven store, which draws interests from consumers and becomes a new business model. From this idea, frozen products, such as pizza and croissant, undergo technological product development, which allow simplified baking process or Ready to Bake process. The products only need to be thawed and baked on-site. Hence, preparation time for pizza is reduced by 64%, and 62% for croissant products. This responds well to a quick service model and creates competitive advantage in process and product quality. The products are highly effective because of the cheaper prices, which is popular among consumers.

CASE STUDY

BiFiO Probiotic Plus

The CPF R&D Center launched the “BiFiO Probiotic Plus”, which is a supplementary product. It is a probiotic supplement which contains 5 strains of quality microorganisms that have received the “FOSHU” of certification from Japan. Additionally, research on its effects showed that it helps boost immunity, prevent allergies, and improve digestive systems. The product contains two types of prebiotics, which is a great food for probiotics. This will allow probiotics to survive longer in our intestines. The product also received the Bronze Medal from the National Research Council of Thailand (NRCT), Ministry of Higher Education, Science, Research and Innovation (MHESI), and Cheewajit Awards 2021–2022.



Natural Capital

Generated income of
1 million THB/year

* During market trial



ENABLING HEALTHCARE DIGITAL TRANSFORMATION



Today, Thailand's ratio of doctors per 1,000 people stands at 0.81, compared to Singapore's 2.29. Making a visit to the doctor in Thailand can be time-consuming and costly. True Corporation Public Company Limited (TRUE) and Charoen Pokphand Group recognize our potential to help society. Therefore, we have developed the “MORDEE” service, which is an online to offline healthcare system that connects the public health system to households and hospitals. This provides people with access to the healthcare system. Currently, MORDEE has over 500 specialized doctors, who can provide consultation covering over 20 diseases, and also has over 50 partner hospitals.

CASE STUDY

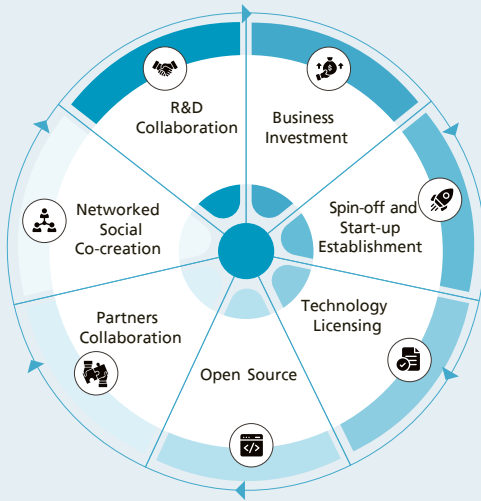
MORDEE



Financial Capital

Generated income of
258 million THB/year

Seeking Opportunities and Building Innovation Partnerships



Besides conducting R&D within Charoen Pokphand Group which relies on the Group's long accumulated knowledge and expertise, the Group has also cooperated with partners from various sectors to jointly develop innovation. For example, in 2022, the Group joined the Decarbonize Thailand Sandbox to advance towards the decarbonization goal in accordance with the "National Energy Plan 2022". The Group joined forces with five Thai leading partner organizations to select startups to work closely together in developing and furthering climate change mitigation efforts, and in transitioning towards Thailand's Zero Carbon Economy. The project was held under the cooperation of startups, the public, and private sectors, leading organizations from various industries as well as researchers, economists, and people in the environment and innovation industry.

CASE STUDY

IoT Platform for Building Energy Management

Ek-Chai Distribution System Company Limited represented Charoen Pokphand Group in the Decarbonize Thailand Startup Sandbox to join partners from Thailand's leading organizations in selecting startups which resulted in the collaboration with ALTO ENERGY EDGE. Subsequently, a pilot project was conducted using technology to manage energy in Lotus's Go Fresh outlets, consisting of IoT, big data and digital infrastructure to manage a Digital Twin, or a real-time simulation model that analyzes the life cycle of stores, customers and energy consumption in AI algorithms in order to increase energy efficiency, among others.



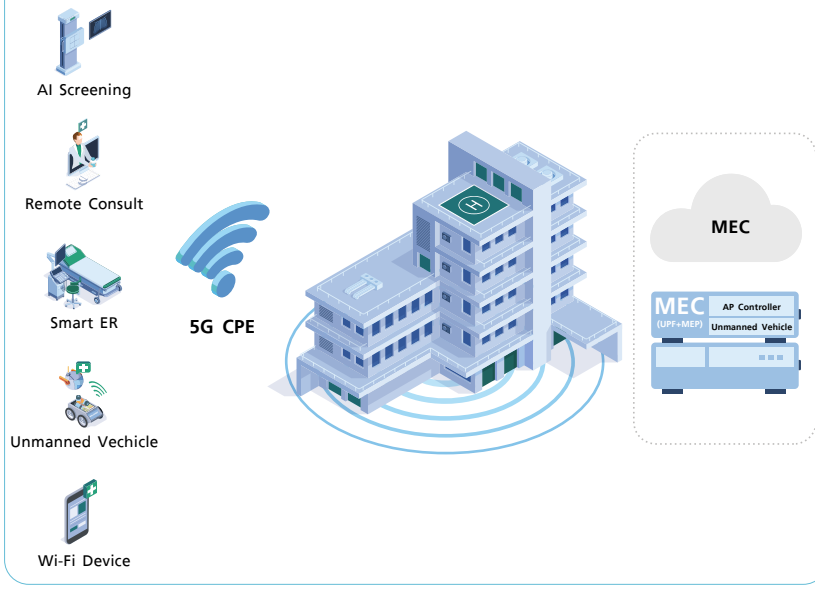
Natural Capital

Reduced energy by **2.80%** per year per branch

Reduced GHG emissions by
8.15 tons CO₂ equivalent

CASE STUDY

Siriraj Data Center

5G Multi-access
Edge Computing

 Financial Capital

Revenue of
50 million THB/year

 Relationship Capital

Efficiency of data
transmission increased by
75%

Multi-access Edge Computing (MEC) is a project under the cooperation of True Corporation Public Company Limited (TRUE) and Siriraj Hospital to set up the Edge Computing system with low latency that allows users to directly and rapidly access systems and data in Siriraj Hospital's Data Center. It provides support to the functioning of Siriraj Hospital's application in the form of data security and speed in data reception/transmission, enabling the efficient use of 5G wireless devices in the hospital and permitting the continuation of various projects that are beneficial to the public health system, such as Tele Ambulance Powered by True 5G, Telehealth, and the development of the 5G smart driverless ambulance, one more. This project allows TRUE to be the first telecommunication provider in Southeast Asia to install and provide MEC services, while promoting the development of smart hospital systems in Thailand.

Stakeholder Engagement

One of Charoen Pokphand Group's approaches towards becoming a sustainable organization that is ready to deliver equal values of the future to all stakeholder groups is to maintain their trust and confidence in the organization. However, current changes in the business environment, such as enforcement of new regulations or rapidly changing market conditions, are challenges that Charoen Pokphand Group faces in our operations and in our effort to rapidly and efficiently create products and services in response to demands. In order to closely monitor any shift, the Group implements a process that regularly tracks stakeholder opinions. The result of the Stakeholder Engagement Survey is adopted upon reviewing the Group's stakeholder engagement strategies, sustainability operations, and transparent communication of the Group's performance. Furthermore, the Group has engaged and joined national and international organizations on sustainability to exchange and apply knowledge to deliver benefits to the country, the people and the Group while adhering to the commitment to empower positive development and changes for a "Better Tomorrow".

Supporting the SDGs



16.7



17.16

17.17

More information available in

→ [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Stakeholder Engagement Score

80%

↓ Decreased by 2% compared to 2021

Sustainability Effectiveness

80%

↑ Increased by 1% compared to 2021

Communication, Listening and Responding

79%

Equal to 2021 result

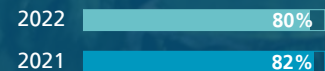
Overall Satisfaction

80%

↓ Decreased by 6% compared to 2021

Goals and Progress

80% of engagement score of multi-stakeholder engagement survey



Future Workplans



Review stakeholder engagement and sustainability strategies in accordance with the result of the Stakeholder Engagement Survey.



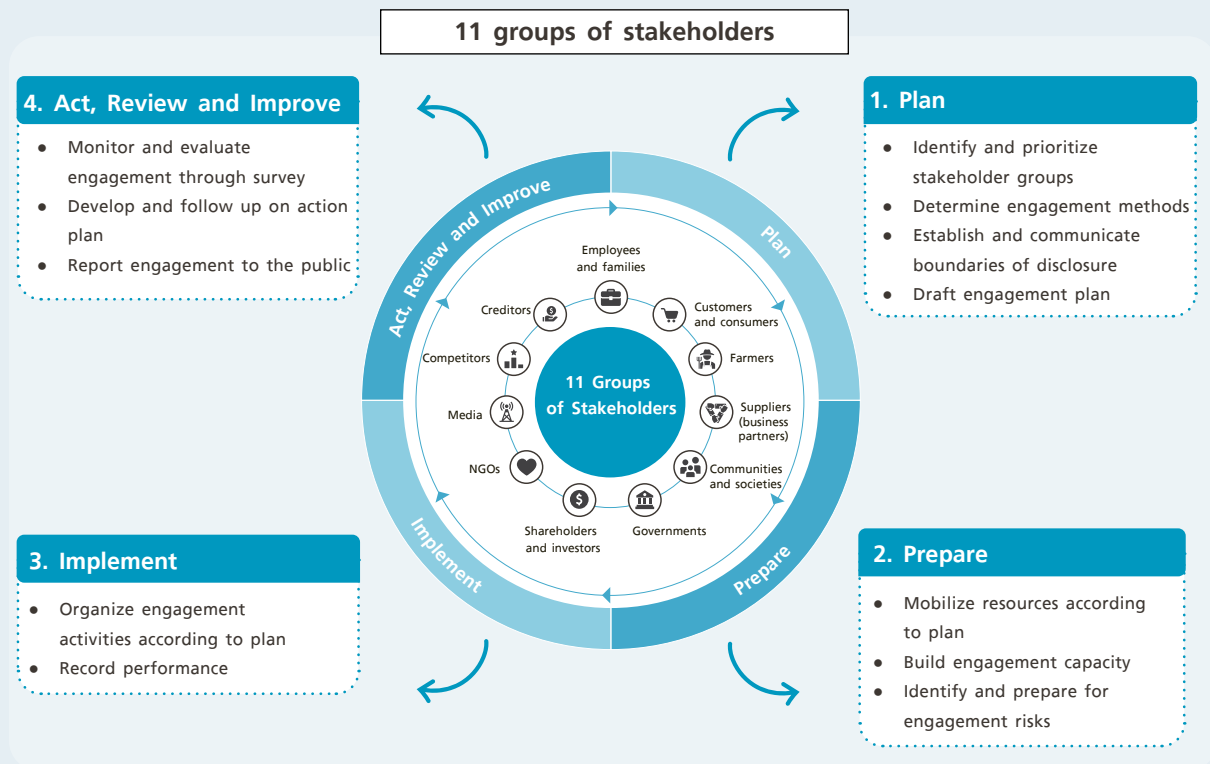
Review materiality issues that are in stakeholders' interest.



Develop an E-learning course on stakeholder engagement process

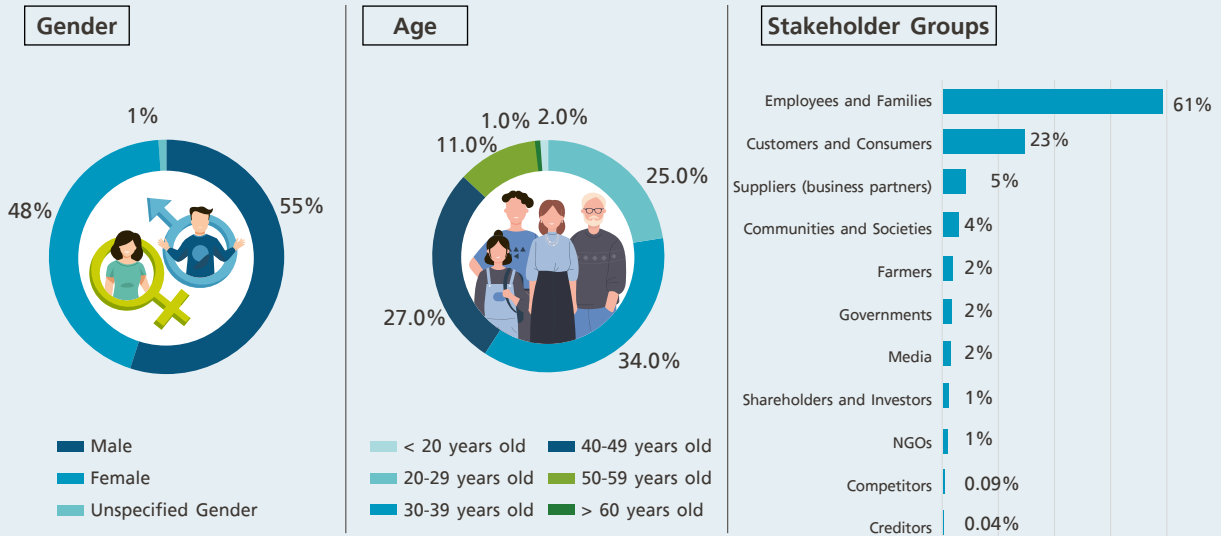
Stakeholder Engagement Survey 2022

Charoen Pokphand Group focuses on building good and equal relationships and confidence among all groups of stakeholders. Therefore, the Group developed the **Stakeholder Engagement Guidelines** based on the AA1000 standards to support each company in identifying relevant stakeholders, establishing stakeholder engagement strategies, and reviewing corporate sustainability strategies.



Charoen Pokphand Group conducted the Stakeholder Engagement Survey on all 11 groups of stakeholders. The survey in 2022 also incorporated the materiality assessment to obtain feedback from stakeholders and adopt them in improving the Group's strategies related to sustainability and stakeholder engagement in order to create stakeholder confidence and trust. The Group has communicated the survey guidelines to our business groups for enhanced effectiveness and inclusiveness. We have also conveyed the survey result to business groups to improve their stakeholder engagement and sustainability operations in order to continuously create shared values between businesses and stakeholders.

The 2022 Stakeholder Engagement Survey was conducted on 16,425 respondents, 51% of whom are male, 48% female, and 1% unspecified gender. The majority of the respondents are in the 30-39 age range. The top three respondent groups are employees, customers and suppliers (business partners).



Based on the 2022 Stakeholder Engagement Survey, stakeholder engagement is at 80%, which met the established target of 80%. The top three stakeholder groups with the highest engagement score are creditors, media and government. The lowest engagement score include competitors.



More information available in

→ [Stakeholder Engagement Report 2022](#)

The engagement scores indicated that stakeholders recognize that Charoen Pokphand Group is excellent in sustainability effectiveness. The overall score increased when compared to result in 2021, this was the result of our commitment in sustainability, such as Corporate Governance, Cybersecurity and Data Protection, and more. At the same time, communication, listening and responding remain a challenge for the Group. The Group has develop an initial plan to improve our performance in these areas. The improvement plan, drawing upon the suggestions received from the survey, will include expanding communication channels and adjusting communication methods according to the needs of each stakeholder group.

Listening and Responding to Stakeholders

Listening to the opinions of key stakeholders who are influenced or affected by the Group's current and future activities, products or services is an opportunity to directly acquire their perspectives and concerns about relevant sustainability issues. It also presents an important opportunity for communication to enable their understanding of the Group's engagement strategy.

In the 2022 Stakeholder Engagement Survey, the Group conducted in-depth interviews with representatives from both internal and external stakeholder groups to learn their insights on the execution of collaborative projects with the Group as well as their issues of interest and suggestion on our communication process. The acquired in depth data will be used to improve our communication strategy and stakeholder engagement process.

Community



“ I view that C.P. Group's support for the Community Tourism Enterprise Project of Baan Thammachart Lang Community is an opportunity for the community to generate income as marine resources are becoming scarcer and the unstable income from fishing alone cannot cover the cost of living. The Group's representatives periodically came to listen to our opinions to provide support and work on further project extensions. ”

Thonglor Worachat
President of Baan Thammachart
Lang Community

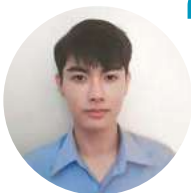
Business Partners



“ The collaboration on circular economy between C.P. Group and SCG responds accurately to the effort in caring for the Earth. The project has the potential to become commercialized. If possible, in the future, we should lay out a long-term roadmap to re-commercialize CP's plastic products across their own value chain. Likewise, we can work together to maximize benefits. ”

Chokchai Montreeamornchet
SCG Chemicals Public Company Limited

Employee



“ I feel at ease working with Siam Makro Public Company Limited, because they have no issue regarding discrimination. The Company also does not restrict career advancement, and allow everyone to demonstrate their abilities which I find very impressive. ”

Thanapon Wiriyasansakul
Siam Makro Public Company Limited

Customer



“ The project to develop a manual for regenerative agricultural practices for farmers operated in conjunction with CP's rice business group. It is a project that Unilever attaches great importance to. The manual will be useful for farmers, and all parties will benefit from effective guidelines and standards that can be used for reference. ”

Nattinee Netraumpai
Unilever Thailand Company Limited

Listening to Opinions of Third-party Experts

In addition to feedback from the aforementioned groups of stakeholders, Charoen Pokphand Group also places importance on addressing the concerns of third-party experts, who can provide clear insights on global trends and international standards. Therefore, the Group conducted in-depth interviews on expert representatives

regarding the Group's sustainability performance and communication. This has helped the Group to adjust operational plans and strategies to effectively answer emerging trends and situations that are occurring internationally.

Government



“Personally, I think there are still gaps in the social dimension of sustainability that can be further developed, such as circular economy. There are dimensions that are worth joining hands on with partners like educational institutions, communities or other groups to enable cooperation and direct experience in knowledge sharing, for which C.P. Group is likely to have high resources, in order to give back to the society or entrepreneurs.”

Assoc. Prof. Dr. Rungrat Chaisamrej
Thai Chamber of Commerce
Circular Economy and Environment Committee

NGOs



“Our relationship with C.P. Group has worked well. C.P. Group featured as an example of good practice and was highlighted as one of the top performers in the 2022 Reporting Matters publication. We want to continue working with and supporting C.P. Group to keep improving the effectiveness of their sustainability disclosures, so that the group can once again be highlighted as one of our top performers within the Asia Pacific region.”

Blanca Grey
World Business Council for Sustainable Development

Collaborating with Partners to Drive Sustainable Development in 2022

5 May 2022 – Mr. Suphachai Chearavanont, Chief Executive Officer of Charoen Pokphand Group, gave a keynote speech on “Digital Transformations” at the “Enhance the Dots” seminar organized by the Thai Chamber of Commerce (TCC). The seminar was attended by more than 500 executives from government organizations, the private sector and the TCC.



1 October 2022 – Mr. Suphachai Chearavanont, Chief Executive Officer of Charoen Pokphand Group, shared his vision on “Leading Sustainable Business” at the CEO Panel with executives from prominent organizations to jointly propose sustainable development guidelines for business management which can be further adopted by leaders of other organizations. He also announced the goals and policies to achieve carbon neutrality and zero waste reduction by 2030 as well as net zero emissions by 2050.

More information available in

→ [Stakeholder Engagement](#)

30 November 2022 – Mr. Suphachai Chearavanont, Chief Executive Officer of Charoen Pokphand Group, shared his vision at the SUSTAINABILITY FORUM 2023 and announced the Group's three challenging goals that must be achieved by 2030: climate change adaptation, inequality reduction through support for education, and protection of ecosystems and biodiversity.



14 December 2022 – Mr. Dhanin Chearavanont, Senior Chairman of Charoen Pokphand Group, and Mr. Akio Toyoda, President and Chairman of the Board of Directors of Toyota Motor Corporation, joined hands to drive the carbon neutrality goal in Thailand by connecting both companies in a joint endeavor to reduce carbon dioxide emissions in production processes, transportation and energy use.

14 March 2023, Mr. Soopakij Chearavanont, Chairman of Charoen Pokphand Group, led the management team from the Group's businesses to participate in research presentations aimed at driving the space program at Panyapiwat Institute of Management (PIM), an alliance network. The team went to the KEETA Space Food Laboratory, which is Asia's only prototype laboratory that meets and applies NASA standards. This is the result of collaboration between Thailand's next generation of space engineers. Because PIM recognizes the importance of Thai technology, it has been promoting youth education through this project. PIM is also willing to collaborate with other departments to accelerate progress and raise Thailand's level of space research and development to international standards.





HOME

Living Together

A holistic approach to environmental stewardship that takes into account the abundance of natural resources, including soil, water, forest, and air, will enable us to achieve the critical goal of limiting global warming to 1.5°C and preserving natural resources that are essential for the livelihoods of the global population and all living things. For this reason, Charoen Pokphand Group stresses on conducting a business that is environmentally friendly by, for instance, reducing greenhouse gas emissions, decreasing waste generation and implementing waste management, water stewardship, protecting ecosystems and biodiversity as well as continuously creating maximum benefits for raw materials and natural resources in order to achieve circular economy. In addition, to our operational commitment, the Group has extended our approach to business partners and suppliers across the value chain to jointly create a wide range of positive impacts for a “Better Tomorrow” of all stakeholder groups.

////////////////////////////////////	
Climate Resilience	174
Circular Economy	192
Water Stewardship	204
Ecosystem & Biodiversity Protection	214
Responsible Supply Chain Management	230

Value Creation Process

Input Factor

Financial Capital

- **4,822 million THB** of environmental investment

Manufacturing Capital

- **93.6%** of green production plants or buildings
- **1,728 branches** improved to upgrade energy efficiency

Human Capital

- **100% of employees** received training on environmental policies and awareness promotion about natural resources protection
- **17,637 suppliers and farmers** received new agricultural knowledge and skill training

Relationship Capital

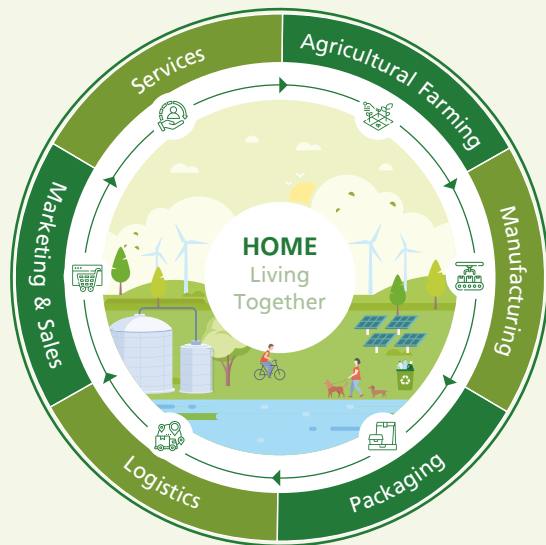
- Establishment of a stable relationship between the Group and all stakeholders
- Partnership with various sectors to create a sustainable society and organization

Natural Capital

- **52.16 million GJ** energy consumption
- **392 cubic meters** water withdrawal
- **328 thousand tons** Natural renewable resources (biomass) used

Value Creation Process through Charoen Pokphand Group's Business Operations

Charoen Pokphand Group's Value Chain



Relevant Activities

Throughout our past operations, Charoen Pokphand Group has always attached importance to caring for, protecting and preserving natural resources with emphasis on reducing resource dependence, using alternative raw materials, increasing recycling, and reusing. We also give priority to reducing waste generated within our operations and by consumers and customers. Apart from actions to reduce environmental impacts from our operations, the Group also aims to continuously develop the capabilities of our suppliers and business partners to produce widespread positive contributions.

Values and Impacts



Relationship Capital

- + 10 suppliers and business partners with operations in environmental protection



Natural Capital

- + 1.32 million tCO₂e GHG reduction (Scope 1&2)
- + 1.06 million Gigajoules increase in renewable energy consumption
- + 69 million cubic meters water reused/recycled
- + 0.04 tons per unit of revenue reduction in waste generated from production
- Impacts on soil, water, air and the well-being of all living things

Relevant Stakeholders

SDGs



Farmers



2.4



Communities and societies



4.4



Suppliers



6.1

6.3

6.4

6.5

6.6

6.B



Employees and families



7.2

7.3



NGOs



8.3

8.4



Governments



9.2

9.4



Competitors



11.6



Customers and consumers



12.2

12.3

12.4

12.5

12.7

12.A



13.3



14.1

14.2

14.4

14.5

14.B



15.1

15.2

15.4

15.5

Climate Resilience

Climate change is one of the global society's top priorities, because its effects are widespread throughout the world. Not only do they impact economic stability, but they also affect the well-being of all living things. With operations across the globe, Charoen Pokphand Group recognizes the importance of caring for and conserving the abundance of the planet's environment in order to create a "Better Tomorrow" for the next generation. The Group has declared the target to become Carbon Neutral by 2030 and to achieve Net Zero emissions by 2050. The Group is well aware of the challenges that lie ahead in our path to achieve both targets. Hence, we have analyzed various operational approaches to respond to potential challenges, increase business opportunities and create a fair transition that offers equal opportunities of access to adequate resources, including clean water and air, to the people. In addition, the Group has coordinated with suppliers and business partners to improve process efficiency and support sustainable purchases and consumption.

Supporting the SDGs

7 AFFORDABLE AND CLEAN ENERGY7.2
7.3**8** DECENT WORK AND ECONOMIC GROWTH

8.4

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

9.4

11 SUSTAINABLE CITIES AND COMMUNITIES

11.6

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

12.A

13 CLIMATE ACTION

13.3

More information available in



Sustainable Development Goals Report 2022

Key Performance in 2022

6.20%

Decrease in GHG Emissions
(Scope 1 and 2)

In 2022, the Group was able to reduce Scope 1 and 2 GHG emissions by 0.17 million tons CO₂e

15%

Proportion of Renewable Energy
Consumption

In 2022, the Group increased the share of renewable energy consumption, equivalent to reducing GHG emissions by 0.78 ton CO₂e

23%

Energy Efficiency Enhancement

In 2022, the Group conducted energy conservation and efficiency enhancement projects, which help in energy saving up to 0.89 million GJ

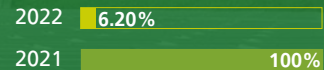
4,822 million THB

Environmental Investment

In 2022, the Group increased its environmental investment

Goals and Progress

Reduce GHG emissions (Scope 1 and 2) from operations from 4.2% target according to Science-based Target



Future Workplans



Increase efficiency of energy consumption in renewable energy



Utilize technology to increase productivity, decrease GHG emission, and increase carbon capture from agricultural activities.



Source raw materials for production, or procure products for sale from sustainable sources.



Promote and support suppliers and other stakeholders along the value chain to reduce GHG emissions.

Charoen Pokphand Group's Commitment towards Net Zero

2005-2015

Started with energy saving goals and began implementing GHG reduction target at 10% compared to base year 2015.

2010

2021

Set net GHG reduction target based on SBT: Scope 1 and 2 by 42% and Scope 3 by 25% within 2030 compared to base year 2021.

2020

2020

Achieved target to reduce GHG emissions (Scope 1 and 2) by 10% per unit of revenue compared to base year 2015.

2030 Short-term Goal

SBT: Scope 1+2: Reduce by 42%

To achieve Carbon Neutral (Scope 1+2)



15%
Energy Efficiency



3%
Natural Refrigerant



30%
Renewable Energy



1%
Electric Transport Vehicles



19%
Bio Energy



22%
Carbon Credit and Clean Energy Certificate



2%
Zero Coal Consumption



8%
Tree Planting

2030

SBT: Scope 3: Reduce by 25%



45%
Procurement of Low-carbon Products



25%
Procurement of Low-carbon Agricultural Raw Materials



16%
Avoided Emission from Used of our Products



11%
Zero Waste to Landfill



3%
Transition to Low-emission Fuels, Electric or Hydrogen Vehicles

Note: Long-term goals cover at least 90% of GHG Scope 3 data.

2030



Charoen Pokphand Group is Certified according to the Science-based Targets Initiative (SBTi)

The Group is committed to reduce greenhouse gas emissions from our operations, both Scope 1 and 2, by 42%, and 25% for Scope 3 within 2030, compared to base year 2021.

2050

Target:
Achieve Net Zero Emissions by 2050
 Conduct neutral business to offset residual GHG

2050 Long-term Target

SBT: Scope 1+2: Reduce by 90%



Renewable Energy



Carbon Credit and Clean Energy Certificate



Carbon Capture and Storage



Tree Planting

SBT: Scope 3: Reduce by 90%



Reduce GHG Emissions from Upstream Suppliers



Re-design and Switch to Sustainable/Recycled Materials and Packaging Components



Jointly Implement Sustainable Agriculture with Partners



Encourage the Use of Renewable Electricity for Tenants



Increase Efficiency of Product Distribution and Logistics



Collaborate with Joint Ventures on Sustainability

2040

2050

Net Zero Emissions

Climate-related Risks and Opportunities Assessment

Charoen Pokphand Group has implemented a climate change management framework across our value chain and has conducted assessments on various dimensions of climate-related risks and opportunities, including potential financial impacts. We have also analyzed long-term strategies and the most efficient allocation of capital in terms of potential economic impacts from climate change in accordance with the framework of the Task Force on Climate-related Financial Disclosures (TCFD).

Climate change has produced profound impacts on Charoen Pokphand Group's businesses. Therefore, switching our operational strategies to low-carbon economy and adapting to change are means of strengthening the Group's competitiveness and the ability to continue delivering sustainable values to the society and environment.

More information available in

→ [Task Force on Climate-related Financial Disclosure \(TCFD\) Report 2022](#)


Charoen Pokphand Group's Climate-related Risks and Opportunities

Risks

Transition

-  Policy and Regulation
-  Technology
-  Market
-  Reputation

Physical

-  Acute / Chronic

Strategic Planning Risk Management

Financial Impact

Income Statement

Cashflow Statement

Statement of Financial Position



Revenues



Expenditures



Assets



Capital

Opportunities

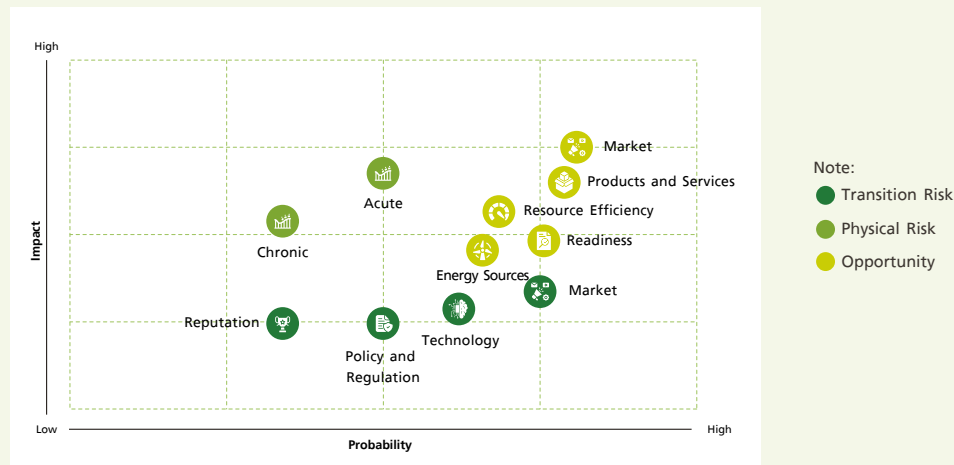
-  Resource Efficiency
-  Energy Sources
-  Products and Services
-  Market
-  Readiness

The assessment of climate-related risks has enabled us to understand the impact of such risks and opportunities on business, acknowledge potential financial impacts on revenue, expenses, value of assets, liabilities and financial costs as well as potential impacts on human ability to live and other relevant human rights. The Group has planned to drive specific actions and proceed with relevant procedures to manage risks and opportunities with full efficiency.

Upon performing climate-related risk assessment, the Group has evaluated the impacts of relevant variables, in order to plan measures to handle potential situations as well as adopting low-carbon technology and carbon pricing. Variables that have undergone significant changes, include policy implementation, technology, and market disruptions. In terms of physical risks, the Group has focused on the impacts of extreme weather events, such as rising temperatures, water stress, storms and droughts. The impacts and levels can be predicted based on the growing frequency and severity of extreme climate change. As a result, volatility in raw material volume and supply will increase.

Assessment Matrix:

Climate-related Risks and Opportunities



Driving Climate Change	Short-term (2021-2025)		Medium-term (2025-2030)		Long-term (2030-2050)	
	Risks	Opportunities	Risks	Opportunities	Risks	Opportunities
Transition Risks						
Policy and Regulation	●	●	●	●	●	●
Technology	●	●	●	●	●	●
Market	●	●	●	●	●	●
Reputation	●	●	●	●	●	●
Physical Risks						
Acute	●	●	●	●	●	●
Chronic	●	●	●	●	●	●

Risks Low High
Opportunities Low High

Climate Change and Energy Management

With the global attention set on the trend to become a Zero Carbon Organization, Charoen Pokphand Group considers this a great challenge for the Group. Therefore, the Group has defined the Carbon Neutral Target and certified with Science-based Target. This target serves as the guideline in managing climate change, which corresponds to the Paris Agreement's ultimate goal of limiting global warming to no more than 1.5°C.

Charoen Pokphand Group focuses on climate change management and attaches importance to promoting the use of renewable energy, upgrading machinery to render maximum efficiency in all activities, developing modern, fast and non-polluting transportation systems, sourcing sustainable and low-carbon raw materials that do not destroy forests, and planting trees, increasing green space and investing in Carbon Sequestration, which are the key driving factors in achieving our established goals.

Climate Change Management Framework

Sustainable Energy

- 1 Conservation and Increase Energy Efficiency
- 2 Usage of Alternative and Renewable Energy

Sustainable Operation

- 3 Efficient Resource Utilization in the Production Process and Logistics
- 4 Zero Waste to Landfill
- 5 Environmentally-friendly Refrigerant

Carbon Removal

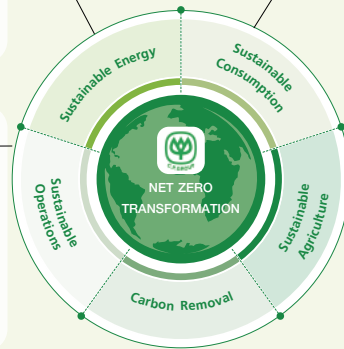
- 6 Removal of Carbon through Natural Approach, such as Tree Planting and Conserving, and through Engineering Approach

Sustainable Consumption

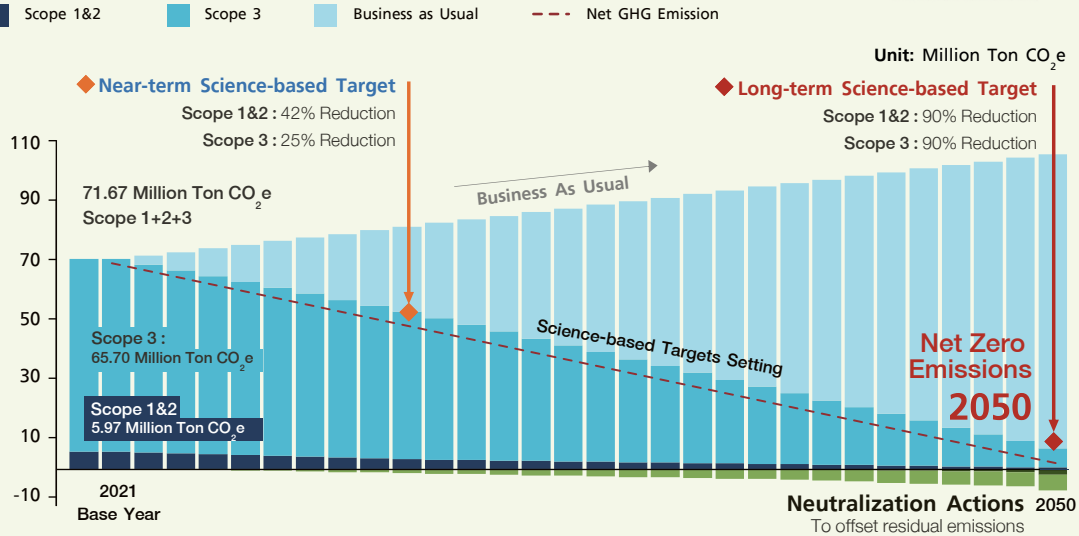
- 9 Procurement of Raw Materials for Product Production or for Distribution from Sustainable Sources
- 10 Production of Products and Services that help Reduce GHG Emission at the Use Phase

Sustainable Agriculture

- 7 Utilization of Technology to increase Productivity, Reduce Emissions and Increase Carbon Capture in Agricultural Activities
- 8 Utilization and Production of Renewable Energy from Agricultural Wastes



Charoen Pokphand Group's Net Zero Pathway (GHG Emissions Scope 1, 2 and 3)

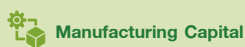


CASE STUDY

“Carbon Neutral Organization” Pak Thong Chai Animal Feed Factory, Nakhon Ratchasima

As a result of the animal feed business's unwavering commitment to the environment, various projects have been carried out to reduce greenhouse gas emissions, reduce process loss, and enhance energy efficiency, such as utilizing biomass, solar energy and automated production systems that reduce loss, etc.

Consequently, the Pak Thong Chai Animal Feed Factory has low greenhouse gas or carbon dioxide emission level. Meanwhile, the Company has shown its responsibility to the environment and the society by offsetting residual carbon to zero, in order to achieve feedmill carbon neutrality. Likewise, the Company is attentive to global warming and climate change. It is also a role model in enhancing corporate capacity in the efficient management of greenhouse gas emissions.

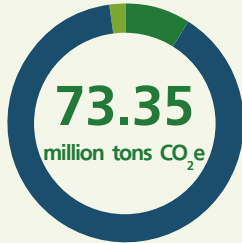


The prototype of Thailand's first carbon neutral animal feed factory, which has been certified by the TGO.

GHG Emissions Management Dashboard

GHG Emissions

Scope 1+2 and 3



Scope 1

Direct GHG emissions from organization 1.18 1.61%

Scope 2

Indirect GHG emissions from energy consumption 4.63 6.31%

Scope 3

Other indirect GHG emissions 67.54 92.08%

GHG Emissions

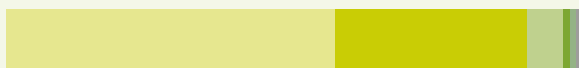
Scope 1+2

By Type



S1 Stationary Combustion 11% S1 Volatile Substances 7%
S1 Mobile Combustion 2% S2 Electricity 80%

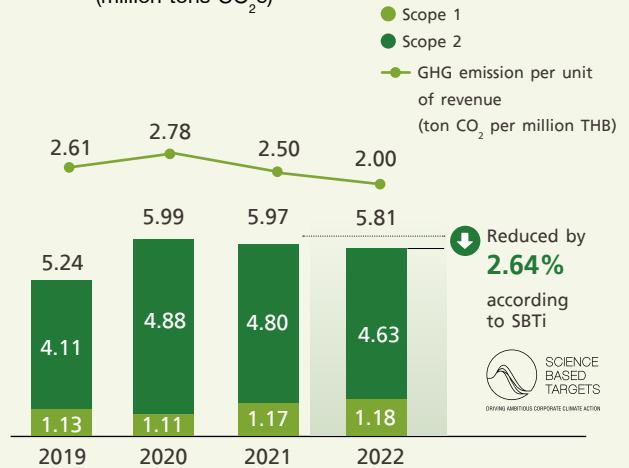
By Business Group



Agro-industry and Food 54% E-Commerce and Digital 1%
Retail and Distribution 37% Property Development 1%
Media and Telecommunications 6% Others 1%

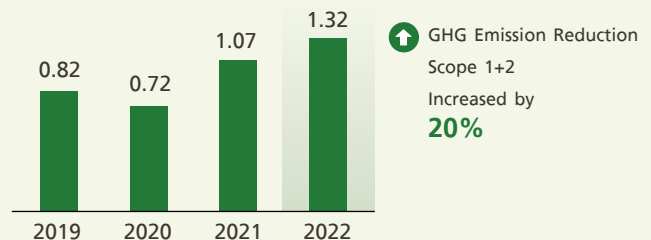
GHG Emissions

(million tons CO₂e)



GHG Emission Reduction from Projects

1.32 million tons CO₂e



Biomass / Biogas 49%



Energy Efficiency 7.48%



Waste Management 30%



Natural Refrigerant 3%



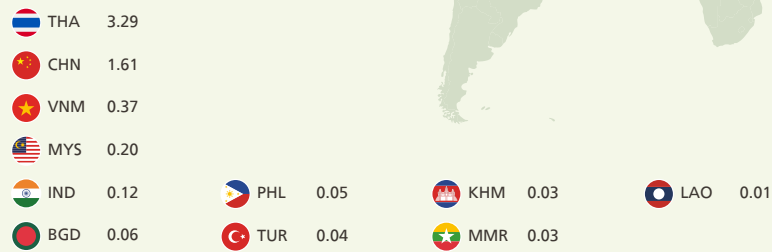
Electricity / Solar cell 11%

GHG Emissions

Scope 1+2

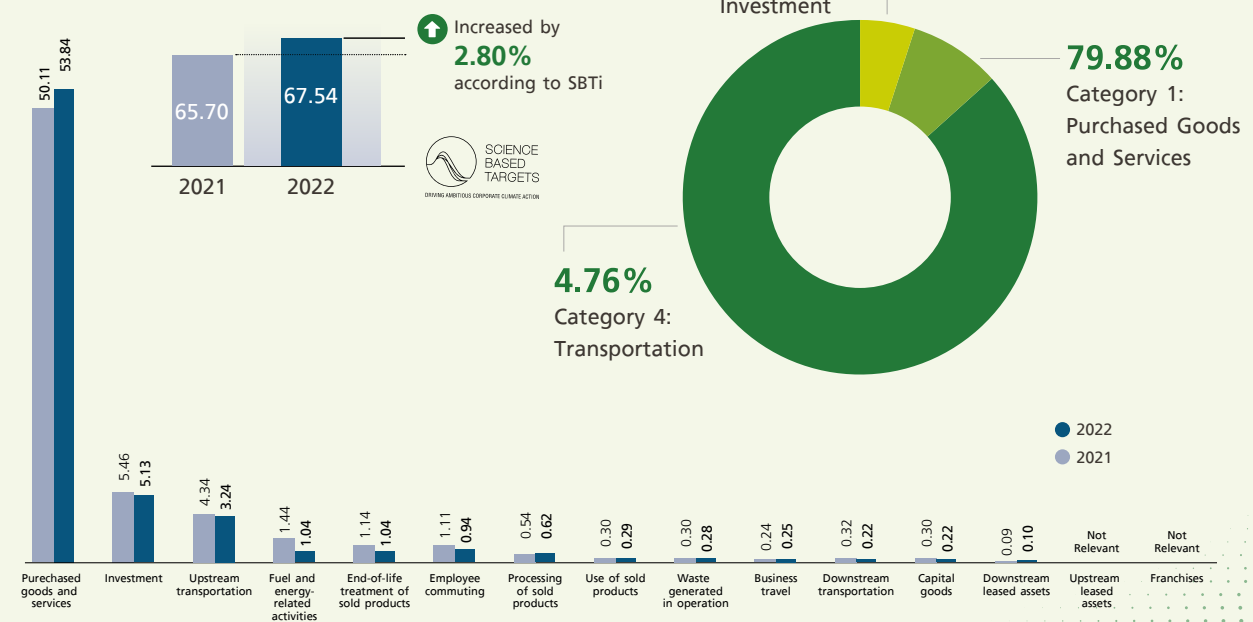
By Country

(million tons CO₂e)

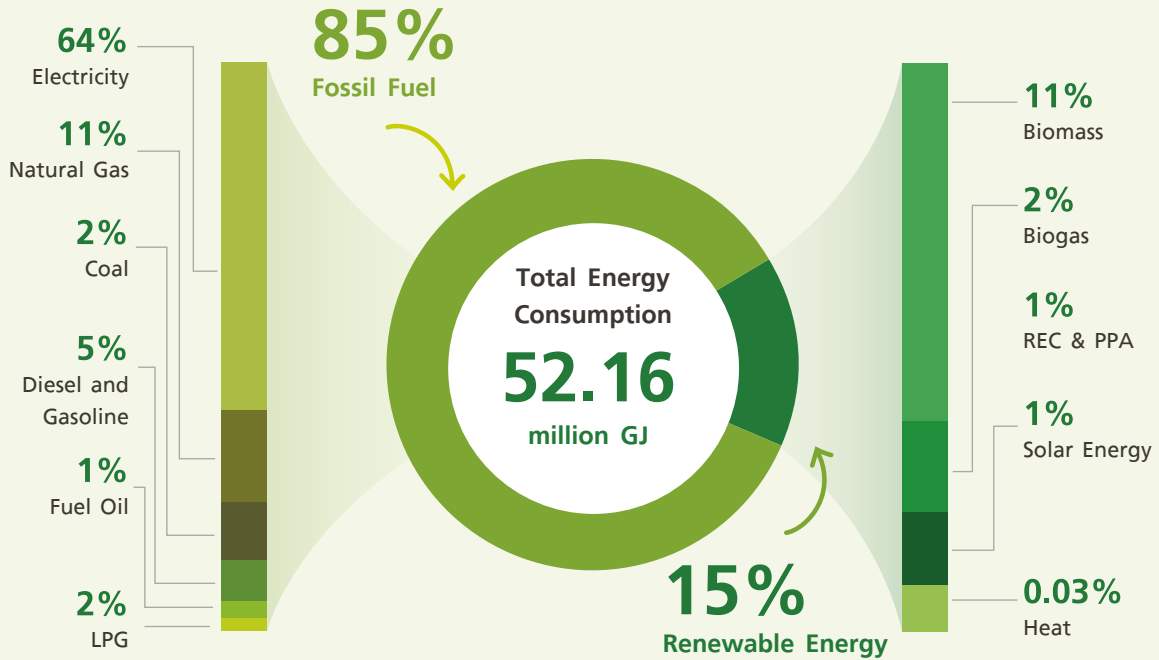


GHG Emissions Scope 3

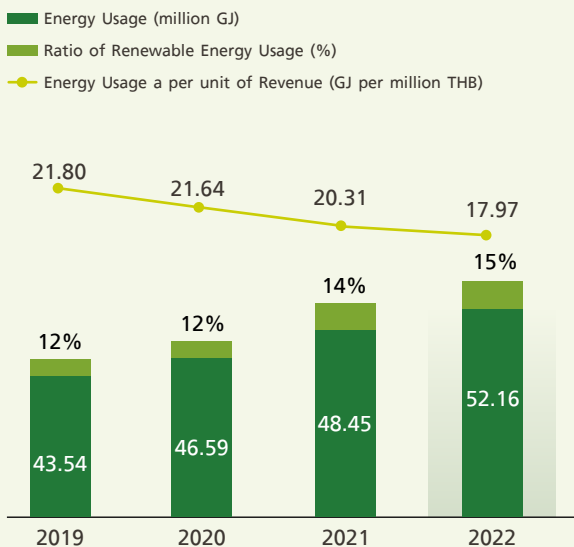
(million tons CO₂e)



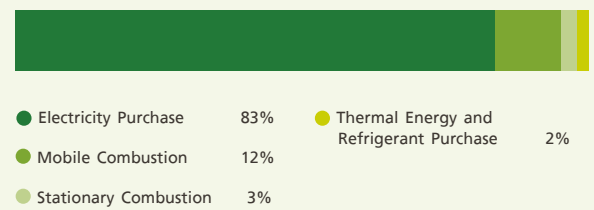
Energy Management Data



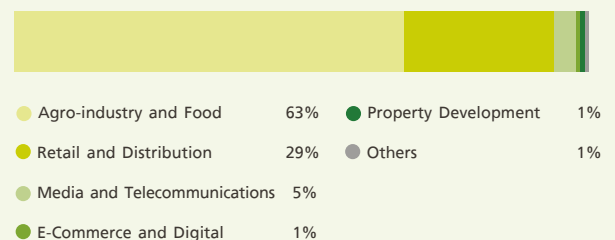
Total Energy Usage per Unit of Revenue



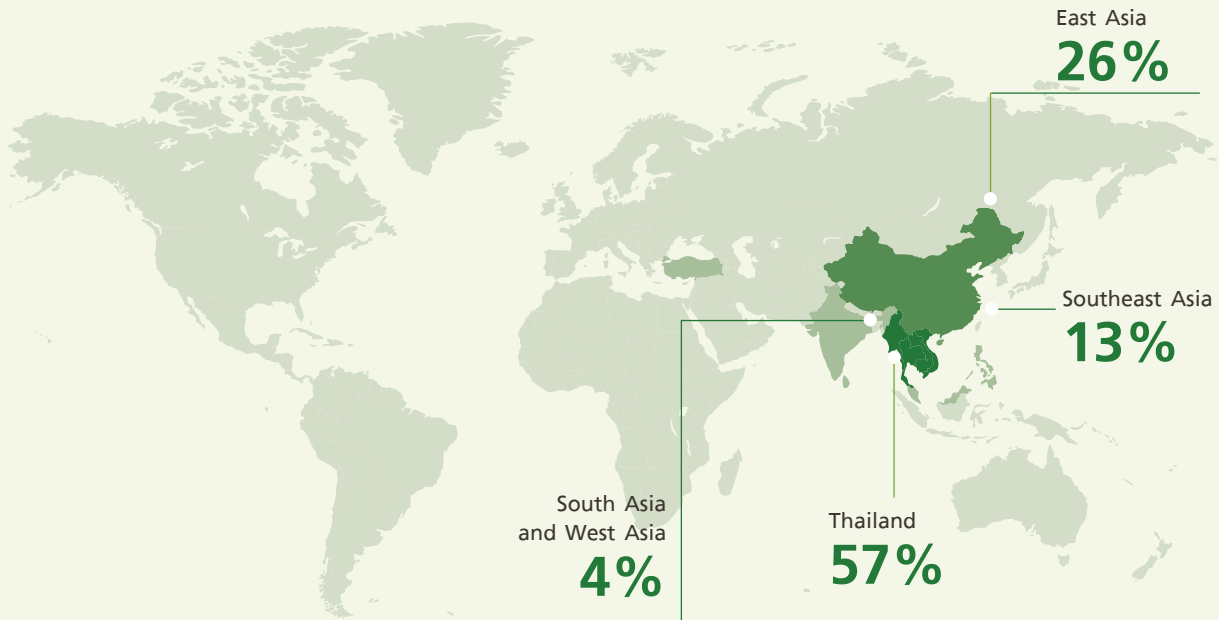
Type of Energy and Activity



By Business Unit

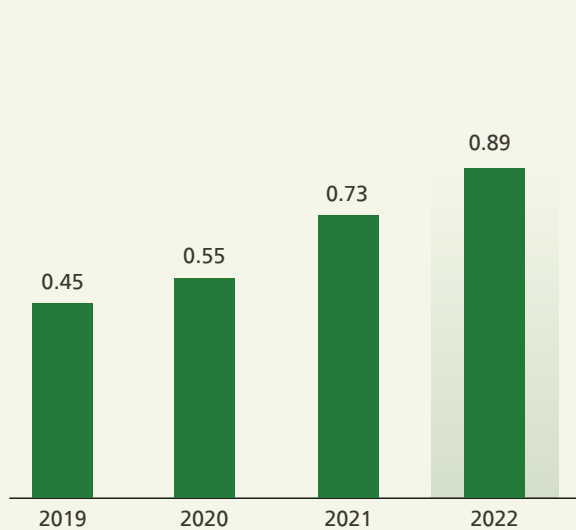


Energy Consumption by Country Zone



Summary Energy Saving

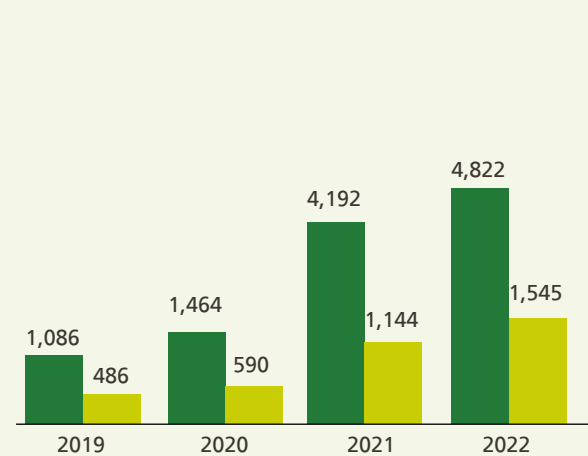
(million GJ)



Summary of Environmental Investments

Environmental Investment (million THB)

Saving (million THB)



Promoting Energy Efficiency

Charoen Pokphand Group has designed our environmental and energy operations to be efficient by adopting modern technology and investing in high-efficiency machinery and equipment to minimize energy consumption. At the same time, we have also enhanced process efficiency and encouraged all business groups to increase the proportion of renewable energy consumption through projects, such as electricity generation from solar energy in the forms of solar rooftop, solar on-ground, and solar floating, and replacing

energy from fossil fuel with biomass. The agriculture and food business group has the policy to promote the eradication of coal usage and switch to biomass instead. Additionally, the business has developed animal feed with lower nitrous oxide emissions. Meanwhile, the farming business has increased the proportion of bio-energy production from pig manure to generate power for the farm's internal use and is ready to extend such practice to all business groups across the globe.



Natural Capital

Installation of Solar Rooftop at 7 CPRAM Factories, which can Reduced GHG by

2,813 tons CO₂e

CASE STUDY

CPRAM Advancing towards Net Zero with Green Factories

With a commitment to the environment, CPRAM installed the Solar Rooftop on seven factories nationwide, equivalent to a total area of 34,315 square meters. The project's investment value is worth 200 million THB and has an electricity generation capacity from solar power of 6,321 megawatt hours per year. This has contributed to reducing the factories' electricity costs by approximately 9 million THB per year and greenhouse gas emissions by over 2,813 tons CO₂ equivalent per year. CPRAM Bor-Ngern Factory is the most modern factory out of the seven establishments installed with the Solar Rooftop. It uses material technology that can reduce heat conduction into the building, the natural lighting concept, shading systems, air vents to relieve heat from the building's interior, and an energy-saving air conditioning system.

CASE STUDY**Greenfarm: Innovative Green Animal Farming Model**

Natural Capital

Reduced electricity costs
by up to

50-80%

of total electricity bill

Reduced GHG emissions by

370,000

tons CO₂e per year



Under this outstanding green business model, all 98 pig farms owned by Charoen Pokphand Foods Public Company Limited (CPF) have been developed into green farm models that “are friendly to the community and the environment”. The model has also been shared to farmers under the Contract Farming Scheme. Adhering to the Greenfarm Standards, CPF focuses on farm waste management using a biogas system and the planting of perennial plants. The Company has also reduced its energy consumption in order to render maximum benefit based on Circular Economy.

CASE STUDY**Green Building: SKY BRIGHT CENTER**

Panyapiwat Institute of Management is an educational institution managed and designed by CP ALL Public Company Limited (CP ALL). Its building in the EEC Campus has been designed to be environmentally friendly based on the criteria of the Thai's Rating of Energy and Environmental Sustainability (TREES) and the Thai Green Building Institute (TGBI). The design of this building emphasizes on the utilization of interior natural lighting and allows the use of LED bulbs. Meanwhile, air conditioning and ventilation systems were designed based on the suitability of indoor air quality, temperature and humidity. A Building Automation System has also been adopted to control the building's operational efficiency. Furthermore, a designated area has been prepared to accommodate solar rooftop installation to reduce electricity consumption by switching to clean and green energy.



Awards:

**ASEAN Energy
Awards 2022**

Charoen Pokphand Group's Renewable Energy Promotion

Business groups under Charoen Pokphand Group have promoted the use of renewable energy through various alternative energy projects, including installing solar on-ground and solar rooftop, using biomass such as wood chips, rice husks, soybean meal and corn cobs, etc., to generate steam, utilizing manure and wastewater to produce biogas for electricity and steam generation, and purchasing Renewable Energy Certificate (REC).

Furthermore, EV charging stations have also been set up for customers of retail businesses. In the future, the Group plans to expand the installation of EV charging stations in 100 more retail outlets. In 2022, over 153 MW of Solar PV were installed, which can save every upto 257,899 MWh/year or equivalent to 0.12 million tons of CO₂e.

Charoen Pokphand Group's Renewable Energy Consumption



Solar Cell

More than
5,000

Installation sites (production plant, distribution center, 7-Eleven Store, base station and exchange)

0.56

Energy usage equivalent (million GJ)

0.12

GHG reduction (million tons CO₂e)



REC

265,000
0.12

Number of REC

GHG reduction (million tons CO₂e)



Biomass

106

Number of factories using biomass (factory)

4.94

Energy usage equivalent (million GJ)

0.47

GHG reduction (million tons CO₂e)



Biogas

252

Number Farms (farm)

1.05

Energy usage equivalent (million GJ)

0.17

GHG reduction (million tons CO₂e)



EV Charging Station

1,013

number of EV (vehicles): motorcycles, cars, and trucks

24

Number of EV charging station (station)

1,452

GHG reduction (million tons CO₂e)



Product Life Cycle Assessment

According to an analysis of consumer trends as well as current and future market growth, Charoen Pokphand Group found that the majority of consumers have started turning their attention to environmental problems, while the demand for eco-friendly products have grown. Furthermore, the advancement of innovation and technology has boosted competitors' potential in producing a wider range of products, resulting in higher market competition. In order to maintain our market position, the Group focuses on differentiating

ourselves through the development of products and services that answer to the genuine needs of customers while also improving their quality of life. Charoen Pokphand Group has adopted the Life Cycle Assessment (LCA) concept and has submitted applications for carbon footprint certifications from the Thailand Greenhouse Gas Management Organization (Public Organization) or TGO, such as Carbon Footprint of Products, Carbon Footprint Reduction and other labelling, to support the development of eco-friendly products.

Carbon Footprint Label Certification



Thailand Voluntary
Emission Reduction
Program: TVERs

12 Projects

97,155
tons CO₂e



Carbon Footprint
for Organization
Label: CFO

33 Companies



Carbon Footprint
for Product
Label: CFP

834 Products



Carbon Footprint
Reduction
Label: CFR

69 Products



Low Emission
Support Scheme:
LESS

241 Projects



CASE STUDY

Carbon Footprint of Eggs

Under the “3.6 Million Eggs” Project, Zhengda Weifang collaborated with Chia Tai Henning Modern Agricultural Technology and Zhengda Egg (Shandong) to initiate the Carbon Footprint of Eggs Project based on agricultural carbon footprint standards. In January 2022, the project was certified for the product life cycle emissions calculation of 26.59 grams CO₂ equivalent per egg. This project is China’s first project to be certified with the Carbon Footprint of Eggs Label. It also won the “Low-Carbon Product Supplier” award which reflects the Company’s commitment to achieving Charoen Pokphand Group’s 2030 Sustainability Goals. Furthermore, laser technology has also been employed to print Carbon Footprint Reduction Label on eggshells.



Natural Capital

Carbon footprint emission
of chicken eggs is

26.59

grams CO₂ equivalent per egg.

CASE STUDY

Green Products, CPF



Natural Capital

More than **818** products

have been assessed for carbon footprint and
more than 56 products have been certified
with global warming reduction labels

At present, Charoen Pokphand Group boasts more than 818 products that have been assessed for carbon footprint and acquired carbon footprint labelling. Meanwhile, over 56 products are low-carbon products that have been certified with global warming reduction labels from the Thailand Greenhouse Gas Management Organization (Public Organization) or TGO. These include live chickens, live ducks, fattening pigs, fresh chicken meat, fresh duck meat and fresh pork meat. Such accomplishments are owed to the constant improvement in production process efficiency, including animal feed R&D to provide suitable nutrition for the growth needs of each age range, energy efficiency enhancement and renewable energy use in production. As a result, greenhouse gas emissions have continuously declined throughout production and raw material acquisition processes, thus transitioning into low-carbon products.

Circular Economy

For many years, circular economy has played a crucial role in supporting businesses to implement their goals to become a sustainable organization. The circular economy approach does not only boost natural resource efficiency and endorse the goal to become environmentally friendly, but it also creates economic, social and environmental stability. Nevertheless, many companies, including Charoen Pokphand Group, still face challenges in their operations, such as cooperation from various sectors in building an ecosystem of sustainability along the value chain, limited technology and innovation, consumer awareness and behavior, and relatively high management costs. With operations scattered around the world involving diverse industries, Charoen Pokphand Group takes into account the scale and magnitude of the potential impacts of our operations and that of our suppliers. Therefore, the Group has formulated policies to promote and support the implementation of circular economy practices in order to establish connections throughout the corporate value chain and to create a “Better Tomorrow”. Additionally, the Group has announced the target to become a “Zero Waste to Landfill” organization, while also reducing food waste for landfill disposal to zero.

Supporting the SDGs



11 SUSTAINABLE CITIES AND COMMUNITIES

11.6



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

12.2

12.3 12.5

12.4 12.A

More information available in

→ [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

94.53%

Plastic packaging that
are recyclable, reusable
or compostable

90%

Waste recycled/reused

35,340 tons

Charoen Pokphand Group's
business groups reduced
food loss and food surplus
by delivering them
to vulnerable groups
in society with focus
on promoting cooperation
with all relevant sectors

Goals and Progress

Zero food waste to landfill

2022 4.28%

2021 10.35%

Zero waste to landfill

2022 11.6%

2021 8.33%

All plastic packaging
are recyclable, reusable
or compostable

2022 94.53%

2021 86.92%

Future Workplans



Comprehensive and
sustainable management
of plastic packaging.



Promote and synergize cooperation
within and beyond the Group to
develop research and development
that leads to an effective circular
economy system.



Optimize resource efficiency
in production and transform
by-products from production
to enable reutilization for
maximum benefit.



Expand responsibility in
management of packaging wastes
after the used phase to be
recycled.

Circular Economy Framework



Steam Generation from 5 Tons of Biogas, Chicken Processing Plant, Nakhon Ratchasima
5,626 tCO₂e GHG reduction



Biogas from Poultry Manure, 7 Laying Hen Complexes
153,300 tons
113,000 tCO₂e GHG reduction



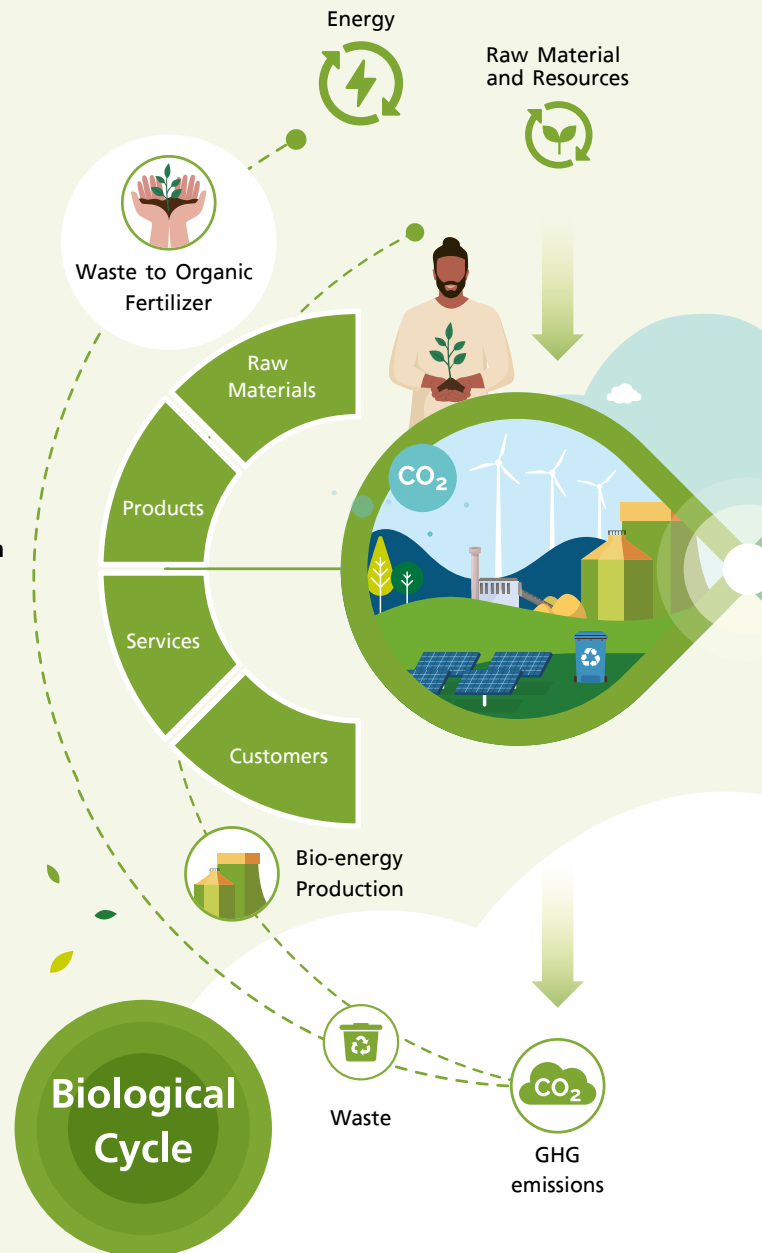
Shrinkage Management System
17,911 tons
45,314 tCO₂e GHG reduction



Eggshell Fertilizer, Chaiyaphum
377 tons
75 tCO₂e GHG reduction



Composting Food Waste into EM Solution
48.35 tons
122,325 tCO₂e GHG reduction



Adding Value to Raw Materials or Products

Charoen Pokphand Group has compiled a sample overview of projects that promote and support the implementation of circular economy from each of our business groups worldwide.

More information available in

→ [Circular Economy](#)



Recycling Bread Scrap, CPRAM

14,600 tons
36,938 tCO₂e GHG reduction



Reducing Single-use Plastic, 7-11

26,405.15 tons
265,268 tCO₂e GHG reduction



Recycling Scrap from Sack Production into Plastic Pallets

55 tons
15.95 tCO₂e GHG reduction



Recycling PET Bottles into Employee Shirts

42.97 tons
59.13 tCO₂e GHG reduction



PET Bottle Donation for Monk Robe Production at Chak Daeng Temple

38.76 tons
111.82 tCO₂e GHG reduction



Sustainable Plastic Packaging Management

Charoen Pokphand Group recognizes the urgency of the plastic waste pollution crisis and the need to significantly reduce the production and consumption of plastic, including single-use plastic packaging, both domestically and overseas. The Group has demonstrated our determination to operate with responsibility for product life cycle and environmental impacts. Additionally, the Group is committed to reducing plastic packaging and aims to establish an action plan to eliminate single-use plastic packaging. The Group further attaches importance to a sustainable distribution system and communicates to the public about the benefits of reducing, reusing and transforming single-use plastic as well as its costs.



1. Transparent and Verifiable

The Group annually discloses information on the quantity and type of plastic used, reused, recycled, reduced and disposed of in the Group's Sustainability Report. We also require the verification of the disclosed information by an independent third-party auditor.



2. Plastic Reduction Policy and Transition Plan

The Group has implemented the "Sustainable Packaging" Policy since 2018 to determine the direction and framework for plastic management throughout the value chain by requiring all business groups around the world to set a common goal for 2025 to ensure that 100% of plastic packaging are "reusable, recyclable and compostable".



3. Reduce, Avoid, Eliminate Single-use Plastic

The Group has expressed our commitment to eliminate the use of plastic and chemicals that cause problems to the health and environment, including non-recyclable plastic. We have also been exploring other alternative and natural materials that can replace single-use plastic.





4. Invest in Reuse Systems and New Product Distribution Systems

The Group encourages investment in R&D of product distribution innovations that are socially and environmentally responsible with no single-use plastic and emphasizes on reutilization. The Group has supported and provided technical cooperation to the Thailand National Metal and Materials Technology Center (MTEC) to enhance the development of food packaging innovation that is safe for consumers.



5. Extended Producer Responsibility

The Group supports and promotes the EPR (Extended Producer Responsibility) principle to extend the producer's scope of responsibility and expand the network of responsibility for managing and recycling post-consumer packaging waste. Our business groups have collaborated with the Thai Institute of Packaging and Recycling Management for Sustainable Environment (TIPMSE) under the Federation of Thai Industries (FTI) through the PackBack Network, which collects and reintroduces packaging into a sustainable processing system. Furthermore, we also promote separation and collection of plastic packaging for recycling through the hypermarket business.



6. Promoting Product Life Cycle

The Group places importance on the source of materials, production, transportation and distribution through to the end of the product life cycle (LCA: Life Cycle Assessment) to assess potentials and identify opportunities of improvement which requires cooperation with plastic resin producers (upstream), converter manufacturers (midstream) and end-users (downstream) to sustainably manage a product's life cycle.



7. Cooperation with Relevant Sectors

The Group has supported and cooperated with all sectors to define packaging design standards that enable reutilization and eliminate the use of plastic packaging that causes environmental impact.



8. Raising Customer and Public Awareness

The Group recognizes the importance to promote and support awareness raising efforts to engage customers and the public in solving the problem of single-use plastic packaging by reducing, avoiding and eliminating its use, as well as opting for alternative materials and transforming plastic for various forms of reutilization.



9. Plastic Scrap and Microplastic

The Group places importance on tackling the problem of plastic waste throughout the supply chain by collecting data on plastic scrap quantity while sorting and transforming the plastic scraps. We have also worked to enable microplastic detection in the production process in order to prevent plastic contamination in water, air and soil.



10. Supporting Waste Reduction Policies and Regulations

The Group has a policy to not support and eliminate the use of plastic packaging and single-use plastic. At the same time, we encourage relevant stakeholders to reduce, avoid and eliminate plastic packaging in accordance with the government's policy on plastic waste management. We have also campaigned to reduce, collect and store plastic to prevent widespread pollution from plastic waste.

Sustainable Plastic Packaging Management

CASE STUDY

Collecting Post-consumer Plastic Packaging Waste for Recycling Project



Natural Capital

1,359 tons

of plastic packaging
collected and reintroduced
into the system

Charoen Pokphand Group has implemented a policy framework to promote and support the responsibility of the Group's businesses under the EPR (Extended Producer Responsibility) principle, which encourages all business groups to acknowledge and take responsibility for the use of plastic packaging from end to end. Besides developing an eco-friendly design, reducing consumption, reusing, processing and recycling packaging, it also covers campaigning for and promoting post-consumer plastic packaging collection (Take Back Program).



Natural Capital

Reduced use of virgin plastic by up to

373 tons

Equivalent to carbon dioxide emissions
reduction of **583** tons CO₂e per year















CASE STUDY

rPET Egg Trays

Charoen Pokphand Foods Public Company Limited has initiated the project to utilize Post Consumer Resin (PCR) and reduce the use of virgin plastic resin as raw materials in the production of CP Selection fresh chicken eggs packaging. The packaging uses PET that contains 80% recycled plastic in the layer that does not have direct exposure to the eggs and 20% new plastic in order to reduce the risk of food contamination.

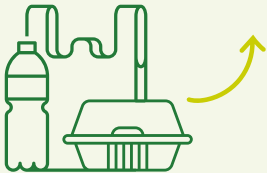
CPF also gives priority to designing packaging that facilitates the recycling process by inserting paper labels into the packaging instead of using adhesive stickers.

Data on Sustainable Plastic Packaging

	PET 	HDPE 	PVC 	LDPE 	PP 	PS 	Other 
Type	Polyethylene Terephthalate	High Density Polyethylene	Polyvinyl Chloride	Low Density Polyethylene	Polypropylene	Polystyrene	Other Plastics
Use	 Water bottles, polyester fabric and food packaging	 Chemicals packaging, toys and baby bottles	 Water pipes, window frames and disposable gloves	 Plastic bags, shrink film and pallet wrapping film	 Food containers, carpets and medical equipment	 Packaging, auto parts, and other parts	 Auto parts, bottles, safety equipment and food containers
Recycling	Usually Recycled	Generally Recycled	Occasionally Recycled	Sometimes Recycled	Generally Recycled	Occasionally Recycled	Rarely Recycled
Quantity							
2022	8,055	27,232	9,629	5,746	50,536	1,560	6,366
2021	9,618	27,936	12,946	3,825	40,057	2,250	8,366

Total Plastic Packaging Used in 2022

125,066 tons



Recyclable, Reusable and Compostable

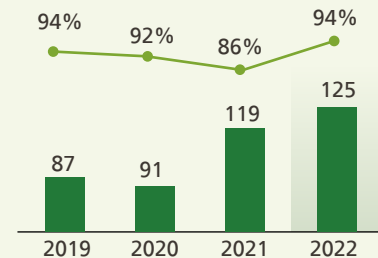


94.53%




Plastic Packaging Usage Trend (thousand tons)

(2019-2022)

Ratio of plastic packaging usage trend



Other Type of Packaging Used

By Category	Total Usage (ton)	Reused and/or Received Certification (%)
 Wood and Paper	31,768.67	82.43
 Metal (Steel, Aluminum)	83.81	100
 Glass	1,173.25	70.99

Take Back System



Cardboard Box
32,936 tons



Plastic Drinking Bottle
1,359 tons

Waste Management

Managing Waste throughout the Value Chain

Charoen Pokphand Group has expressed our intent to give priority to integrated waste management throughout the value chain. We strictly operate under the framework of the Group's Environmental Policy and Guidelines and announced the Zero Waste to Landfill goal to reduce potential negative environmental impacts in the future. Accordingly, each business group has effectively promoted, supported and synergized operations both within the business group and with third-party agencies or organizations.

CASE STUDY

Sludge Management Using Sludge Digestion System to Generate Electricity

CPF Food and Beverage Company Limited has studied and developed a prototype of a system to digest sludge from the 120 m³/day wastewater treatment system and uses a sludge digester to generate electricity. The system utilizes sludge as raw material for fuel gas production. This is in line with the circular economy guidelines, which focus on reducing waste disposal through landfill methods and lowering greenhouse gas emissions. Under the objectives of this project, the Company also plans to develop a learning center on the management of sludge from wastewater treatment systems for interested factories in the future.



Natural Capital

Sludge digestion

120 cubic meters/day

1,550 tons CO₂e per year
of GHG reduction

Data on Waste Management 2022

Total Waste By Category

1,128.87
thousand tons



89%

waste diverted
from disposal



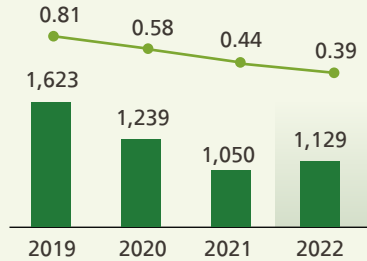
11%

waste doesn't
diverted from
disposal

Total Quantity of Waste (thousand tons)

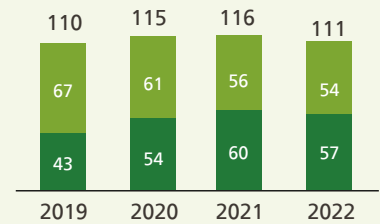
(2019-2022)

— ton/million THB



Total Quantity of Waste and Food Waste sent to Landfill (thousand tons)

■ General Waste
■ Food Waste



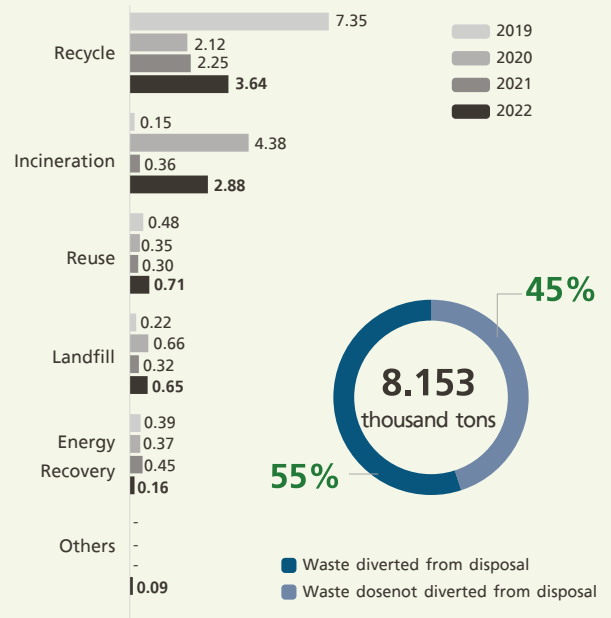
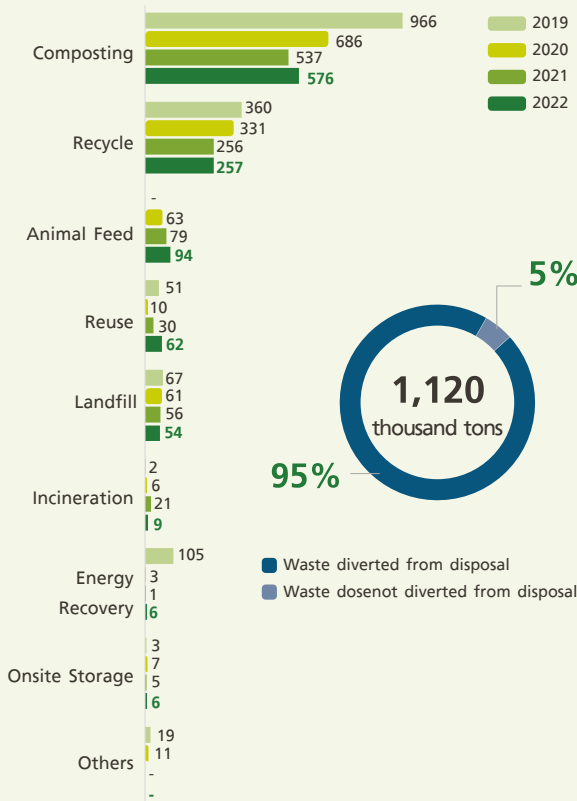
Total Waste By Disposal Methods

Non-hazardous Waste

1,120 thousand tons

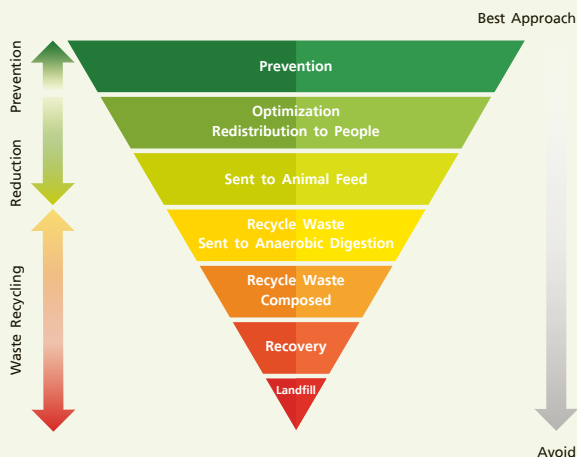
Hazardous Waste

8.153 thousand tons



Food Loss and Food Waste Management

Charoen Pokphand Group has established **Food Loss and Food Waste Policy**, in order to reduce the negative environmental impacts that occur under the chain of operations. The Group is committed to exploring and adopting various measures in its operations to maximize resource efficiency.



The framework focuses on promoting cooperation with all relevant sectors in order to reuse excess food for maximum benefit and to have zero food waste to landfill by 2030.

More information available in

→ [Food Loss and Food Waste Policy](#)



CASE STUDY

Overall Food Loss and Food Waste Management Project

Charoen Pokphand Group has declared our intent and commitment to reduce food loss, food surplus and food waste from our business operations in Thailand and overseas by forwarding food surplus to vulnerable groups in the society and donating to wildlife under collaborations with relevant government agencies and the private sector. This is in accordance with the Group's policy and in line with SDG 12, which emphasizes on achieving maximum resource efficiency. The overview of the project implementation in 2022 can be summarized as follows:

Volume of Food Surplus that were Donated Covering Operations in all Business Groups Worldwide

Thailand



31,230
tons of food surplus

China



1,988
tons of food surplus

Others

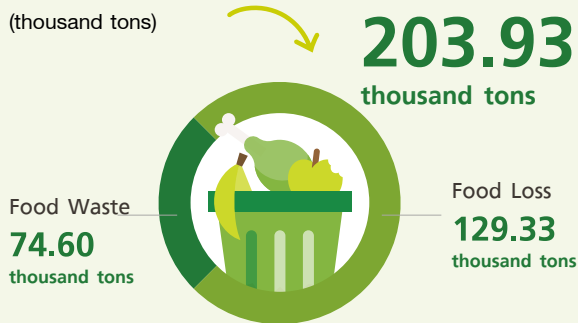


2,098
tons of food surplus

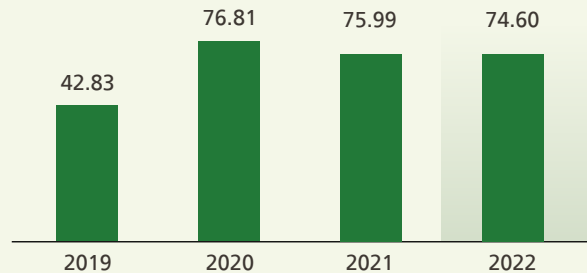
Data on Food Loss and Food Waste Management in 2022

Breakdown of Food Loss and Food Waste Quantity

(thousand tons)

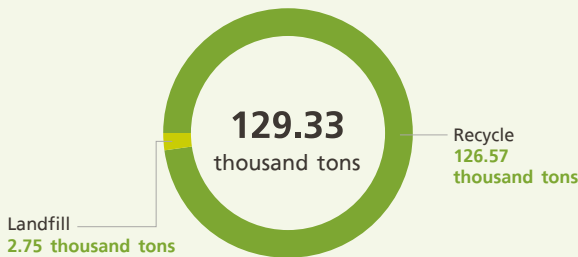


Trends of Food Waste Generation (thousand tons) (2019-2022)



Quantity of Food Loss

By Disposal Methods

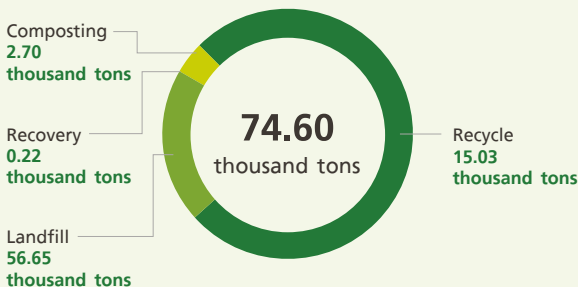


By Types

	Grains	97.72%
	Mixed Food Waste	1.7%
	Fruits and Vegetables	0.51%
	Meat	0.05%
	Others	0.02%
	Bakery	0%
	Ready-to-Eat	0%
	Condiments	0%

Quantity of Food Waste

By Disposal Methods



By Types

	Fruits and Vegetables	30.40%		Others	0.85%
	Ready-to-Eat	21.66%		Grains	0.13%
	Bakery	20.73%		Frozen Food	0.10%
	Seafood	11.76%		Tuber Crops	0.04%
	Dairy Products	7.09%		Condiments	0.01%
	Meat	4.74%		Dry Food	0.01%
	Beverages	1.63%		Pulses and Oil Seeds	0.001%
	Mixed Food Waste	0.85%			

Water Stewardship

Charoen Pokphand Group has always given priority to water stewardship. Accordingly, the Group has adopted new innovations and technologies to enhance water efficiency in our production processes. We have inclined more towards the use of a circular water system, which has contributed to the achievement of our water withdrawal reduction target. Recognizing water stewardship opportunities throughout the value chain, Charoen Pokphand Group has promoted water management measures to our suppliers. At the same time, we have also supported community access to water sources and good sanitation. Furthermore, the Group has highlighted the importance of maintaining and restoring watersheds which are important water sources for everyone's daily life. As such, the Group is committed to cooperating with partners in all sectors to encourage the conservation and restoration of watersheds where the Group has engaged in business, with a focus on those located in high water risk areas.

Supporting the SDGs

6 CLEAN WATER
AND SANITATION



6.1 6.5
6.3 6.6
6.4 6.B

14 LIFE
BELOW WATER



14.1

More information available in

→ [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Water Withdrawal per Unit
of Revenue

135.04

cubic meters/million THB

Reduced Water Withdrawal
per Unit of Revenue by

37%

compared to base year 2020

Water Recycled/Reused

68.97

million cubic meters

Percentage of Water
Recycled/Reused

18%

Goals and Progress

20% Reduction of water
withdrawal per unit of revenue
compared to base year 2020

2022 **100%**

2021 **100%**

Future Workplans



Seek technology to increase
water efficiency.



Promote water management
to key suppliers and high-risk
suppliers.






Encourage the increase of
watersheds in high water
risk areas.

Sustainable Water Resource Management throughout the Value Chain

Charoen Pokphand Group has conducted our business based on the **Water Stewardship Policy**, which is a part of the Group's **Environmental Policy and Guidelines**, in order to sustainably manage water resources throughout the value chain, support community access to water sources and sanitation, and promote the management of watersheds in high water risk areas. We are also committed to operating in accordance with the UN Global Compact's CEO Water

Mandate and in support of the United Nations SDG 6. This year, Charoen Pokphand Group has improved and developed the Water Stewardship Framework to cover all dimensions and to meet international standards. The Group aims to return more water to nature and communities than the amount used in our production processes (Net Water Positive).

Water Stewardship Framework

Level	Commitment	Action
Corporate and Supplier 	To achieve maximum benefit from water management throughout the value chain	<ul style="list-style-type: none"> Assess water risks for all units under the Group's business groups and key suppliers. Adopt circular water management based on the 5Rs principle. Encourage suppliers to use water efficiently to reduce the risk of water scarcity and regularly audit suppliers' water management.
Community 	To provide everyone access to clean, safe, hygienic water sources and good sanitation management	<ul style="list-style-type: none"> Cooperate with all sectors in promoting community access to water sources. Support the establishment of a basic water storage system for villages and communities. Improve quality of sanitation and hygiene for communities and schools.
Watershed 	To protect and restore watersheds in high water risk areas	<ul style="list-style-type: none"> Assess risks in watersheds where the Group operates and manage watersheds in high water risk areas. Cooperate with all sectors and world-class organizations in preserving and restoring watershed forests which are the origin of natural water sources.

Organizational Water Management

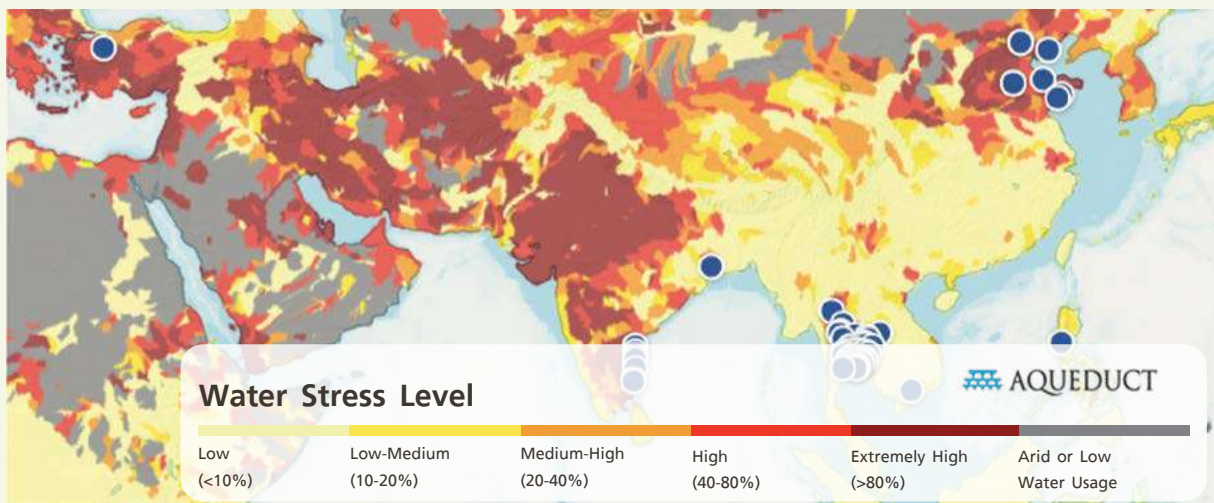
Integrated Water Risk Assessment

Charoen Pokphand Group has implemented a framework to assess water risks on all production units by taking into account water stress level using the World Resources Institute (WRI)'s Aqueduct Water Risk Atlas tool and water withdrawal volume of each business unit. The assessment results are

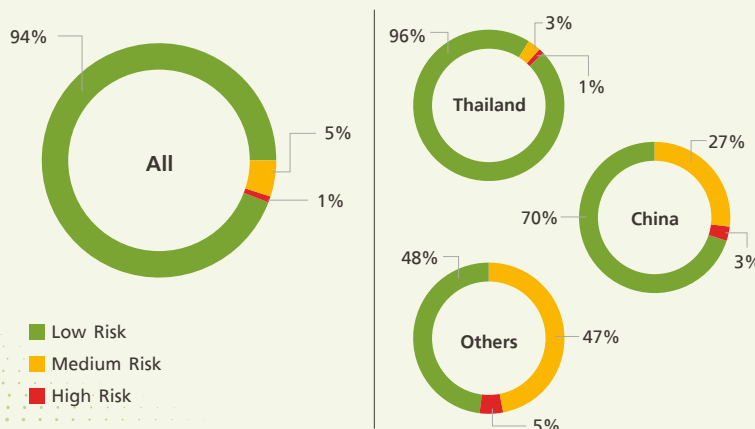
then categorized into three levels according to water risk level in order to formulate a water management plan.

More information is available in

→ [Integrated Water Risk Assessment](#)



Charoen Pokphand Group's Production Units According to Water Risk Level by Geography



This year, a review of water risk assessment was conducted on all of Charoen Pokphand Group's production units. This has enabled the identification of units with high water risk level, which accounts for 1% of all units. The Group has emphasized on promoting the implementation of an intensive water management plan and continuous follow-ups on the performance of water consumption reduction.

Organizational Water Management

Circular Water Management

Charoen Pokphand Group has adopted the Circular Water Management approach based on the 5Rs principle (Reduce, Reuse, Recycle, Restore, and Recover), established by the World Business Council for Sustainable Development (WBCSD), in conjunction with our business operations in order

to enhance water efficiency and achieve the Group's water withdrawal reduction goal.

More information is available in

→ [Circular Water Management](#)

CASE STUDY

CPF Maximizes Water Efficiency throughout Production Process



Amount of water recycled and reused is
24%
of total water withdrawal

Reduced water withdrawal per production unit by
53%
compared to base year 2015
(Thailand Operation)



Ultrafiltration : UF



Reverse Osmosis



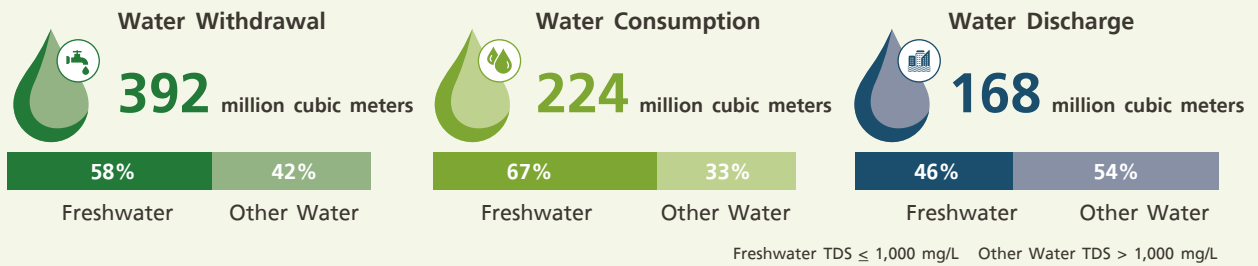
Air Chill



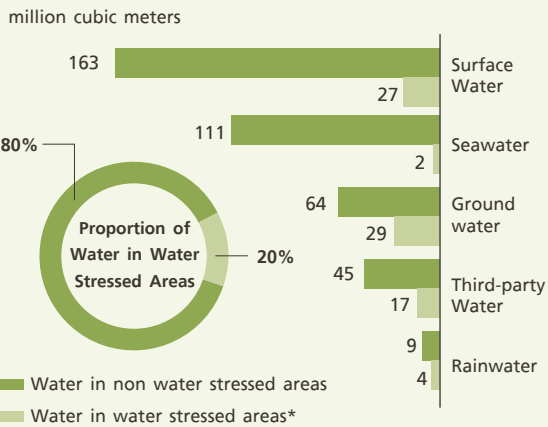
Biofloc

Charoen Pokphand Foods Public Company Limited (CPF) has developed innovation and technology to enhance the efficiency of water management throughout the production process. In doing so, CPF has implemented the ultrafiltration (UF) technology to improve water quality to match waterworks standards, enabling water to be reused for cleaning tools and equipment, and in specific areas of the toilet that do not come into contact with human. Furthermore, CPF has furthered such effort with a reverse osmosis filtration technology which improves water quality for use in the factory's cooling system. In addition, CPF has modified the production process of the chicken processing plant by substituting the water chill system with the air chill system to reduce the temperature of chicken. This could reduce water consumption by approximately 15% compared to the conventional production method. CPF has also modified its aquaculture process using a Biofloc water treatment system and UF, reducing water withdrawal by up to 75%.

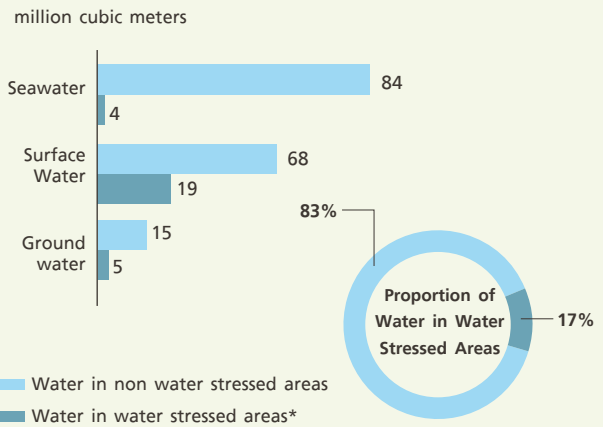
Water Resources Data in 2022



Water Withdrawal by Source

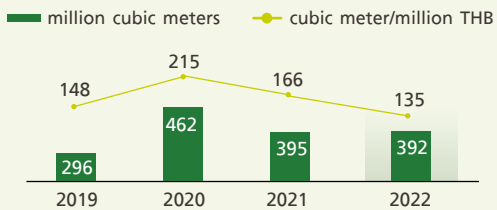


Water Discharge by Source

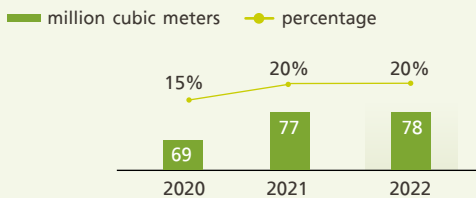


* Units located in high and extremely high baseline water stress areas based on Aqueduct Water Risk Atlas

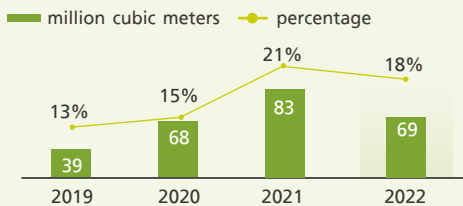
Total Water Withdrawal



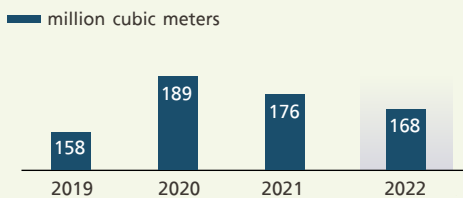
Water Withdrawal from Water Stressed Areas



Water Recycled/Reused



Total Water Discharge



Supplier's Water Management

Charoen Pokphand Group has developed a water management guideline for suppliers, who are the key stakeholders in our business, in order to encourage those with water risks to use water efficiently and reduce the risk of water scarcity while advocating for the conservation of water resources.

More information is available in

→ [Supplier's Water Management](#)



Natural Capital

Reduced water consumption by

50% of total water consumption

CASE STUDY

Plastic Banana Mulching Sheets for Farmers

CP ALL Public Company Limited (CP ALL) is determined to help farmers, who are its suppliers, to upgrade the food production process to one that is eco-friendly and preserves natural resources. Through the Water Reduction Program which is a part of the Sustainable Farmer Program, the Company has introduced projects such as Plastic Banana Mulching Sheets for Farmers to educate farmers on the use of plastic mulching sheets to retain soil moisture, reducing water consumption in banana cultivation by up to 50%. Such practice has also contributed to a decrease in the use of herbicides and insecticides.

Community Water Management

Promoting Community Access to Water and Sanitation

Charoen Pokphand Group has been collaborating with partners in various sectors, including the government, private sector and communities, to promote access to clean and safe water sources and good sanitation for all as well as ensuring sufficient water sources for the daily life.

More information on projects is available in

→ [Community Water Management](#)



Collaborating with Stakeholders to Promote Community Access to Water and Sanitation

Thailand

- Safe Nature Project, Mae Chaem District, Chiang Mai Province
- "Nam Phang" Model
- Water Resources for Agricultural Development Projects, Ban Mae Wak Community, Chiang Mai Province
- Living Weir Projects in 17 Northern Provinces
- Collaboration Project in Mueang Chang Subdistrict, Nan Province
- Restoration of Clear Water to Ban Samong Community, Prachinburi Province
- Natural Drinking Water Project, Ban Thammachat Lang, Trad Province
- Swine Manure Liquid Fertilizer for Ban Huay Nam Dib Community, Chiang Mai Province
- Toilet Construction Project by CPF's Fund for Elderly, Don Krabueng Subdistrict, Ratchaburi Province
- Check Dam Reparation Project, Khao Phraya Doen Tong
- Happiness for All Project

China

- Well and Pumping Station Construction Project, Bai Dian Village, Xiangzhou District, Hubei Province
- Village Water Supply System Installation, Chang Shun Village, Zitong District, Sichuan Province

Vietnam

- Ka Nau Village Water Pipeline Installation Project, Binh Dinh Province
- Home for Water Construction Project, Trang Bang District, Tây Ninh Province

Myanmar

- Clean Drinking Water for Schools in Aung Za Bu
- Water Sources for Sustainable Agriculture Projects in Bago and Naypyitaw

Bangladesh

- Groundwater Well Construction for Communities Project

India

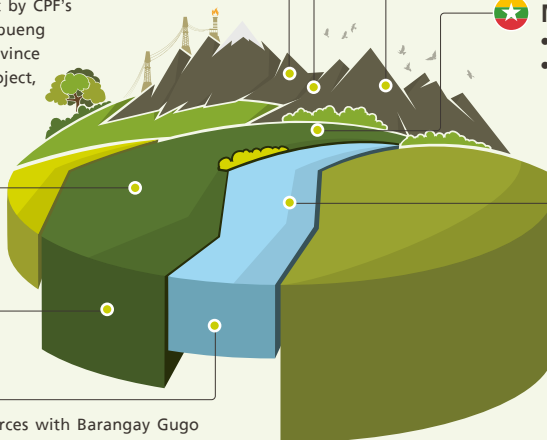
- Water For Life Project

The Philippines

- Sharing Water Resources with Barangay Gugo Community Project

Cambodia

- Clean Toilets for Students Project, Kampong Speu Province



Watershed Management

Protecting and Restoring Watersheds in High Water Risk Areas

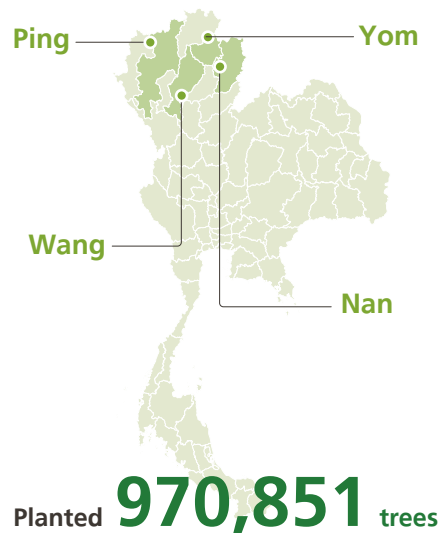
Charoen Pokphand Group performs water risk assessments based on an operational framework on all our production sites. This allows the Group to identify watersheds that are located in high water risk areas. According to the assessment, by using Aqueduct Water Risk Atlas, it results that 14 major

watersheds in 6 countries where the Group operates are situated in high water risk areas. Therefore, the Group gives priority to cooperating with all sectors to protect and rehabilitate watersheds which are the source of water resources needed in our daily lives.



CASE STUDY**Good Deeds for the World CP 100th Anniversary: Planting for Sustainability in Four Northern Watersheds**

Under this project, Charoen Pokphand Group has joined forces with partners from the government, civil society, private sector and communities in four watersheds, namely Ping, Wang, Yom, and Nan, which are Thailand's major watersheds in the Chao Phraya River Basin, an area categorized as a high water risk area. The project targets to increase green areas in order to restore watershed forests and aims to enable communities to live in harmony with nature. During the past five years, the project has planted more than 758,755 trees. In 2022, the project planted 212,096 more trees, resulted in a total of 970,851 trees planted in the four watersheds, Ping, Wang, Yom and Nan.



Ecosystem & Biodiversity Protection

Natural resources and biodiversity are vital to humans and our planet; however, both have been on the decline over the past several decades. Charoen Pokphand Group's business operations are dependent on ecosystem services. Our businesses also involve land use change and the utilization of natural resources. Therefore, the loss of biodiversity balance poses a risk on the Group's businesses and the livelihood of all beings. For this reason, ecosystem protection and biodiversity restoration are urgent matters that require action in order to drive Thailand towards bio-economy and green economy. Such actions will also empower the Group to accomplish the Sustainable Development Goals and the 2050 Target of "Living in Harmony with Nature" agreed upon by the COP15 The UN Biodiversity Conference.

Supporting the SDGs



6.6



14.2

14.4

14.5 14.B



15.1

15.2

15.4 15.5

More information available in

→ [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Accumulated Number of
Trees Planted since 2019-2022

8.2 million trees

Operating Sites Assessed for
Risks with IBAT Program

1,991 sites

Cooperation with International Organizations
to Drive Biodiversity Goals and Strategies



Goals and Progress

100% of high-risk raw material can be traced back to the origin by 2030

Year	Progress
2022	53.26%
2021	26.7%

100% of business groups conduct collaborative projects with national and international partners to manage and monitor biodiversity in business operations

Year	Progress
2022	36.84%
2021	19.7%

Future Workplans



Review and set biodiversity goals according to the Science-based Target for Nature



Establish Group Wide biodiversity guidelines.

Conserving and Restoring Biodiversity

Commitment to Protect Biodiversity



Charoen Pokphand Group is committed to operating our businesses without causing biodiversity loss, while utilizing natural resources sustainably. Therefore, the Group has formulated **Ecosystem and Biodiversity Protection Policy** and commitment to deforestation as operational frameworks for our subsidiaries and relevant stakeholders.

Furthermore, in the recent Global Compact Network Thailand (GCNT) Forum in November 2022, Mr. Suphachai Chearavanont, Chief Executive Officer of Charoen Pokphand Group, together with executives of the Group's subsidiaries have declared the intent to tackle climate change and protect nature by taking into account the significance of biodiversity and ecosystem services in sustainable business operations.

Establishing Goals and Indicators

Charoen Pokphand Group has reviewed our biodiversity goals to enable its consistency with business-related risk factors and the goals of the Kunming-Montreal Global Biodiversity Framework. The Group's biodiversity goals consist of:

Operation Goals



Year
2030

All business groups conduct projects or collaborate with relevant national and international partners to manage and monitor biodiversity* (Progress: 36.8%)



Year
2030

Sourcing of key raw material from no deforestation areas (Progress: 23%)



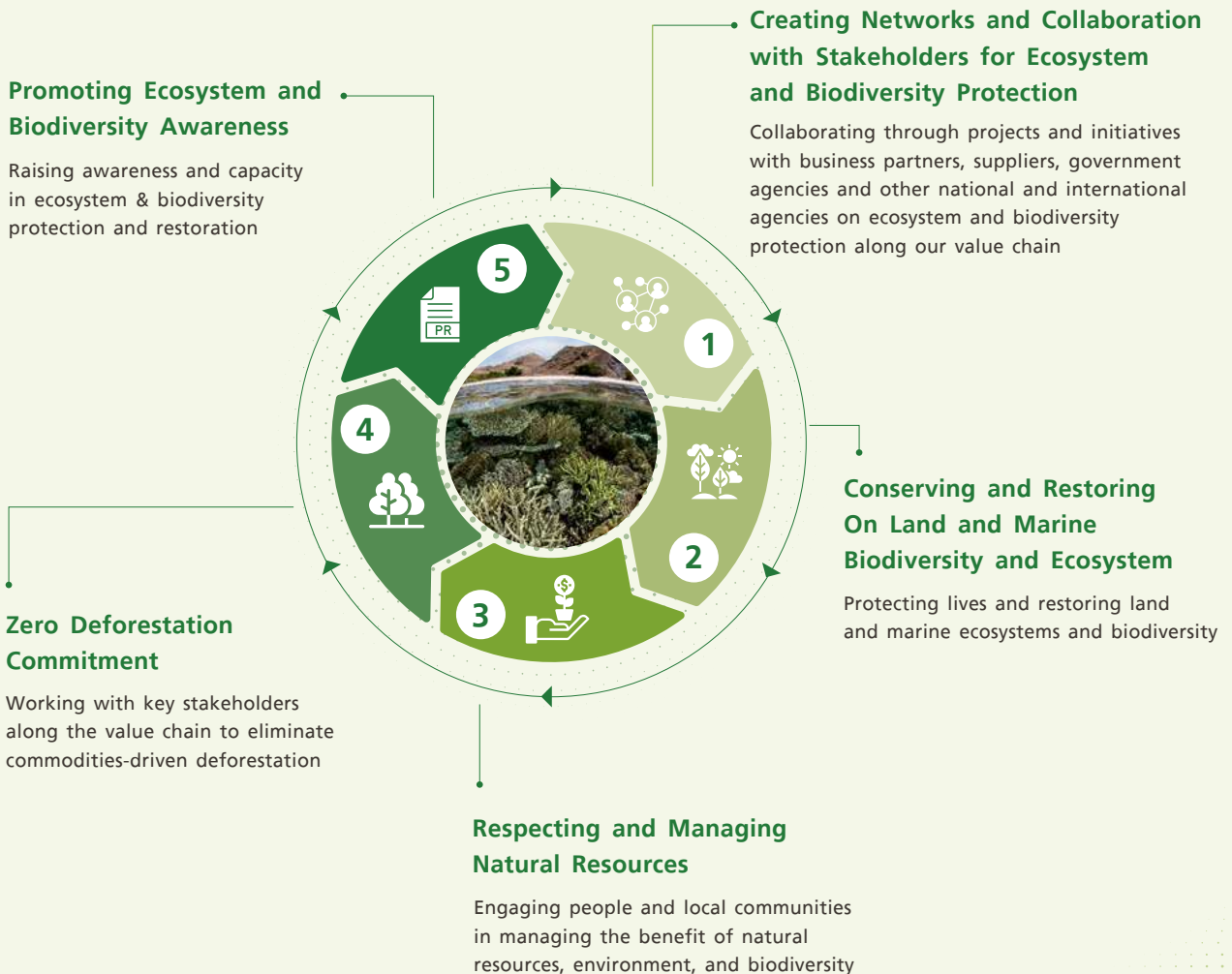
Year
2025

Planting
20 million trees
(Progress: 8.2 million trees)

Remark: * Operational targets for business groups that depend on natural resources (Dependency) in the production processes, and might cause impact on natural resources, such as Agro-industry and Food Business Group, Retail and Distribution Business Group, Media and Telecommunication Business Group, and Property Development Business Group.

Biodiversity Management

Charoen Pokphand Group is determined to conduct our business with responsibility alongside environmental and biodiversity conservation. The Group upholds such principles in all processes, such as selecting sites for business establishments that are not located in natural resource and environmental conservation areas, strictly complying with rules, regulations, standards and ministerial regulations, and regularly assessing impacts and defining measures to prevent and mitigate potential impacts from business operations. The Group's management framework focuses on procuring agricultural raw materials from responsible sources that do not encroach forests, conserving and rehabilitating land and marine ecosystems, creating networks and cooperation for biodiversity protection and restoration with stakeholders, and enhancing knowledge and awareness about the importance of biodiversity among employees of the Group, communities and societies.



Information Disclosure for Nature according to TNFD Framework

Charoen Pokphand Group developed Taskforce on Nature-related Financial Disclosure by adopting LEAP Approach or a framework that takes risk and opportunity related to natural resources into systematic analysis. The result is also used to define the Group's strategy and risk management.

LEAP Approach comprises of four main steps, which are

- Locate (L): analysis of business activities along the supply chain to identify activity that interface with to natural resources
- Evaluate (E): evaluation of dependency and impact on natural resources and ecological services.
- Assess (A): Identification of material risk and opportunity related to business operation
- Prepare (P): Mitigation measure and information disclosure

L

Locate

Interface with Nature

E

Evaluate

Dependencies & Impacts

A

Assess

Material Risk & Opportunities

P

Plan

To Respond & Report

Ecosystem Integrity

- Degraded/Intact forest
- Coral bleaching/richness
- Contaminated water/clean water

Biodiversity Importance

- Environmental conservation or protected areas
- Areas where endangered species are found
- Key biodiversity area

Water Stress

- Areas with water shortage

Impact Drivers

- Air pollution is leading to less precipitation
- Climate change a human activities is leading to decreasing in number of pollinators
- The use of fertilizers and agricultural chemicals is leading to decreasing forest areas

State of Nature

- Increase or decrease of ecosystem
- Function and richness of ecosystem
- Population status

Ecosystem Services

- Provision services, such as water, food and energy
- Regulating service, such as climate control, and flood protection
- Cultural service, such recreation that create sentimental value
- Supporting service, such as providing nutrients, and habitat for animals

Physical Risks

- Decreasing in number of pollinators
- Changing in precipitation as a result of pollution
- Losing soil integrity

Transition Risks

- Enforcement of biodiversity laws
- Consumers' preference
- Use of technology and innovation

Systematic Risks

- Ecological collapse

Opportunities

- Nature-based solution
- Protection and restoration of ecosystem
- Resource Efficiency

Governance**Strategy****DIRO**

Dependency, Impact, Risk and Opportunity (DIRO) Assessment and Management

TNFD Nature-related Disclosures

Ecosystem Services Dependency Assessment

Natural capital and ecosystem services are key drivers of Charoen Pokphand Group's business and that of our suppliers and business partners. Changes or damages to ecosystem services will inevitably affect our operational ability. Therefore, the Group has adopted ENCORE as a tool to analyze our dependency on ecosystem services and their importance on business, which will lead to further risk management. The analysis results of each business can be summarized below:

Agro-industry and Food



Soil and erosion control



Flood and disaster prevention



Climate and weather



Surface and ground water



Pollination

Retail and Distribution



Soil and erosion control



Flood and disaster prevention



Climate and weather



Bioremediation

Property Development



Soil and erosion control



Flood and disaster prevention



Surface and ground water

Automotive



Surface and ground water



Flood and disaster prevention

Pharmaceuticals



Genetic materials



Surface and ground water



Bioremediation

E-Commerce and Digital



Climate and weather



Flood and disaster prevention

Telecommunications



Flood and disaster prevention



Climate and weather

Finance and Banking



Climate and weather

More information available in

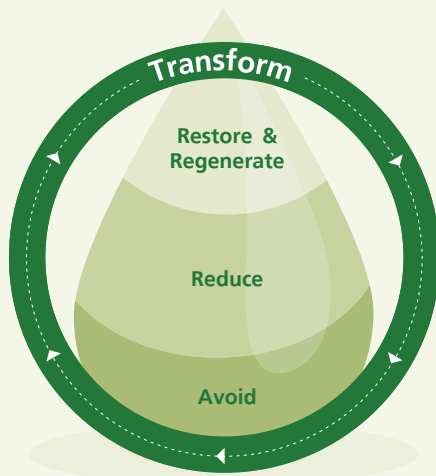


[Biodiversity \(TNFD\) Report 2022](#)

Assessment of Pressures on Nature

Considering business-related pressures on nature is one of the requirements of the Taskforce on Nature-related Financial Disclosure (TNFD). Charoen Pokphand Group has identified the following pressures from our business operations according to the Science-based Target for Nature (SBTN) guidelines:

Pressure	Example of Impact	Measure / Strategy
Resource Utilization	<ul style="list-style-type: none"> Utilizing surface water from natural sources for agriculture 	<ul style="list-style-type: none"> Set goal to reduce the Group's water consumption Implement natural resources restoration projects
Land Utilization	<ul style="list-style-type: none"> Forest fragmentation Land use change 	<ul style="list-style-type: none"> Conduct site screening prior to operations Avoid operating in key biodiversity areas
Pollution Emissions	<ul style="list-style-type: none"> Wastewater from farmlands and factories Soil contamination 	<ul style="list-style-type: none"> Treat wastewater to meet standards Reduce chemical use in agriculture practice
Invasion of Alien Species	<ul style="list-style-type: none"> Introduction of invasive species into the area 	<ul style="list-style-type: none"> Strictly comply with relevant laws
Climate Change	<ul style="list-style-type: none"> Greenhouse gas emissions from energy consumption, agriculture and waste management 	<ul style="list-style-type: none"> Set Net Zero Target by 2050



Biodiversity Impact Management Framework

Charoen Pokphand Group and our subsidiaries have set a framework for managing risks and potential impacts on biodiversity from our operations. We observe the Mitigation Hierarchy based on the AR3T Framework developed by the Science-based Target for Nature (SBTN), which consists of “Avoid” negative impacts, “Reduce” impacts, “Restore & Regenerate”, and in the case that impacts are inevitable, “transform” them into positive impacts on nature, respectively. Such principles will contribute to the achievement of the sustainable coexistence goal according to the Kunming-Montreal Global Biodiversity Framework.

Source:

→ https://framework.tnfd.global/wp-content/uploads/2022/11/TNFD_Framework_Annex_3-1_v0-3_B.pdf

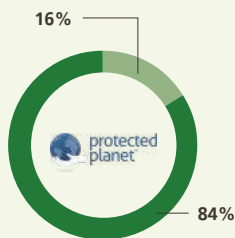
Biodiversity Risk Assessment

Site-level Risk Assessment

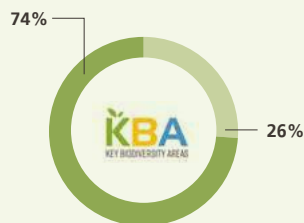
Charoen Pokphand Group recognized that reducing biodiversity loss is an important goal that needs to be accelerated. Hence, the Group has adopted biodiversity management, which begins with Avoid the impact from the operation. This is being done by using Integrated Assessment Tool (IBAT) to screen the operational areas that are at risk from locating within or close to biodiversity rich areas. The Group has set the radius for five kilometers.

The risk screening results of the Group's 1,991 operating sites around the world can be summarized as follows:

Operating Site	Site at Risk	
	Environmental Protected Area	Important Biodiversity Area ^{1/}
Thailand	68	45
China	5	12
Southeast Asia	25	28
Others	35	12



Percentage that found environmental protected areas within a radius of 5 km from the project site



Percentage of Key Biodiversity Area

The total number of threatened species on the IUCN Red List ^{2/} within a 50 km. radius.	Number of operating site found
> 450	6
351 - 450	39
251 - 350	159
151 - 250	536
51 - 150	1,027
< 50	224

The top 5 most threatened operating areas for IUCN Red List species are located in Southeast Asia. The numbers found in each group are as follows:

Top 5 that has been found the most	Threatened Species Found ^{2/}		
	CR	EN	VU
1	54	123	317
2	47	115	293
3	37	124	315
4	37	122	315
5	32	148	348

Remark:

^{1/} Key Biodiversity Area: KBA refers to areas with ecosystems important for the sustaining of biodiversity.

^{2/} Threatened Species according to IUCN Red List, it can be classified into three groups:

- Critically endangered: CR
- Endangered: EN
- Vulnerable: VU

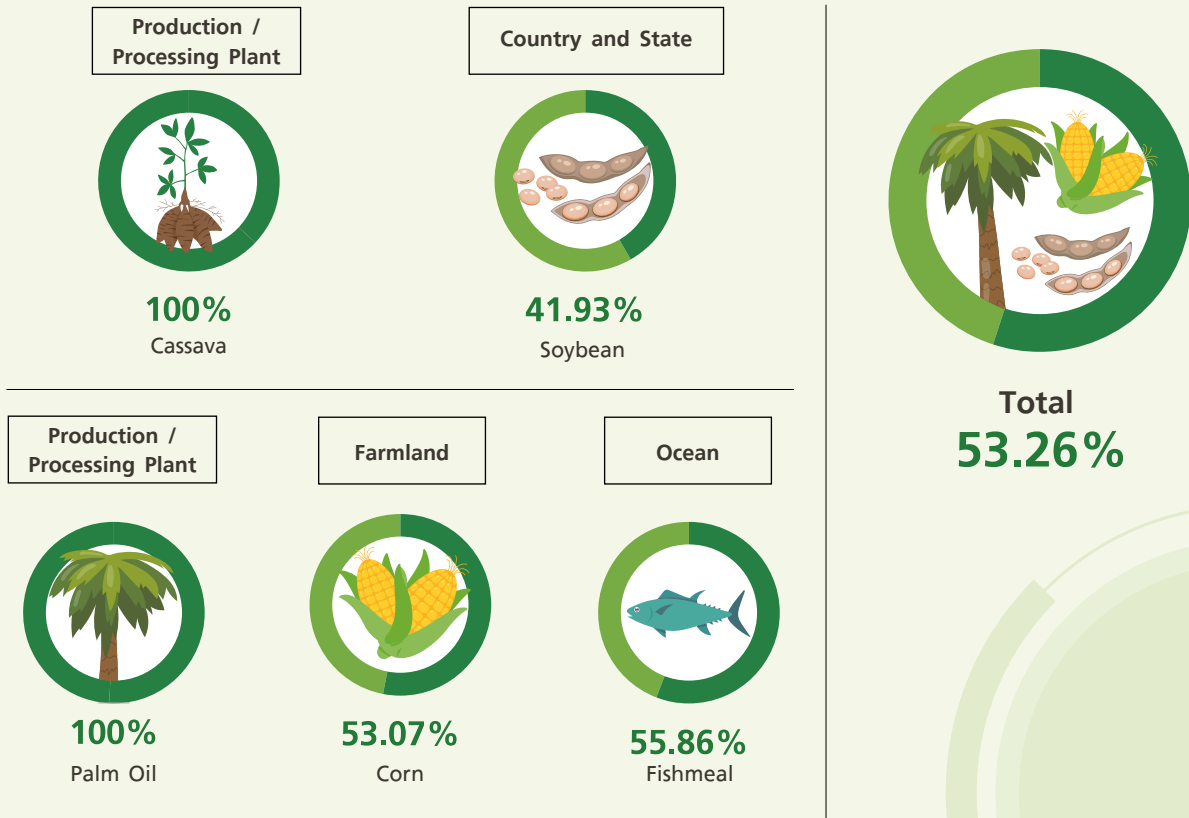
High-risk Raw Material Traceability

High-risk Raw Material Traceability Management

Charoen Pokphand Group places importance on the responsible and sustainable procurement of raw materials and production throughout the supply chain in tandem with maintaining environmental balance by ensuring that main agricultural raw materials in both Thailand and abroad are procured from a legal and traceable source.

Charoen Pokphand Group has developed a traceability system throughout the supply chain based on an accurate, rapid and transparent auditing system to reassure consumers that raw materials proceed from sustainable sources that do not involve forest encroachment. In 2023, two more items, namely beef and wood, will be added to the high-risk raw material traceability goal. Results will be further reported.

Result of High-risk Raw Material Traceability in 2022*



Note:

* Raw animal feeds come from operation in Thailand, Vietnam, India, Laos, Cambodia, Malaysia, Philippines, Myanmar and Bangladesh

Conservation and Restoration of Biodiversity

Toward Nature Positive



Reforestation

1,184 rais



Land Ecosystem Restoration

6,971 rais



Marine and Coastal
Ecosystem Protection
and Restoration

5 projects



Biodiversity Offsetting

7,000 million juveniles





Natural Regeneration

75 rais



Agroforestry

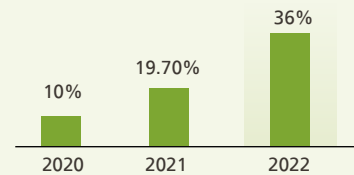
6,298 rais



Set-aside Land

374 rais

Business Groups Collaborating with Relevant Partners to Manage and Monitor Biodiversity in Business Operations



99 Communities

Benefiting from the Project

5,094 Farmers, Fisherman, and SMEs

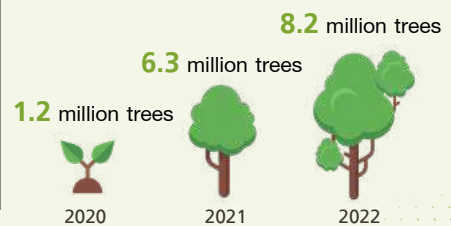


Community Income Increase

over 64 million THB

Target to Plant

20 million trees by 2025



CASE STUDY

Wild Elephants Warning



The expansion of communities around protected forest areas directly affects wild elephants in terms of diminished food sources. Oftentimes, wild elephants trespass communities or farmlands in the forest's vicinity, causing conflicts between humans and wild elephants. All relevant parties regard this as a critical issue due to its growing severity. Therefore, True Corporation Public Company Limited has provided technological support in the form of a camera trap system to photograph wild elephants and other wildlife as well as a warning system against trespassing of wildlife food sources and habitats using IoT.



Relationship Capital

Reduce loss on agricultural produces which caused by elephants

56%

Increase efficiency in protecting elephant trespassing into agricultural lands up to

100%

Elephants are essential to the ecosystem as they help to distribute plant seeds, thus, restoring forests. Furthermore, elephant dung is a food source and important habitat for many wild insects that help in maintaining the balance of the forest.



CASE STUDY

CP-Meiji Save Forests, Save Water, Love the Land

CP-Meiji Company Limited collaborated with the Protected Areas Regional Office 1 Saraburi Branch, Department of National Parks, Wildlife and Plant Conservation (DNP) on a campaign to conserve forest resources and wildlife as well as prevent forest fires at Namtok Sam Lan National Park, Mueang Saraburi district, Saraburi province. The project sponsored forest fire protective and extinguishing equipment to support the DNP's efficient and safe forest fire prevention operations, which benefits the conservation of forests in Namtok Sam Lan National Park in Saraburi province and Khao Wong Chan Daeng Non-hunting Area in Lopburi province, which are both important watershed forests. Fire is one of the main reasons that cause changes in the natural reproduction of animals in the area or inhibit the natural regeneration of native trees which will result in a decrease of plant diversity in the area. Moreover, forest fires also emits carbon dioxide which is one of the contributors of climate change and PM 2.5.



CASE STUDY



Natural Capital

7,153 kilograms of waste collected around the operating areas

CPF Restore the Ocean

Creating collaboration and driving action through employee awareness raising on the preservation of marine ecosystems by reducing and collecting waste for proper management according to the Ocean Conservancy principle. The project consists of activities, such as **“Waste to Value”** which engages communities around the mouth of rivers and canals in collecting, sorting and transforming waste into community products as well as encouraging the establishment of a community enterprise to further develop knowledge in the community;

“Trap the Sea Trash” to collect waste washed ashore on beaches for further development, i.e., lightweight bricks from plastic fishnets, and plant pots from Styrofoam. The project also established a marine waste learning center in the community;

“Catch the Trash Back to the Shore” to encourage fishers to collect garbage floating in the sea back to shore for recycling. Plastic bottles are upcycled into polo shirts through a collaboration with PTT Global Chemical Public Company Limited.

CASE STUDY**CPF Rak Ni-Ves Project at Pasak Watershed,
Phraya Doen Thong Mountain**

Since 2016 until present, Charoen Pokphand Foods Public Company Limited (CPF) has collaborated with the Royal Forest Department and local communities in the conservation, restoration and reforestation of Phraya Doen Thong mountain in Phatthana Nikhom district, Lopburi province, which is a watershed forest for Pasak River. For the first phase (2016-2020), the project conserved and restored 5,971 rais. In the second phase (2021-2025), project has proceeded with conserve, restore, and reforest of 1,000 more raise. The reforest has been done under 4 approach according to the condition of the forest; meticulous reforestation, forest-enhanced reforestation, natural germination, and ecological reforestation. These approached help reduce time to restore of watershed forests in Pasak basin and proceeded to conserve, restore and reforest 1,000 more rais in its second phase (2021-2025), bringing the total to 6,971 rais.

As a result of the first phase, the once degraded forest covered with vines and thorns that lacked biodiversity as perennial plants were unable to grow were transformed into a green forest with diverse plant species, thus returning abundance to nature.

Forest restoration also increase wildlife habitat and help increase species and amount of wildlife. This is another indices that indicate the integrity of ecosystem. Hence, CPF joined with the Faculty of Forestry, Kasetsart University to study the biodiversity of wildlife, such as birds, mammals, reptiles, and amphibians. The data will then be used as database and performance indicators for forest conservation and restoration. The survey were conducted through on-site visit and monitoring via Camera Trap. More than 174 species of wildlife were found within the area, such as pangolin, which is considered as critically endangered (CR) species on IUCN Red List; the cormorant, which is considered as a near threatened (NT) species; and leopard cat, pine bunting and fox were also found.

2016**2021****“Phraya Doen Thong Mountain”, Phatthana Nikhom District, Lopburi Province**

Important model in conserving and restoring watershed forest from its degraded condition covered with thorns and weeds that inhibited natural recovery and needed rehabilitation to restore abundance.

Environmental, Social, and Economic Value Evaluation



80

plant species



396

employments in
the community



174

wildlife species returned
to the area



4,848 people

employees participating
in the project



27,264

tons CO₂ absorbed per year



2

third-party
organizations
participating in
the project

Responsible Supply Chain Management

Charoen Pokphand Group is aware that our supply chain is highly complex and distributed across many countries worldwide. Therefore, a systematic supply chain management that regularly tracks supplier performance is indispensable. Nevertheless, the impacts of climate change, international conflicts, and new laws and regulations that differ in each country are all challenges in the Group's efforts to manage and maintain supply chain stability. Therefore, in order to procure good raw materials with qualifications matching the Group's requirements to create quality products and services for a better and more sustainable tomorrow for stakeholders, the Group has incorporated standards relating to supply chain management into our culture of diversity. In addition, the Group has communicated with suppliers to acknowledge and strictly comply with such standards in order to build the sustainable society and environment together.

Supporting the SDGs



2 ZERO HUNGER

2.4



4 QUALITY EDUCATION

4.4



8 DECENT WORK AND ECONOMIC GROWTH

8.3



9 INDUSTRY INNOVATION AND INFRASTRUCTURE

9.2



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

12.7
12.A

More information available in

→ [Sustainable Development Goals Report 2022](#)

Key Performance in 2022

Total Spend on Significant Suppliers in Tier 1

68.64%

Suppliers Received Sustainability Risk Assessment

71.32%

Suppliers Supported in Corrective Action Plan Implementation

100%

Goals and Progress

100% of high-risk suppliers are audited

2022 **73.76%**

2021 **92.2%**

Future Workplans



Effectively transfer policies and guidelines on sustainable procurement into practice.



Modify systems and increase auditor competence in accordance with policies and the newly revised Supplier Code of Conduct.



Promote and encourage procurement of product and services from local and within countries with operations.

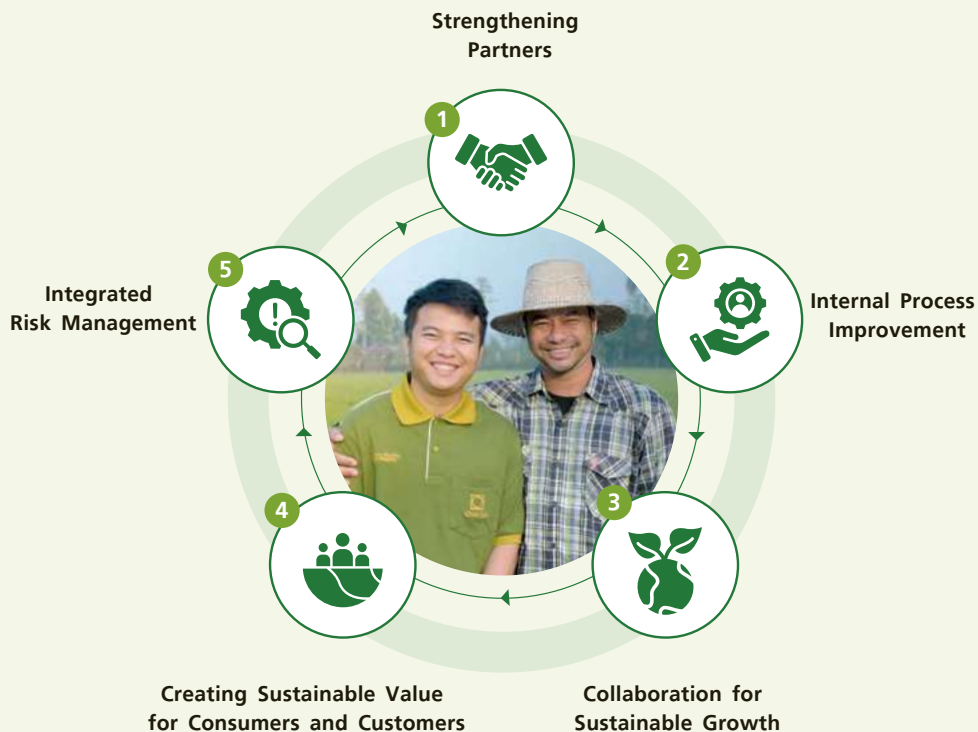


Collaborate and support supplier's capacity to be able to complete as well as develop products and services that are responsible to the environment, social and governance.

Responsible Supply Chain Management

With the objective of ensuring that our supply chain management is undertaken responsibly and is ready to deliver quality products and services to all stakeholder groups, Charoen Pokphand Group has developed the **Supplier Code of Conduct** and communicated it to suppliers for their acknowledgement and compliance. We have also formulated the **Sustainable Procurement Policy and Guidelines** to align the direction of supplier operations with that of the Group.

In addition, Charoen Pokphand Group stresses on all dimensions of management in order to reduce environmental and social risks, improve suppliers' economic stability, and promote good corporate governance throughout the life cycle of products and services. To enable our suppliers to grow sustainably together with the Group, while rendering positive contributions along the value chain, Charoen Pokphand Group has defined the Supply Chain Management Strategy.



More information available in

→ [Responsible Supply Chain Management](#)

Supplier Code of Conduct

Charoen Pokphand Group has announced the implementation of the Supplier Code of Conduct, which covers issues on environmental management, human rights respect and labor practices, and ethics in operations. Furthermore, the Group has developed the Sustainable Procurement Policy and

Guidelines in accordance with relevant domestic and international laws, rules, regulations and standards. This serves as a guideline in reducing business risks in the procurement process and in jointly driving sustainability to all suppliers.

Examples of Key Issues Included in the Supplier Code of Conduct



Forced Labor



Occupational Health and Safety



Anti-corruption and Conflict of Interest



Child Labor



Discrimination and Harassment



Anti-competitiveness



Working Environment



Freedom of Association and Collective Bargaining



Environmental Management

More information available in

→ [Supplier Code of Conduct](#)

Supplier Assessment

Charoen Pokphand Group conducts supplier risk assessments throughout the supply chain at least once every three years using appropriate methods, including:



Analysis of data from trusted sources



Questionnaire/self-assessment forms



Site visits by Group staff/independent auditors



Analysis of supplier's operational data from trusted service provider

In order to accommodate our suppliers around the world, the Group has created a risk assessment tool by adopting the e-Procurement system developed by Pantavanij Company Limited, an affiliate of Ascend Group. The system reduces operating time and offers transparency in procurement.

Supplier Risk Management

To enable correct and thorough practice, Charoen Pokphand Group has developed the Responsible Supply Chain Management Guidelines, which covers supplier treatment practice, new supplier selection, supplier classification, risk assessment, audit, performance evaluation, and supplier capacity development. Furthermore, the Group has given priority to enhancing sustainability operations with value-added auditing. Accordingly, the Group has developed a Supplier Audit Guidelines, organized training programs by domestic and international experts, and developed e-Learning for interested individuals.

More information available in

→ [Responsible Supply Chain Management](#)

→ [ESG Supplier Assessment](#)

Key Performances in 2022

Supplier Classification



27,236 suppliers
Tier 1 Suppliers

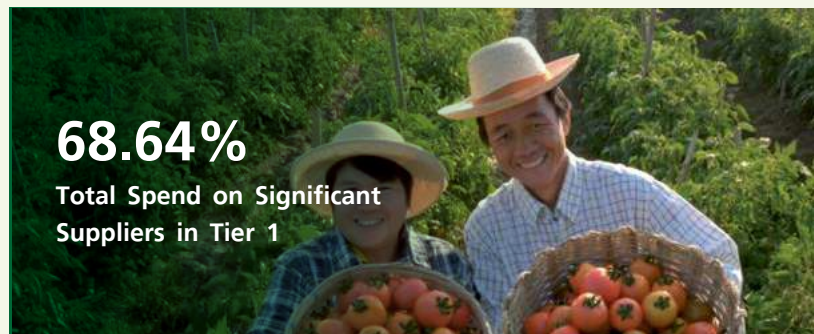
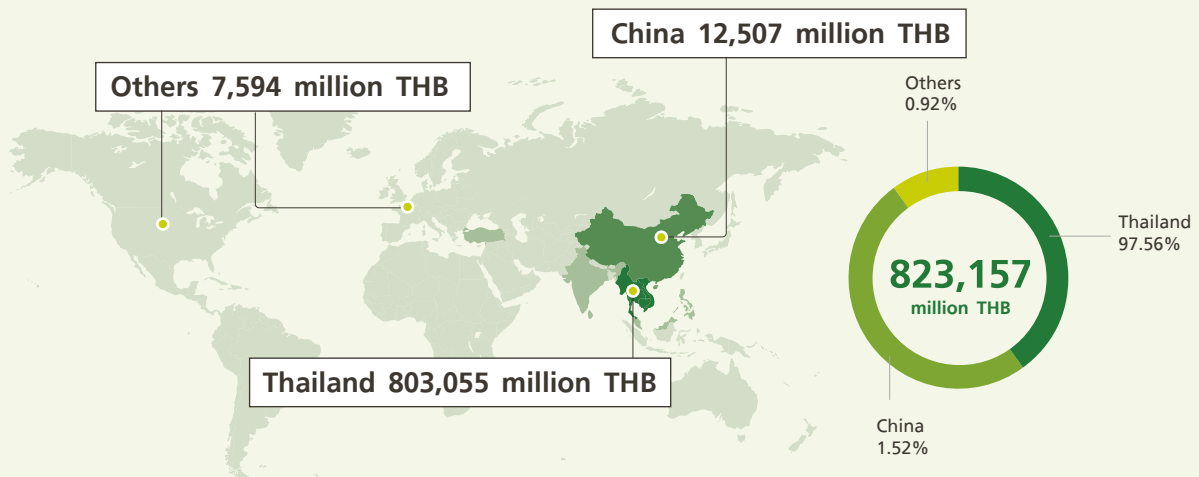


2,127 suppliers
Significant Suppliers
in Tier 1



89 suppliers
Significant Suppliers
in non-tier 1

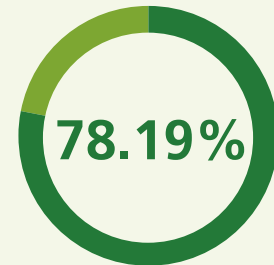
Total Spending for Products and Services



Supplier Code of Conduct for Significant Suppliers in Tier 1

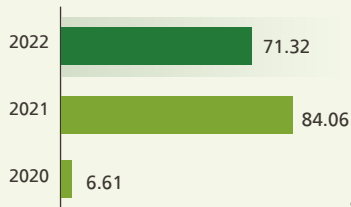


Responsible Personnel Received Training in Sustainable Procurement



Sustainability Risk Management

Supplier received sustainability risk assessment (%)



74 suppliers

Significant suppliers assessed with substantial actual/potential negative impacts



61 suppliers

Suppliers with substantial actual/potential negative impacts with agreed corrective action/improvement plans



0 suppliers

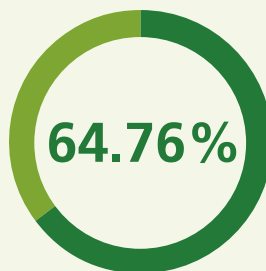
Suppliers with substantial negative impacts that were terminated

Supplier Development

Suppliers Supported in Corrective Action Plan Implementation (%)



Suppliers in Capacity Building Programs (%)



CASE STUDY

Proactive Supplier Development to Enhance All Dimensions of Sustainability

Environmental

True Corporation Public Company Limited (TRUE) encourages suppliers to engage in the responsible management of the supply chain. Therefore, the Company held “TRUE Suppliers Day 2022: Conquering Carbon Neutral / Net Zero” to share management practices in reducing global warming and climate change as well as introducing interesting case studies from Thailand and overseas in preparation for True Group and Charoen Pokphand Group’s common goal of achieving carbon neutrality by 2030 and Net Zero emissions by 2050.

Social

Crop Integration Business, Rice, Transportation and Services Business Groups encourage suppliers to responsibly comply with labor laws and work safety practices in accordance with the Sustainable Development Guidelines. Such action will enable sustainable human rights management in the supply chain. In doing so, the business groups stress on aligning labor protection, which is based on human rights principles and universal standards, with the conditions and rules of new world trade partners in order to provide workers with protection, equality, fairness, and safety according to the Thai Labor Standard, Good Labor Practices (GLP), and the Sustainable Development Guidelines.

Governance

Charoen Pokphand Foods Public Company Limited and CP ALL Public Company Limited have joined hands with the Thai Institute of Directors to host an online seminar to share knowledge and experience as well as create understanding on fraud and corruption risk prevention for SME operators. The event encourages them to declare their intent and upgrade their operations to become an organization certified as an anti-corruption coalition in order to further establish an ecosystem of business transparency.

แนวปฏิบัติ
การจัดการห่วงโซ่อุปทานอย่างรับผิดชอบ



Relationship Capital

Number of suppliers received efficiency enhancement in responsible supply chain management

6,918 suppliers

CASE STUDY**Supplier Development for Sustainable Growth**

Charoen Pokphand Group places value on sustainable supply chain management. The Group focuses on developing supplier capacity and sustainably enhancing their business conduct to increase efficiency, reduce risks in the supply chain, and create opportunities for mutual growth. Thus, the Group has provided all forms of support to our diverse suppliers in order to eliminate limitations or obstacles encountered in their business operations, such as developing sustainable farming

standards, upgrading production systems according to international standards, and implementing technology to reduce costs, enhance efficiency, and provide support in terms of distribution channels and funding sources. In addition, the Group has also advocated for the implementation of circular economy principles in the business sector by creating understanding and encouraging production and consumption behaviors to be shifted towards circular economy.

CASE STUDY**Enhancing Maize Farmers to Replace Stubble Burning with Plowing to Reduce Dust and Smog**

Charoen Pokphand Foods Public Company Limited (CPF) and the Feed Ingredients Trading Business Group have teamed up with suppliers and farmers to establish a sustainable maize production chain and solve PM 2.5 problems through the “Self-Sufficient Farmers, Sustainable Maize” project. The project focuses on modifying cultivation methods, adjusting fertilizer to suit soil condition, ending post-harvest scrap and stubble burning, and reducing expenses relating to fertilizers and soil nourishment for farmers. CPF also set up a special buying point near cultivation areas to cut down on the number of trips in transporting maize to factories and lower dust from such activities. Furthermore, the Company makes site visits to educate farmers while also facilitating their access to knowledge anytime, anywhere via online media or “For Farm” application. Besides encouraging suppliers and farmers to reduce dust particles in the maize production chain, CPF is also committed to procuring agricultural raw materials that do not involve deforestation and protect biodiversity.

CPF uses Blockchain Traceability to increase transparency and ensure that 100% of maize used in our Thailand business can be traced back to a source that does not involve forest encroachment or deforestation. Such effort has also been extended to overseas operations.



Natural Capital

Number of farmers participating
in the project

11,612 people

Total land **355,324** rais

Total amount of produce

increase per rai **18%**



Appendix

The disclosure of our sustainability performance in the annual Sustainability Report has always been one of the key instruments that Charoen Pokphand Group uses to communicate with our stakeholders. It also empowers significant changes in the operations of the Group, suppliers, and business partners. Furthermore, sustainability performance disclosure allows us to recognize multiple challenges and opportunities, which have always been taken into account upon reviewing the Group’s Sustainability Strategy. In addition, the Group has referred to the reporting standards of the Global Reporting Initiative (GRI Standards 2021) and numerous other frameworks to enhance the Group’s sustainability reporting standards to meet international norms. The Group has also contracted an independent third-party consultant to verify the accuracy and consistency of the Report’s contents in accordance with the GRI Standards 2021.



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Reporting Boundary 2022

Content of this Sustainability Report 2022 presents Charoen Pokphand Group's sustainability performances. Economic data are consolidated from Group's operation in 21 countries and economies across the world. Environmental and social performance data (only safety and occupational health) are covered information of company and subsidiaries with operation in Thailand, Vietnam, India, Philippines, Malaysia, Cambodia, Türkiye, Laos, China, Myanmar, Indonesia, Bangladesh, and Taiwan. Social performance data (only human resources) is covered data from companies as listed below:

Business Group/Company Name	Economic	Environmental				Social	
		Energy	Greenhouse Gas	Water	Waste	Safety	Human Resources
1 Charoen Pokphand Group Co., Ltd. and subsidiaries	●	○	○	○	○	○	●
2 Thana Telecom Co., Ltd. and subsidiaries	●	●	●	●	●	●	●
3 Leadership Development Charoen Pokphand Group Co., Ltd.	●	●	●	●	●	●	●
4 K.S.P. Equipment Co., Ltd.	●	●	●	●	●	●	○
5 Kasetphand Industry Co., Ltd.	●	●	●	●	●	●	○
6 Advance Pharma Co., Ltd.	●	●	●	●	●	●	○
Agro-industry and Food Business Group							
1 Charoen Pokphand Foods Public Company Limited and its subsidiaries	●	●	●	●	●	●	●
2 Agro-Industry and Food Business Group (China)	●	●	●	●	●	●	●
3 Chia Tai Enterprises International Limited	●	●	●	●	●	●	●
4 Myanmar C.P. Livestock Company Limited	●	●	●	●	●	●	○
5 C.P. Bangladesh Company Limited	●	●	●	●	●	●	●
6 Charoen Pokphand Pakistan (Pvt.) Ltd.	●	○	○	○	○	○	○
7 Chia Tai Feedmill Pte. Ltd.	●	○	○	○	○	○	○
8 Chia Tai Company Limited and its subsidiaries	●	●	●	●	●	●	●
9 C.P. Intertrade Company Limited and its subsidiaries	●	●	●	●	●	●	●
10 Charoen Pokphand Produce Company Limited and its subsidiaries	●	●	●	●	●	●	●
11 Charoen Pokphand Agriculture Company Limited	●	●	●	●	●	●	●
12 Charoen Pokphand Engineering Company Limited	●	●	●	●	○	●	●
13 Perfect Companion Group Company Limited	●	●	●	●	●	●	●
Retail and Distribution Business Group							
1 CP ALL Public Company Limited and its subsidiaries	●	●	●	●	●	●	●
2 Siam Makro Public Company Limited and its subsidiaries	●	●	●	●	●	●	●
3 C.P. Lotus Corporation	●	●	●	●	●	●	●

Business Group/Company Name		Economic	Environmental				Social	
			Energy	Greenhouse Gas	Water	Waste	Safety	Human Resources
Media and Telecommunications Business Group								
1	True Corporation Public Company Limited and its subsidiaries	●	●	●	●	●	●	
E-commerce and Digital Business Group								
1	Ascend Corporation Company Limited and its subsidiaries	●	●	●	●	●	○	
2	Freewill Solutions Company Limited	●	●	●	●	●	●	
Property Development Business Group								
1	C.P. LAND Public Company Limited and its subsidiaries	●	●	●	●	●	●	
2	CP Property Holding Company Limited	●	●	●	●	●	●	
3	Shanghai Kinghill Limited	●	●	●	●	●	●	
4	Chia Tai Land Company Limited	○	●	●	●	○	●	
5	Chia Tai Di Jing (Shanghai) Investment Management Limited							
Automotive and Industrial Products								
1	E. C. I. Group Company Limited and its subsidiaries	●	○	○	○	○	●	
2	CPPC Public Company Limited and its subsidiaries	●	●	●	●	●	●	
Pharmaceutical Business Group								
1	Sino Biopharmaceutical Limited	●	○	○	○	○	●	
Finance and Investment Business Group*								
1	Zheng Xin Bank Company Limited	○	○	○	○	○	●	
2	Ping An Insurance (Group) Company of China, Ltd.							
3	ITOCHU Corporation							
4	CITIC Group Corporation Ltd.							
Other Businesses								
1	Alter Vim Company Limited	○	○	○	○	○	○	
2	Asia Era One Company Limited	○	○	○	○	○	○	
3	CP Medical Center Company Limited	○	○	○	○	○	○	

● Refers to company's performances that are covered in this Sustainability Report 2022

○ Refers to company's performance that are not covered in this Sustainability Report 2022

* At present, the Finance and Investment Business Group is not currently under the management of Charoen Pokphand Group

GRI CONTENT INDEX

GRI Content Index (GRI Standards 2021)

Foundation 2021

Statement of Use Charoen Pokphand Group has reported in accordance with the GRI Standards for the period between 1 January 2022 to 31 December 2022

GRI 1 Used GRI 1: Foundation 2021



Applicable GRI Sector Standard(s) N/A

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
General Disclosure 2021							
The Organization and its Reporting Practices							
GRI 2	2-1 Organizational details	page 18-19 C.P. Group website: Overview					
GRI 2	2-2 Entities included in the organization's sustainability reporting	page 240-241					
GRI 2	2-3 Reporting period, frequency and contact point	page 16-17					
GRI 2	2-4 Restatement of information	Sustainability Performance Report 2022				G4	
GRI 2	2-5 External assurance	page 256-257				G13	
Activities and Workers							
GRI 2	2-6 Activities, value chain and other business relationships	page 20-21 C.P. Group website: Overview					
GRI 2	2-7 Employees	page 80-81 Sustainability Performance Report 2022					
GRI 2	2-8 Workers who are not employees	Sustainability Performance Report 2022					
Governance							
GRI 2	2-9 Governance structure and composition	page 30-31 C.P. Group website: Sustainability Governance				G5, G11	
GRI 2	2-10 Nomination and selection of the highest governance body	page 64-65					

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
GRI 2	2-11 Chair of the highest governance body	page 30-31, 64-65 C.P. Group website: <u>Sustainability Governance</u>					
GRI 2	2-12 Role of the highest governance body in overseeing the management of impacts	page 44-47				G1, G7	
GRI 2	2-13 Delegation of responsibility for managing impacts	page 44-47				G5	
GRI 2	2-14 Role of the highest governance body in sustainability reporting	page 46-47				G1	
GRI 2	2-15 Conflicts of interest	page 72 C.P. Group website: <u>Corporate Governance</u>					
GRI 2	2-16 Communication of critical concerns	page 72 C.P. Group website: <u>Corporate Governance</u>					
GRI 2	2-17 Collective knowledge of the highest governance body	page 65-73 C.P. Group website: <u>Corporate Governance</u>					
GRI 2	2-18 Evaluation of the performance of the highest governance body	page 65					
GRI 2	2-19 Remuneration policies		a, b	Confidentiality constraints	The information is internally confidential information	G10	
GRI 2	2-20 Process to determine remuneration		a, b	Confidentiality constraints	The information is internally confidential information		
GRI 2	2-21 Annual total compensation ratio	<u>Sustainability Performance Report 2022</u>					
Strategies, Policies and Practices							
GRI 2	2-22 Statement on sustainable development strategy	page 48-49				G1	
GRI 2	2-23 Policy commitments	<u>Codes of Conduct</u> <u>Human Rights and Labor</u> <u>Practices Policy and</u> <u>Guidelines</u>				G2, G3, G7, G7.1, HR2, L1.1, E1.1	

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
GRI 2	2-24 Embedding policy commitments	C.P. Group has several policies in place to ensure strict compliance to our Codes, vision and strategy, as well as applicable laws and regulations. Each management level has responsibility in the policy development, implementation, and monitoring. Beside overseeing the adoption of policies, every level of employee is provided with trainings to confirm clear understanding of each policy, and ability to execute everyday activity in accordance with statement set forth within policies.					<input checked="" type="checkbox"/>
GRI 2	2-25 Processes to remediate negative impacts	page 72, 78-79 C.P. Group website: Corporate Governance Human Rights and Labor Practices					<input checked="" type="checkbox"/>
GRI 2	2-26 Mechanisms for seeking advice and raising concerns	page 72 Report a Concern Whistleblowing Policy and Guidelines				G8, G8.1	<input checked="" type="checkbox"/>
GRI 2	2-27 Compliance with laws and regulations	page 70-72 C.P. Group website: Corporate Governance					
GRI 2	2-28 Membership associations	page 56-57 C.P. Group website: Stakeholder Engagement					
Stakeholder Engagement							
GRI 2	2-29 Approach to stakeholder engagement	page 40-43 Stakeholder Engagement Report 2022					
GRI 2	2-30 Collective bargaining agreements	Sustainability Performance Report 2022				L1.2	
Material Topics 2021							
GRI 3	3-1 Process to determine material topic	page 44-47 Double and Dynamic Materiality Assessment Report 2022				G7, G7.1, HR3, L2, E2	
GRI 3	3-2 List of material topics	page 47 Double and Dynamic Materiality Assessment Report 2022				HR1, E12	

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
GRI 3	Management of material topics	page 62, 74, 88, 98, 108, 118, 130, 142, 150, 162, 174, 192, 204, 214, 230 <u>Double and Dynamic Materiality Assessment Report 2022</u>				G7, G9, HR2, HR2.1, HR3, HR4, HR5, HR6, HR7, HR8, L1, L2, L3, L4, L5, L11, L12, E1, E2, E3, E4, E4.1, E4.2, E5, AC1, AC4, AC6, AC7, AC8	
Economic Performance 2016							
GRI 201	201-1 Direct economic value generated and distributed	page 19					
GRI 201	201-2 Financial implications and other risks and opportunities due to climate change	page 178-179 <u>Task Force on Climate- related Financial Disclosure (TCFD) Report 2022</u>				E2, E3, E4, E4.1, E4.2, E5, E9	
GRI 201	201-3 Defined benefit plan obligations and other retirement plan		a, b, c, d, e	Information unavailable/ incomplete	Disclosure of the information is unavailable		
GRI 201	201-4 Financial assistance received from government		a, b, c	Not applicable	C.P. Group does not receive any financial assistance from government		
Indirect Economic Impacts 2016							
GRI 3	3-3 Management of material topics	page 130 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 203	203-1 Infrastructure investments and service supported	page 132-139					
GRI 203	203-2 Significant indirect economic impacts	page 132-139					

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
Procurement Practice 2016							
GRI 3	3-3 Management of material topics	page 230 Double and Dynamic Materiality Assessment Report 2022					
GRI 204	204-1 Proportion of spending on local supplier	C.P. Group website: Responsible Supply Chain Management					
Anti-corruption 2016							
GRI 3	3-3 Management of material topics	page 62 Double and Dynamic Materiality Assessment Report 2022					
GRI 205	205-1 Total number and percentage of operations assessed for risks related to corruption.	page 71-73				G6, AC1, AC4, AC6, AC7, AC8	
GRI 205	205-2 Communication and training about anti-corruption policies and procedures	Sustainability Performance Report 2022				AC1, AC3, AC4, AC6, AC7, AC8	
GRI 205	205-3 Confirmed incidents of corruption and actions taken	page 72 C.P. Group website: Corporate Governance				AC1, AC4, AC5, AC6, AC7, AC8	
Anti-competitive Behavior 2016							
GRI 206	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	page 72					
Materials 2016							
GRI 3	3-3 Management of material topics	page 192 Double and Dynamic Materiality Assessment Report 2022					
GRI 301	301-1 Materials used by weight or volume	page 199 Sustainability Performance Report 2022					 Packaging Material
GRI 301	301-2 Recycled input materials used	page 199, 201 Sustainability Performance Report 2022					 Packaging Material

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
GRI 301	301-3 Reclaimed products and their packaging materials	page 199 <u>Sustainability Performance Report 2022</u>					
Energy 2016							
GRI 3	3-3 Management of material topics	page 174 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 302	302-1 Energy consumption within the organization	page 184-185 <u>Sustainability Performance Report 2022</u>				E1, E2, E3, E4, E4.1, E4.2, E5, E10, E11	<input checked="" type="checkbox"/>
GRI 302	302-2 Energy consumption outside the organization	page 184-185 <u>Sustainability Performance Report 2022</u>				E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 302	302-3 Energy intensity	page 184-185 <u>Sustainability Performance Report 2022</u>				E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 302	302-4 Reduction of energy consumption	page 184-185 <u>Sustainability Performance Report 2022</u>				E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 302	302-5 Reductions in energy requirement of products and services	page 184-185 <u>Sustainability Performance Report 2022</u>	a, b, c	Information unavailable/ incomplete	Disclosure of the information is unavailable	E1, E2, E3, E4, E4.1, E4.2, E5	
Water and Effluents 2018							
GRI 3	3-3 Management of material topics	page 204 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 303	303-1 Interactions with water as a shared resource	page 206-213				E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 303	303-2 Management of water discharge- related impacts	page 206-213				E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 303	303-3 Water withdrawal	page 209 <u>Sustainability Performance Report 2022</u>				E1, E2, E3, E4, E4.1, E4.2, E5, E13	<input checked="" type="checkbox"/>

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
GRI 303	303-4 Water discharge	page 209 Sustainability Performance Report 2022				E1, E2, E3, E4, E4.1, E4.2, E5	<input checked="" type="checkbox"/>
GRI 303	303-5 Water consumption	page 209 Sustainability Performance Report 2022				E1, E2, E3, E4, E4.1, E4.2, E5, E13	<input checked="" type="checkbox"/>
Biodiversity 2016							
GRI 3	3-3 Management of material topics	page 214 Double and Dynamic Materiality Assessment Report 2022					
GRI 304	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		a, b	Not Applicable	C.P. Group and its subsidiaries do not cause any significant impacts on biodiversity	E1, E2, E3, E4, E4.1, E4.2, E5, E15, E16	
GRI 304	304-2 Significant impacts of activities, products, and services on biodiversity		a, b	Not Applicable	C.P. Group and its subsidiaries do not cause any significant impacts on biodiversity	E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 304	304-3 Habitats protected or restored	Biodiversity (TNFD) Report 2022				E1, E2, E3, E4, E4.1, E4.2, E5, E17	
GRI 304	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	page 216					
Emissions 2016							
GRI 3	3-3 Management of material topics	page 174 Double and Dynamic Materiality Assessment Report 2022					
GRI 305	305-1 Direct (Scope 1) GHG emissions	page 182-183 Sustainability Performance Report 2022	Direct GHG emission excluded emission from flaring of biogas and all vented from CPF	Information unavailable		E1, E2, E3, E4, E4.1, E4.2, E5, E6	<input checked="" type="checkbox"/>

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
GRI 305	305-2 Energy indirect (Scope 2) GHG emissions	page 182-183 Sustainability Performance Report 2022				E1, E2, E3, E4, E4.1, E4.2, E5, E6	<input checked="" type="checkbox"/>
GRI 305	305-3 Other indirect (Scope 3) GHG emissions	page 182-183 Sustainability Performance Report 2022				E1, E2, E3, E4, E4.1, E4.2, E5, E7, E7.1	<input checked="" type="checkbox"/>
GRI 305	305-4 GHG emissions intensity	page 182-183 Sustainability Performance Report 2022				E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 305	305-5 Reduction of GHG emissions	page 182-183 Sustainability Performance Report 2022				E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 305	305-6 Emissions of ozone-depleting substances (ODS)		a, b, c, d	Not Applicable	C.P. Group and its subsidiaries do not have any operation and products that emit ozone depleting substances (ODS).	E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 305	305-7 Nitrogen oxides (NOx), Sulfur oxides (SOx), and other significant air emissions	Sustainability Performance Report 2022				E1, E2, E3, E4, E4.1, E4.2, E5, E18	<input checked="" type="checkbox"/> (VOCc)
Waste 2020							
GRI 3	3-3 Management of material topics	page 192 Double and Dynamic Materiality Assessment Report 2022					
GRI 306	306-1 Waste generation and significant waste-related impacts	page 194-203				E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 306	306-2 Management of significant waste-related impacts	page 194-203				E1, E2, E3, E4, E4.1, E4.2, E5	
GRI 306	306-3 Waste generated	page 199, 201, 203 Sustainability Performance Report 2022	Electronic waste from Ascend group	Information unavailable		E1, E2, E3, E4, E4.1, E4.2, E5, E19	<input checked="" type="checkbox"/>

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
GRI 306	306-4 Waste diverted from disposal	page 199, 201, 203 <u>Sustainability Performance Report 2022</u>				E1, E2, E3, E4, E4.1, E4.2, E5, E20	<input checked="" type="checkbox"/>
GRI 306	306-5 Waste directed to disposal	page 199, 201, 203 <u>Sustainability Performance Report 2022</u>				E1, E2, E3, E4, E4.1, E4.2, E5, E20	<input checked="" type="checkbox"/>
Supplier Environmental Assessment 2016							
GRI 3	3-3 Management of material topics	page 230 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 308	308-1 New suppliers that were screened using environmental criteria	page 235					
GRI 308	308-2 Negative environmental impacts in the supply chain and actions taken	page 235					
Employment 2016							
GRI 3	3-3 Management of material topics	page 74, 82-83 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 401	401-1 New employee hires and employee turnover	<u>Sustainability Performance Report 2022</u>					
GRI 401	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	page 82-83 C.P. Group website: <u>Human Rights and Labor Practices</u>					
GRI 401	401-3 Parental leave	<u>Sustainability Performance Report 2022</u>					
Labor/Management Relations 2016							
GRI 402	402-1 Minimum notice periods regarding operational changes	At C.P. Group, minimum notice periods regarding operational changes is 30 days in advance.					
Occupational Health and Safety 2018							
GRI 3	3-3 Management of material topics	page 74, 84 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 403	403-1 Occupational Health and Safety Management System	page 84-85				L1, L2, L3, L4, L5, L11, L12	

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
GRI 403	403-2 Hazard identification, risk assessment, and incident investigation	page 84-85				L1, L2, L3, L4, L5, L11, L12	
GRI 403	403-3 Occupational health services	page 84-85				L1, L2, L3, L4, L5, L11, L12	
GRI 403	403-4 Worker participation, consultation, and communication on occupational health and safety	C.P. Group highly values workers engagement, even the amid of COVID-19 pandemic. C.P. Group communicates with worker regarding occupational health and safety on regular basis to ensure that highest occupational health and safety standards are uphold. In case of uncertainty, C.P. Group has consultation channels for workers to file questions.				L1, L2, L3, L4, L5, L11, L12	
GRI 403	403-5 Worker training on occupational health and safety	page 87 C.P. Group website: <u>Human Rights and Labor Practices</u>				L1, L2, L3, L4, L5, L11, L12	
GRI 403	403-6 Promotion of worker health	page 85				L1, L2, L3, L4, L5, L11, L12	
GRI 403	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	page 84-87				L1, L2, L3, L4, L5, L11, L12	
GRI 403	403-8 Workers covered by an occupational health and safety management system		a, b, c	Not applicable	Disclosure of the information is unavailable	L1, L2, L3, L4, L5, L11, L12	
GRI 403	403-9 Work-related injuries	page 81 <u>Sustainability Performance Report 2022</u>				L1, L2, L3, L4, L5, L9, L10, L11, L12	<input checked="" type="checkbox"/>
GRI 403	403-10 Work-related ill health	<u>Sustainability Performance Report 2022</u>				L1, L2, L3, L4, L5 , L11, L12	<input checked="" type="checkbox"/>

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
Training and Education 2016							
GRI 3	3-3 Management of material topics	page 98 Double and Dynamic Materiality Assessment Report 2022					
GRI 404	404-1 Average hours of training per year per employee	page 99 Sustainability Performance Report 2022					
GRI 404	404-2 Program for upgrading employee skills and transition assistance	page 100-107 Sustainability Performance Report 2022					
GRI 404	404-3 Percentage of employees receiving regulation performance and career development reviews	page 103 Sustainability Performance Report 2022					
Diversity and Equal Opportunity 2016							
GRI 3	3-3 Management of material topics	page 74 Double and Dynamic Materiality Assessment Report 2022					
GRI 405	405-1 Diversity of governance bodies and employees	C.P. Group's Board of Director consists of 11 members, of which 10 members are non-independent directors, and 1 is executive directors. A total of 100% of members are male. However, C.P. Group does not discriminate from having female director, and this has been stated in CG Policy, which is internal document.				G11	
GRI 405	405-2 Ratio of basic salary and remuneration of women to men	Sustainability Performance Report 2022				L8	
Non-discrimination 2016							
GRI 406	406-1 Incidents of discrimination and corrective actions taken	page 72 C.P. Group website: Corporate Governance				L1, L2, L3, L4, L5, L11, L12	
Freedom of Association and Collective Bargaining 2016							
GRI 407	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	As stated in C.P. Group's Code of Conduct, Human Rights and Labor Practices Policy and Guidelines, and Supplier Code of Conduct, employees, suppliers and contractors have the rights to freely exercise their rights and participate in any collective bargaining in accordance with legal procedures in the applicable jurisdiction.				L1, L2, L3, L4, L5, L11, L12	

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
Child Labor 2016							
GRI 3	3-3 Management of material topics	page 74 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 408	408-1 Operations and suppliers at significant risk for incident of child labor	page 76-79				L1, L2, L3, L4, L5, L11, L12	
Forces or Compulsory Labor 2016							
GRI 3	3-3 Management of material topics	page 74 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 409	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	page 76-79				L1, L2, L3, L4, L5, L11, L12	
Security Practices 2016							
GRI 410	410-1 Security personnel trained in human rights policies or procedures		a, b	Not applicable	This indicator is not applicable to C.P. Group and its subsidiaries		
Rights of Indigenous Peoples 2016							
GRI 3	3-3 Management of material topics	page 74 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 411	411-1 Incidents of violations involving rights of indigenous people	page 76-79					
Local Communities 2016							
GRI 3	3-3 Management of material topics	page 130 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 413	413-1 Operations with local community engagement, impact assessments, and development programs	page 132-141					
GRI 413	413-2 Operations with significant actual and potential negative impacts on local communities	page 132-141					

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
Supplier Social Assessment 2016							
GRI 3	3-3 Management of material topics	page 230 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 414	414-1 New suppliers that were screened using social criteria	page 235 <u>Sustainability Performance Report 2022</u>					
GRI 414	414-2 Negative social impacts in the supply chain and actions taken	page 235 <u>Sustainability Performance Report 2022</u>					
Public Policy 2016							
GRI 415	415-1 Political contributions	page 56-57 C.P. Group website: <u>Stakeholder Engagement</u>					
Customer Health and Safety 2016							
GRI 3	3-3 Management of material topics	page 62, 118, 142 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 416	416-1 Assessment of the health and safety impacts of product and service categories	page 120-129, 144-149					
GRI 416	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	page 72 C.P. Group website: <u>Corporate Governance</u>					
Marketing and Labelling 2016							
GRI 3	3-3 Management of material topics	page 118 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 417	417-1 Requirements for product and service information and labeling	page 126-127					
GRI 417	417-2 Incidents of non-compliance concerning product and service information and labeling	page 72 C.P. Group website: <u>Corporate Governance</u>					
GRI 417	417-3 Incidents of non-compliance concerning marketing communications	page 72 C.P. Group website: <u>Corporate Governance</u>					

GRI Standard/ Other Source	Disclosure	Our Response/Location Reference	Omission			UNGC CoP	External Assurance
			Requirement Omitted	Reason	Explanation		
Customer Privacy 2016							
GRI 3	3-3 Management of material topics	page 62 <u>Double and Dynamic Materiality Assessment Report 2022</u>					
GRI 418	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	page 72 C.P. Group website: <u>Corporate Governance Cybersecurity and Data Protection</u>					

Assurance Statement



LRQA Independent Assurance Statement

Relating to Charoen Pokphand Group Company Limited's Sustainability Report for the calendar year 2022

This Assurance Statement has been prepared for Charoen Pokphand Group Co, Ltd 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 Group Co, Ltd (CPG) to provide independent assurance on its Sustainability Report for the calendar year 2022 ("the report") against the assurance criteria below to a limited level of assurance and at the materiality of the professional judgement of the verifier using LRQA's verification procedure. LRQA's verification procedure is based on current best practice, is in accordance with ISAE 3000 and ISAE 3410 and uses the following principles of - inclusivity, materiality, responsiveness, impact and reliability of performance data.

Our assurance engagement covered only CPG's global operations and specifically the following requirements:

- Confirming that the report is in accordance with GRI Standard (2021).
- Reviewing the integrity of CPG's (GRI 2-24) Embedding policy commitments, (GRI 2-25) Processes to remediate negative impacts and (GRI 2-26) Mechanism for seeking advice and raising concerns and supplier assessment process.
- Evaluating the reliability of data and information for only the selected indicators listed below:
GRI 301-1 Packaging material used by weight, GRI 301-2 Recycled input packaging material used, GRI 302-1 Energy consumption within the organization, GRI 303-3 to 5 Water withdrawal, discharge and consumption, GRI 305-1 Direct (Scope 1) GHG emissions ⁽¹⁾, GRI 305-2 Energy indirect (Scope 2) GHG emissions, GRI 305-3 Other Significant indirect (Scope 3) GHG emissions – excluded cat. 8 and 14 which not relevant, GRI 305-7 Significant air emissions – VOC only, GRI 306-3 to 5 Waste generated, diverted from and directed to disposal included food loss and food waste and GRI 403-9 and 10 Work related injury and ill health.

Notes: 1. Reporting scope of direct GHG emission excluded emission from flaring of biogas, fugitives and all vented from CPF

2. Reporting scope of waste disposal excluded electronic waste from Ascend Group

The information for these selected indicators is available at <https://www.cpgroupglobal.com/storage/document/additional-topic-specific-reports/2023/sustainability-performance-report-2022-en.pdf>

LRQA's responsibility is only to CPG. LRQA disclaims any liability or responsibility to others as explained in the end footnote. CPG'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 CPG.

LRQA's Opinion

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

- Met the requirements above
- Disclosed reliable performance data and information for the selected indicators 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 limited level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited 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 CPG's approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. We did this by reviewing documents and associated records.
- Reviewing CPG's process for identifying and determining material issues to confirm that the right issues, with no bias, were included in their Report and updated overtime.
- Auditing CPG's data management systems to confirm that there were no significant errors, omissions or mis-statements in the Report. We did this by reviewing the effectiveness of data handling processes and systems, including collaborating information from third party assurance engagements done for CPG subsidiaries included CPF (Global), CPAll and True Corp.
- Sampling evidence presented verification to CPG's subsidiaries included Ascend, Chai Tai, CPLand, CPCC, CP Intertrade, CPCrop and Lotus's operations in People's Republic of China, Malaysia and Thailand to confirm the reliability of the selected indicators. We also spoke with key people in various facilities responsible for compiling the data and drafting the Report.

Note: LRQA did not verify the data back to its original sources, nor did it assess the accuracy and completeness of the data reported by individual locations.

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 CPG's engagement process.
- Materiality: We are not aware of any material aspects concerning CPG's sustainability performance that have been excluded from the Report.
- Responsiveness: CPG has processes for responding to various stakeholder groups. We believe that future reports should further explain the climate actions being taken by CPG and its supply chains.
- Impact: CPG should extend the supplier assessment process to address related ESG impacts through its supply chains.
- Reliability: CPG should maintain those subsidiary companies' third-party verification as CPG has collaborated its data and information from subsidiaries level.

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, together with verification for CPG subsidiaries are the only work undertaken by LRQA for CPG and as such does not compromise our independence or impartiality.

Signed

Dated: 3 June 2023

Opart Charuratana
Lead Verifier
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Making Today
a Better Tomorrow



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