



Environmental Policy and Guidelines

Crop Integration Business



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Environmental Policy and Guidelines

Crop Integration Business

1. Intent

Crop Integration Business recognizes the importance of environmental protection and responsible use of natural resources. Crop Integration Business is committed to complying with all applicable environmental laws and regulations as well as internationally-recognized standards and relevant industry best-practices. We undertake all practical efforts to minimize adverse environmental impacts from our business operations, within our own boundary and throughout our value chain, including product design and development, raw material sourcing, agricultural activities, manufacturing activities, provision of services and solutions, operations of business facilities, sales and distribution activities, retail activities, as well as management of waste and products at their end-of-use stage. This principle is applied to current business operations, as well as when there is a change in business activities, whether through development of new businesses, modification or expansion of existing businesses, or acquisition of new businesses, which requires environmental due diligence prior to executing the transaction. Crop Integration Business collaborates with multiple stakeholders on environmental protection and natural resource conservation. We work with communities wherever we operate to prevent environmental impacts that may arise from our own business activities and activities throughout the value chain from adversely affecting members of surrounding communities. We support the use of renewable energy to reduce greenhouse gas emissions. Charoen Pokphand Group is also a supporter of United Nations Global Compact (UNGC), committed to upholding all relevant environmental principles, and to encourage our suppliers, business partners and contractors to implement those principles as well.

These efforts and undertakings are aimed at generating long-term values for all stakeholders and achieving Crop Integration Business's Sustainability Strategy and Goals.



To implement this Environmental Policy and Guidelines, the following supporting policies have been enacted:

- 1) Crop Integration Business's Climate Resilience Policy
- 2) Crop Integration Business's Circular Economy Policy
- 3) Crop Integration Business's Water Stewardship Policy
- 4) Crop Integration Business's Ecosystem and Biodiversity Protection Policy
- 5) Crop Integration Business's Food Loss and Food Waste Policy
- 6) Crop Integration Business's Sustainable Packaging Policy
- 7) Crop Integration Business's Waste Management Policy
- 8) Crop Integration Business's Product Stewardship Policy
- 9) Crop Integration Business's Air Quality Management Policy
- 10) Crop Integration Business's Hazardous Chemicals and Substances Management Policy

2. Scope

This Environmental Policy and Guidelines apply to Charoen Pokphand Group, (hereafter "the Group") which includes Charoen Pokphand Group Co., Ltd., and all of its subsidiary companies. The term "company" hereafter refers to any such company individually that has adopted this Environmental Policy and Guidelines. This document shall be reviewed at least once a year, or as conditions require.

3. Objectives

- 3.1 To create an understanding among employees at all levels regarding their roles and responsibilities in environmental protection, natural resources, climate and environmental management, as well as proper waste and end-of-life product management.
- 3.2 To minimize the environmental impacts from our business operations, to make the most of use of natural resources, and protect ecosystem and biodiversity, in line with the Group's Sustainability Strategy and Goals.



4. Roles and Responsibilities

4.1 Board of Directors

- 4.1.1. Review and approve the Environmental Policy and Guidelines to ensure that they are in place and cover all relevant business activities and stakeholders along the value chain.
- 4.1.2. Ensure that all business operations are in accordance with the laws, rules, regulations and policies related to environmental management.

4.2 Management

- 4.2.1 Set objectives, targets, and indicators for environmental performance.
- 4.2.2 Establish standards, criteria, and protocols that are suitable to the business context and consistent with this Environmental Policy and Guidelines.
- 4.2.3 Establish an organizational structure with clear roles and responsibilities, to ensure that business activities comply with applicable laws, regulations, and are consistent with this Policy and Guidelines.
- 4.2.4 Promote and support business operations in accordance with the Policies and Guidelines at the Group level, including the laws and regulations that each company adheres.
- 4.2.5 Assess all relevant environmental risks including climate, water, air, noise, biodiversity, and waste, as well as, the impact of resources and energy consumption in business activities in order to conduct business in accordance with Policies and Guidelines.
- 4.2.6 Communicate Policy and Guidelines to employees and all related departments to ensure correct understanding and effective implementation.
- 4.2.7 Provide a whistleblowing channel for all stakeholders to file reports regarding environmental violations. The whistleblowing mechanism must provide adequate protection for whistleblowers, complainants and informants.



- 4.2.8 Monitor the implementation to ensure compliance with this Policy and Guidelines, and applicable environmental laws, regulations, and standards, and identify new measures to improve environmental performance.
- 4.2.9 Produce a report on an annual basis to show company performance on environmental management.
- 4.2.10 Review the Group's environmental policies and practices in accordance with both local and international laws, regulations and practices.

4.3 Environmental Team or Responsible Department / Person

- 4.3.1 Implement this Environmental Policy and Guidelines, in line with each company's business context, while supporting the Group's sustainability targets.
- 4.3.2 Develop action plans and targets that are consistent with this Policy and Guideline, including the Group's Sustainable Development Goals.
- 4.3.3 Support and coordinate with relevant teams or persons at the Group level in implementing this Environmental Policy and Guidelines, and driving towards the Group's Sustainable Development Goals.
- 4.3.4 Communicate and advise the management and employees on how to comply with this Environmental Policy and Guidelines to ensure correct understanding; promote continuous engagement with relevant stakeholders throughout the value chain.
- 4.3.5 Provide an environmental management investment plan and practical tools to assess the Environmental Return on Investment (EROI).
- 4.3.6 Organize training, public relations and communications to all employees and relevant persons to raise awareness of environmental protection on a regular basis, as well as expanding the effort to reach stakeholders throughout the value chain.
- 4.3.7 Arrange channels for whistleblowing, submitting suggestions, opinions and complaints from employees and stakeholders on environmental issues, to encourage participation in environmental management and use the information for further improvement of environmental management.



- 4.3.8 Monitor and analyze environmental performance data in accordance with this Policy and Guidelines on a regular basis.
- 4.3.9 Compile and report all applicable environmental performance data in accordance with this Policy and Guidelines to the Management at least once a year.
- 4.3.10 Communicate all environmental performance data to the public, employees and stakeholders through Charoen Pokphand Group's Sustainability Report annually.
- 4.3.11 Review and provide feedback on the Environmental Policies and Guidelines to the Company's Management annually.

4.4 Staff

- 4.4.1 Ensure correct understanding of applicable environmental laws, regulations, standards, and this Policy and Guidelines.
- 4.4.2 Attend mandatory trainings on environmental issues and participate in environmental activities.
- 4.4.3 Report information or complaints through the company's whistleblowing channel when encountering wrongdoings or violations this Policy and Guidelines.

5. Guidelines

- 5.1 Strictly comply with environmental laws, rules and regulations, this Policy and Guidelines, and applicable environmental standards, in all countries of operations.
- 5.2 Develop and improve the efficiency of business operations, including manufacturing processes, procurement, provision of services, logistics, business administration, product and service design, and other business activities, with the objective of delivering high-quality, environmentally-friendly products and services to customers.



- 5.3 Commit to preventing impacts on natural resources and the environment from operations throughout value chain such as water, air, soil pollution.
- 5.4 Encourage the innovation and technology development to increase efficient use of resources, including designing of products and services that reduce greenhouse gas emissions throughout the value chain and minimize environmental impacts.
- 5.5 Ensure adequate, thorough, and regular assessment of environmental risks and opportunities, including financial impacts, to support operational decisions, before initiating a new project or activity, during the implementation of projects or activities, and after the project or activities have been completed.
- 5.6 Implement management control of factors that may cause pollution problems for communities surrounding business operations and society in general, in accordance with the Green Economy Principles in Charoen Pokphand Group's C.P. Excellence Management System.
- 5.7 Monitor and follow-up on environmental impacts from operations and promote continuous improvement by setting up clear objectives, targets and action plans as well as assess environmental impact to support operational decision.
- 5.8 Conserve natural resources through efficient and sustainable consumption, implementing the 9 R's principles:
 - (1) Refuse: avoid the use of materials that are harmful to the environment; provide consumers with the options to avoid or reduce unnecessary purchase and consumption.
 - (2) Reduce by Design: develop products with resource and energy efficiency as design criteria.
 - (3) Reduce: reduce unnecessary consumption of resources and generation of waste.
 - (4) Reuse: extend useful life of products or materials by reusing.
 - (5) Repair: repairable items should be repaired for further use whenever practical to avoid generating waste and consumption of new resources; products should be designed with reparability in mind.



- (6) Refurbish: whenever possible, refurbish items to return to their acceptable quality and performance instead of discarding them, which would lead to generation of waste and consumption of new resources; relevant products should be designed to allow refurbishment.
- (7) Remanufacture: for applicable products, remanufacture end-of-life products into new products that serve the same function as the original item.
- (8) Repurpose: convert parts of one product into input for making new products that serve a different function as the original item.
- (9) Recycle: process materials from discarded products into raw materials for making new products.

- 5.9 Manage and integrate environment management by working together with stakeholders and providing full support to suppliers, business partners and contractors in the implementation of Charoen Pokphand Group's Environmental Policy and Guidelines.
- 5.10 Collaborate with the private sector, government sector, civil society and surrounding communities to promote the conservation of natural resources and protecting the environment.
- 5.11 Communicate this Policy and Guidelines to suppliers and business partners to ensure that they perform in line with appropriate environmental standard and procedures.
- 5.12 Encourage environmental awareness building by providing training to employees, partners and relevant stakeholders.
- 5.13 Disclose environmental performance to the public in the form of Sustainability Report or other formats.

6. Training

The Company shall communicate the Environmental Policy and Guidelines and cascade it through training programs, conferences, and other appropriate channels to its directors, management, staff, and relevant stakeholders including suppliers, business partners and the general public throughout the value chain. The effectiveness of such training and communications programs shall be evaluated on a regular basis.



7. Whistleblowing

In case a violation of the Environmental Policy and Guidelines is found, a report must be filed by following the procedure stated in the Whistleblowing Policy and Guidelines. The information of complainant or whistleblower will be protected and the information will be kept confidential during the investigation and after the completion of the investigation process.

8. Policy Advice

In case of suspicion on the action that may violate environmental laws, regulations and this Environmental Policy and Guidelines, the employee can seek advice from her or his supervisors; team or persons responsible for environmental management within the Company, Compliance Department; or Legal Department, before making any decision or carrying out any action.

9. Penalties

In the event of an investigation, all employees must fully cooperate with internal and external entities. If an employee violates or fails to comply with this Policy and Guidelines, either directly or indirectly, the employee will be subject to disciplinary action in accordance with Company's regulations.

10. Related Laws, Regulations, and Policies

- 10.1. Related Acts and applicable environmental laws in all countries where Crop Integration Business operates.
- 10.2. Crop Integration Business's Sustainability Policy and Guidelines
- 10.3. Crop Integration Business's Whistleblowing Policy and Guidelines



Climate Resilience Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Realizing that climate change, caused primarily by anthropogenic greenhouse gas emissions, is a critical global challenge with potentially significant and devastating economic, social, and environmental impacts, Crop Integration Business is therefore determined to operate its businesses with the principle of climate stewardship. The Group integrates low-carbon development measures into its sustainable management of natural resources, to minimize the impact on climate change. The Group's climate stewardship strategy is aligned with the Paris Agreement, to limit global temperature increase to 1.5°C above preindustrial levels, and to reach net-zero by 2050. Charoen Pokphand Group also committed to set science-based emissions reduction targets in line with the criteria and recommendations of the Science Based Targets initiative (SBTi) to ensure the strongest level of ambition in the short, medium, and long-term.

Furthermore, Charoen Pokphand Group sets a Net Zero Carbon target from operations by 2030 and aims to plant 20 million trees by 2025. The Group encourages employees, business partners, contractors and stakeholders to reduce greenhouse gas emissions from business operations and continues to support use of renewable energy throughout value chain.

In order to achieve these objectives, Crop Integration Business establishes the following guideline.

1. Set up targets, strategies and guidelines, and collaborate with stakeholders throughout supply chain to reduce greenhouse gas emissions and adapt to climate change aligned with relevant international framework on climate, including the Paris Agreement of United Nations and the UN Convention on Biological Diversity.
2. Integrate an "internal carbon price" in business strategies and use as a guide for business planning and investment decisions.



3. Assess climate change risks and opportunities and impact from climate change that might affect business operations throughout lifecycle of products and services, as well as implement effective management approach for climate issues.
4. Design and develop products, services, and operating processes with considerations of climate adaptation measures, to reduce energy usage and greenhouse gas emissions.
5. Implement sustainable procurement, prioritizing raw materials, products, services, and solutions with lower climate impact, and use control measures to combat deforestation and forest degradation, and support nature-based solutions including carbon sequestration in forest areas.
6. Promote the use of energy and natural resources effectively and most efficiently throughout supply chain.
7. Develop and apply technology and innovation into business operations to reduce energy consumption and overall greenhouse gas emissions.
8. Implement measures to achieve zero food waste and zero waste to landfill to reduce climate impact from waste management.
9. Increase the proportion of renewable energy and low-carbon energy in business operations.
10. Encourage efficient use of fertilizers in agriculture; promote carbon sequestration and reduction of greenhouse gas emissions from agricultural production.
11. Implement greenhouse gas emissions reduction projects/activities within the business operations, and explore credible offsets to achieve net zero carbon.
12. Ensure that the greenhouse gas emissions from business operations do not exceed the amount of allowed by relevant laws, regulations and standards.
13. Provide transparent governance and audit process to monitor progress and review action plans for climate change management.
14. Set up a performance tracking system and report greenhouse gas emissions data from Scope 1 (direct emission), Scope 2 (indirect emission for energy usage) and Scope 3 (others indirect emission) in compliance with internationally recognized standards.



15. Develop and regularly review emergency preparedness action plans to maintain businesses continuity.
16. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders on climate resilience both nationally and internationally.
17. Communicate with employees, suppliers, business partners and stakeholders on a regular basis to raise awareness about climate resilience.
18. Disclose performance and progress against targets on climate resilience through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Climate Resilience Policy, and other applicable policies and guidelines related to climate resilience.



Circular Economy Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Realizing that population growth, economic growth and rapid technology advancement contribute to intensifying consumption of natural resources, some of which are quickly becoming depleted. At the same time, most materials are being discarded at the end of their useful life without being recovered for reuse or recycling. The lack of effective management to maximize resource efficiency can lead to two key environmental crises: shortages of critical resources and waste management problems.

To tackle these challenges, Crop Integration Business has adopted the circular economy principle in its business operations to maximize resource efficiency, reduce waste generation, recover waste from all processes along the value chain for reutilization and recycling. The Group prioritizes renewable resources in the selection of materials, product design, and applies innovation and technology in related processes throughout the product lifecycle to research and develop products, equipment and infrastructure with longer useful life. Charoen Pokphand Group has set the target to achieve zero waste to landfill and zero food waste by 2030, and while 100% of plastic packaging use must be reusable, recyclable, or compostable by 2025 for operations in Thailand and by 2030 for international operations.

In order to achieve these objectives, Crop Integration Business establishes the following guideline.

1. Ensure effective management is in place for all waste streams from business activities; reduce the overall amount of waste, both from internal operations and activities by applying 9Rs concept.
2. Implement lifecycle assessment during the design and development phase of products and services to eliminate or minimize waste, and increase efficiency in all production processes and services.



3. Research and develop technologies and innovations that can be applied to enhance useful life of products, services, equipment, and infrastructure, to reduce environmental impacts from waste.
4. Explore investment and development opportunities in businesses and technologies that enhance resource efficiency.
5. Set up a performance tracking system and report circular economy performance in compliance with internationally recognized standards.
6. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to promote the best use of resources, including reducing waste generation, increasing the rate of recycling and material recovery, and mitigating impacts of improper handling of plastic waste.
7. Promote responsible consumption and waste management behaviors among consumers and stakeholder's, encourage waste minimization, proper management of expired food products, waste sorting, recycling of plastic and other materials.
8. Communicate with employees, suppliers, business partners and stakeholders on a regular basis to raise awareness about circular economy principles.
9. Disclose performance and progress against targets on circular economy through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Circular Economy Policy and other applicable policies and guidelines related to circular economy.



Water Stewardship Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Recognizing the severity of the current scarcity and degradation of the world's water resources, which are essential for all societies and natural systems, Crop Integration Business places water stewardship as an essential component to its core business operations and value chain management. The Group's effort is aligned with both the United Nation's Sustainable Development Goals (SDGs) and the Group's own Sustainable Development Goals. Furthermore, Crop Integration Business's water stewardship practice supports the CEO Water Mandate under the UN Global Compact.

Crop Integration Business continues to improve the effectiveness of its water resources management throughout its entire value chain, to mitigate the impact of water shortage, and to promote more efficient use of this valuable resource. We achieve this through an integrated water resources management, leveraging technologies and innovations that enable efficient water management of agriculture and manufacturing processes. This effort increases the capacity for business resilience and ensures that access to quality water resources is equitably shared with communities around our operations. Moreover, Crop Integration Business assesses water scarcity risk according to international standards to help assess water resource risks within the organizations and for related stakeholders. The tool also aids in planning efficient water use, in line with Charoen Pokphand Group's 2030 goal to achieve 20% reduction in water withdrawals per unit revenue compared to baseline year 2020.

In order to achieve these objectives, Crop Integration Business establishes the following guideline.

1. Commit to protecting water resources and managing water efficiently throughout the value chain, covering freshwater, surface water, ground water, marine and coastal water, and minimizing negative impacts on natural water resources.



2. Ensure that its business operations do not adversely impact the ability of communities in surrounding areas to access water resources for utilization and consumption, and implement measures to improve their access in a fair and equitable manner.
3. Analyze and assess water risks, increase the proportion of water reused and recycled both internally and externally, covering all key stakeholders.
4. Develop, explore and evaluate technology and innovation in water management to improve efficiency, minimize waste, and increase the proportion of water reused and recycled.
5. Set long-term goals for effective management and efficient use of water resources.
6. Monitor and maintain water quality from all business activities and treat wastewater before releasing into public waterways in accordance with national laws and standards.
7. Set up a performance tracking system and report water stewardship performance in compliance with internationally recognized standards.
8. Encourage collaborations with communities and relevant stakeholders in the utilization and conservation of water resources, as well as respond to any concern from the community and the public in a timely manner.
9. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to address national and global water problems.
10. Communicate with employees, suppliers, business partners and stakeholders on a regular basis to raise awareness about the issue of water stewardship.
11. Disclose water stewardship performance and progress against targets on water conservation through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Water Stewardship Policy and other applicable policies and guidelines related to water stewardship.



Ecosystem and Biodiversity Protection Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Crop Integration Business realizes that rapid growth in global population, intensifying urbanization, increasing industrial activities and associated demand for natural resources within the value chain can lead to greater pressure on the biodiversity of ecosystems, which are the foundation for environmental resilience as well as the well-being of human societies, as they are a vital resource of economic and industrial systems.

Crop Integration Business is committed to responsible business practices, maintaining the balance of nature, and giving priority to ecosystem restoration and biodiversity protection in accordance with internationally-accepted principles, including The Rio Declaration on Environment and Development and The Convention on Biological Diversity. Additionally, Charoen Pokphand Group sets a target that by 2030, 100% of its business units shall implement, or participate in biodiversity protection programs with suitable partners, to ensure effective management and monitoring of biodiversity issues related to their operations.

In order to achieve these objectives, Crop Integration Business establishes the following guideline.

1. Incorporate ecosystem risks into the business risk management framework; analyze and assess risks of impacts on ecosystem and biodiversity from business activities and incorporate the findings in decision-making for business operations.
2. Develop guidelines on responsible supply chain that cover sustainable agriculture, forestry, and fishery, and include commitments on zero deforestation and destructive fishing practices.
3. Support and contribute to ecosystem and biodiversity protection by supporting the expansion of protected natural areas as habitats for terrestrial and aquatic species, to conserve and rehabilitate the ecosystems in those areas.



4. Protect biodiversity of native ecosystems from the risks posed by Genetically Modified Organisms (GMOs) as well as invasive alien species.
5. Maintain and improve soil health and agrobiodiversity within all business activities, including the Group's own operations and procurement of raw materials.
6. Ensure that land use activities do not result in violations of land tenure laws and rights of communities and indigenous communities, as well as no involvement in corruption and bribery.
7. Set up a performance tracking system and report ecosystem and biodiversity protection performance in compliance with internationally recognized standards.
8. Implement fast response surveillance and early warning system with action plans for relief and remedies, when there is a threat and impacts on ecosystems and biodiversity in all areas where Crop Integration Business operates.
9. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to implement ecosystem and biodiversity protection projects.
10. Communicate with employees, suppliers, business partners and stakeholders on a regular basis to raise awareness about ecosystem and biodiversity protection.
11. Disclose performance and progress against targets on ecosystem and biodiversity protection through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Ecosystem and Biodiversity Protection Policy and other applicable policies and guidelines related to ecosystem and biodiversity protection.



Food Loss and Food Waste Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Realizing the importance of food loss and food waste management as an issue of global significance, and recognizing the impacts that food losses, excess food production, and food waste have on the environment, contributing to climate change and reducing the opportunities for food access for underprivileged members of society. Reducing food loss and food waste can strengthen food security and sustainability in the future.

Charoen Pokphand Group, as a food producer, retailer, and service provider, also contributes to the generation of food loss and food waste, and is well aware of the role and responsibility that it must take to address the issue. Charoen Pokphand Group has set the target to reduce food waste from business operations to zero by 2030

In order to achieve this objective, Crop Integration Business establishes the following guideline.

1. Assess and analyze food losses within the production and distribution processes to identify ways to reduce food loss and food waste at the sources.
2. Fully utilize raw materials in the food production process.
3. Reduce the amount of food waste by managing leftover or unsold food that is still in good condition by reusing, donation, and reprocessing; convert food waste and food that is unfit for consumption into fertilizer and energy.
4. Develop and seek new technologies and innovations that can reduce food loss and food waste from operations along value chain.
5. Support business partners to increase the efficiency of agricultural raw material production to reduce food loss.



6. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to address food loss and food waste problem.
7. Set up a performance tracking system and report food loss and food waste reduction performance in compliance with internationally recognized standards.
8. Communicate and raise awareness on food loss and food waste to employees, suppliers, business partners and stakeholders continuously.
9. Disclose performance and progress against targets on food loss and food waste through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Food Loss and Food Waste Policy and other applicable policies and guidelines related to food loss and food waste.



Sustainable Packaging Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Realizing that improper use and disposal of plastics and other packaging materials may cause environmental problems, and that Charoen Pokphand Group's business operations, from development, production, distribution and services, utilize plastics, directly and indirectly as component of packaging materials, to ensure that plastic materials are properly managed and recycled, Charoen Pokphand Group thereby promotes systematic plastic management according to the circular economy principle and aims to eliminate problematic or unnecessary plastic packaging in the organization and reduce the use of single-use plastic packaging. Charoen Pokphand Group sets a target that 100% of its plastic packaging materials must be reusable, recyclable, or compostable by 2025 for operations within Thailand, and by 2030 for international operations.

In order to achieve these objectives, Crop Integration Business establishes the following guideline.

1. Assess and identify opportunities from using reusable, recyclable, or compostable plastic packaging.
2. Use reusable, recyclable, or compostable plastic packaging and reduce dependency on single-use plastic.
3. Eliminate the use of plastic packaging that has impact on environment or unnecessary plastic packaging through redesign, innovation and/or improve delivery efficiency.
4. Support policy of driving positive behavioral change through the 9Rs concept according to the Charoen Pokphand Group's Circular Economy Policy.
5. Develop and invest in businesses, technologies, or other assets that contribute to circular economy for plastics.



6. Use plastic packaging that is free from hazardous chemicals that are harmful to health and must be safe for everyone.
7. Set up a performance tracking system and report sustainable packaging in compliance with internationally recognized standards.
8. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to reduce the overall use of plastic, increase the reuse and recycling rate of plastic materials, and increase the use of compostable plastics for necessary single-use plastic items.
9. Communicate and raise awareness on sustainable packaging to employees, suppliers, business partners and stakeholders continuously.
10. Disclose performance and progress against targets on sustainable packaging through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Sustainable Packaging Policy and other applicable policies and guidelines related to sustainable packaging.



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4. Support policy of driving positive behavioral change through the 9Rs concept according to the Charoen Pokphand Group's Circular Economy Policy.
5. Develop and invest in businesses, technologies, or other assets that contribute to circular economy for plastics.



6. Use plastic packaging that is free from hazardous chemicals that are harmful to health and must be safe for everyone.
7. Set up a performance tracking system and report sustainable packaging in compliance with internationally recognized standards.
8. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to reduce the overall use of plastic, increase the reuse and recycling rate of plastic materials, and increase the use of compostable plastics for necessary single-use plastic items.
9. Communicate and raise awareness on sustainable packaging to employees, suppliers, business partners and stakeholders continuously.
10. Disclose performance and progress against targets on sustainable packaging through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Sustainable Packaging Policy and other applicable policies and guidelines related to sustainable packaging.



Waste Management Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Realizing the importance of waste management from business activities from manufacturing processes or services, to those activities of suppliers upstream and downstream, Crop Integration Business has developed a waste management approach and framework that covers our entire value chain. Our approach centers on reducing the amount of waste at its sources, maximizing resource use efficiency, increasing recycling rate, and encouraging business partners and customers to practice good waste management practice to drive positive changes to the environment on a broader scale in improvement environmental quality, along with sustainable business operations. Charoen Pokphand Group set the target to achieve zero waste to landfill and zero food waste from operations by 2030.

In order to achieve these objectives, Crop Integration Business establishes the following guideline.

1. Implement waste management measures that cover all wastes from both within organizational boundary, and waste arising from activities within the value chain.
2. Assess and identify risks from waste management to mitigate possible adverse impacts.
3. Improve waste management by applying 9Rs concept according to Charoen Pokphand Group's Circular Economy Policy.
4. Reduce the amount of waste generation at the sources, increase recycling rate, increase recovering and utilization of organic waste for other benefits to create added value.
5. Develop and seek new technologies and innovations to reduce the environmental impacts of waste from operations and value chain.
6. Set up a performance tracking system covering hazardous and non-hazardous wastes, and report circular economy performance in compliance with internationally recognized standards.



7. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to implement waste management initiatives.
8. Communicate and raise awareness on waste management to employees, suppliers, business partners and stakeholders continuously.
9. Disclose performance and progress against targets on waste management through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Waste Management Policy and other applicable policies and guidelines related to waste management.



Product Stewardship Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Realizing the importance of using natural resources efficiently and responsibly in every product, Crop Integration Business is committed to reducing the environmental impacts of products and services, by managing all processes throughout the product lifecycle to ensure that the products and services are of satisfactory quality, safe, and in compliance with applicable standards, as well as to reduce carbon and ecological footprints of those products and services. Furthermore, it seeks to collaborate with customers, consumers and stakeholders throughout the value chain in product stewardship to realize the value of responsible consumption and promote environmentally friendly products and services.

In order to achieve these objectives, Crop Integration Business establishes the following guideline.

1. Develop and define design products and services criteria to ensure high quality, safety, compliance with environmental standards, and certifications by relevant national and international regulators.
2. Assess and identify health, society and environmental risks throughout the product lifecycle to mitigate possible adverse impacts.
3. Improve operational, products and services production efficiency continuously by selecting raw materials that are of high quality and sustainably-sourced, prioritize safe and environment-friendly materials free of hazardous substances, reused, or recycled materials, sustainably sourced materials. Ensure that no conflict minerals are used as raw materials.
4. Prioritize business partners and contractors who comply with standards in responsible production of products and services.
5. Support and drive green procurement to promote environmentally friendly products and services.



6. Verify the effectiveness of Product Stewardship throughout the lifecycle of the products and services, including design, procurement, production, managerial activities, transportation, distribution and end-of-life management.
7. Reduce or develop a plan to eliminate the use of hazardous chemicals or substances in products and services.
8. Implement quality assurance and control systems according to international standards to ensure reliability of products and services.
9. Allocate resources to implement product stewardship concepts along the value chain, including sustainable sourcing programs, LCA (Life Cycle Assessment) of products and services, sustainable product/service design criteria, and other related programs and activities.
10. Develop, research and apply innovation and clean technology to design safer products that meet applicable standards and have low environmental impact.
11. Provide quality products and services that deliver resource efficiency benefits to customers and consumers, together with product environmental labels, nutrition labels or other labels that show product and chemical safety information to customers.
12. Set up a performance tracking system and report data in compliance with internationally recognized standards.
13. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to promote sustainable production and consumption.
14. Communicate and raise awareness on product stewardship among employees, suppliers, business partners and stakeholders continuously.
15. Disclose performance and progress against targets on product stewardship through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Product Stewardship Policy and other applicable policies and guidelines related to product stewardship.



Product Stewardship Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Realizing the importance of using natural resources efficiently and responsibly in every product, Crop Integration Business is committed to reducing the environmental impacts of products and services, by managing all processes throughout the product lifecycle to ensure that the products and services are of satisfactory quality, safe, and in compliance with applicable standards, as well as to reduce carbon and ecological footprints of those products and services. Furthermore, it seeks to collaborate with customers, consumers and stakeholders throughout the value chain in product stewardship to realize the value of responsible consumption and promote environmentally friendly products and services.

In order to achieve these objectives, Crop Integration Business establishes the following guideline.

1. Develop and define design products and services criteria to ensure high quality, safety, compliance with environmental standards, and certifications by relevant national and international regulators.
2. Assess and identify health, society and environmental risks throughout the product lifecycle to mitigate possible adverse impacts.
3. Improve operational, products and services production efficiency continuously by selecting raw materials that are of high quality and sustainably-sourced, prioritize safe and environment-friendly materials free of hazardous substances, reused, or recycled materials, sustainably sourced materials. Ensure that no conflict minerals are used as raw materials.
4. Prioritize business partners and contractors who comply with standards in responsible production of products and services.
5. Support and drive green procurement to promote environmentally friendly products and services.



6. Verify the effectiveness of Product Stewardship throughout the lifecycle of the products and services, including design, procurement, production, managerial activities, transportation, distribution and end-of-life management.
7. Reduce or develop a plan to eliminate the use of hazardous chemicals or substances in products and services.
8. Implement quality assurance and control systems according to international standards to ensure reliability of products and services.
9. Allocate resources to implement product stewardship concepts along the value chain, including sustainable sourcing programs, LCA (Life Cycle Assessment) of products and services, sustainable product/service design criteria, and other related programs and activities.
10. Develop, research and apply innovation and clean technology to design safer products that meet applicable standards and have low environmental impact.
11. Provide quality products and services that deliver resource efficiency benefits to customers and consumers, together with product environmental labels, nutrition labels or other labels that show product and chemical safety information to customers.
12. Set up a performance tracking system and report data in compliance with internationally recognized standards.
13. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to promote sustainable production and consumption.
14. Communicate and raise awareness on product stewardship among employees, suppliers, business partners and stakeholders continuously.
15. Disclose performance and progress against targets on product stewardship through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Product Stewardship Policy and other applicable policies and guidelines related to product stewardship.



Air Quality Management Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Air is a vital resource that all humans, animals and plants depend on. Many business activities can adversely impact air quality, from the manufacturing processes, distribution, transportation and provision of services. Air pollutants, such as smoke and dust particles from fuel combustion can harm health and affect quality of life for all members of society, and lead to environmental degradation. Greenhouse gas emissions from these activities also lead to anthropogenic climate change.

As Crop Integration Business operates businesses that can negatively impact air quality, it is determined to manage air quality to meet legal requirements, regulatory responsibility, and applicable air quality standards. Charoen Pokphand Group aims to protect and enhance environmental quality in line with the Sustainable Development Goals.

In order to achieve these objectives, Crop Integration Business establishes the following guideline.

1. Assess air pollution risks and monitor air quality in accordance with the laws of each country, in order to develop and implement appropriate air pollution prevention measures.
2. Develop production processes and apply technology to reduce air pollution.
3. Avoid using toxic volatile substances, chemicals that may form Volatile Organic Compounds (VOCs) and treat air emission according to acceptable level as specified by the relevant laws and regulations before being releasing it into the atmosphere. This depends on the nature of chemicals use in each business and their associated risks.
4. Improve combustion efficiency, including by regular inspection and maintenance of all equipment, vehicles and machines to ensure good operating condition.



5. Promote the application of technology and innovation for monitoring, inspecting, and managing air quality in accordance with the standards.
6. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to manage, control, and address air pollution problems.
7. Communicate and raise awareness on air quality management among employees, suppliers, business partners and stakeholders continuously.
8. Disclose information and performance of air quality management through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Air Quality Management Policy and other applicable policies and guidelines related to air quality management.



Hazardous Chemicals and Substances Management Policy

Crop Integration Business

This policy is a part of Crop Integration Business's Environmental Policy and Guidelines.

Hazardous chemicals and substances are utilized in industry, agriculture and daily activities; however, improper management and handling of such materials can impact the safety of employees and community; and lead to severe degradation of environmental quality.

Charoen Pokphand Group recognizes the importance of appropriate management of hazardous chemicals and substances, and chemicals used in agricultural activities, in the company's operations in accordance with applicable standards to reduce and eliminate adverse impact to human health and associated financial damages, as well as, mitigate short- and long-term impacts on the environment.

In order to achieve these objectives, Crop Integration Business establishes this Hazardous Chemicals and Substances Management Policy with the following guideline.

1. Assess the risks associated with hazardous chemicals and substances, covering all activities including import, procurement, transport, storage, use and disposal, and set standard practices to prevent and mitigate potential impacts.
2. Avoid the use of hazardous chemicals and substances by using the hazard criteria specified by the laws of each country. This shall include chemicals used in agriculture that are highly toxic or can cause a high level of impact on health and environment.
3. Apply the Hierarchy of Controls Principles to effectively manage hazardous chemicals and substances including Elimination; Substitution with less hazardous materials, processes, operations or equipment; Engineering Control; Warning; and Administrative Control.



4. Apply Integrated Pest Management (IPM) Principles to minimize the use of chemicals in agriculture.
5. Set up a performance tracking system and report hazardous chemicals and substances data in compliance with internationally recognized standards.
6. Support and collaborate with government agencies, NGOs, educational institutions, communities and other stakeholders to implement projects to reduce the use of hazardous chemicals and substances.
7. Communicate and raise awareness on the impact of hazardous chemical and substances to employees, farmers, business partners and stakeholders continuously.
8. Disclose performance and progress against targets regarding the management of hazardous chemicals and substances through Sustainability Report or other relevant disclosures to stakeholders annually.

Directors, executives and employees of Crop Integration Business must comply with the laws, rules, regulations, standards, as well as this Hazardous Chemicals and Substances Management Policy and other applicable policies and guidelines related to the management of hazardous chemicals and substances.