

Emerging Risk

CPF places importance on the analysis of risk factors which are currently encountered and emerging risks which may occur in the future. This has potential impacts on the company's supply chain or food industries in the next 3-5 years. With the aims of setting business strategies and risk management mitigation action in accordance with risk factors in the short and long term, disclosing risk issues to stakeholders, and understanding a trend of emerging risks. CPF, as the world's leading food producer and distributor, identifies the emerging risks which may arise in the future as follows:



Emerging Risk

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1. Climate Variability

Description

Since climate change is intensifying and brings about severe impacts, the 26th United Nations Framework Convention on Climate Change Conference of the Parties (UNFCCC COP26) further strengthens to accelerate active reduction of GHG emissions. The influence of the COP26 creates stringent regulations in Thailand and other countries.

As a result, Thailand has expressed its intention to contribute to reduce GHG emissions with countries at the COP26 to achieve GHG emissions reduction as well as updated Thailand Nationally Determined Contribution (NDC) to achieve 40% of GHG emissions reduction by 2030 (as supposed to 20-25% NDC target) with the targets to reach carbon neutrality by 2050 and net zero greenhouse gas emissions by 2065.

At the same time, European Union Carbon Border Adjustment (EU CBAM) is an important example of a major drive force that regulated the products' emission footprint and enforced carbon tariff of importing goods to Europe. Moreover, as deforestation and biodiversity were one of COP26 agenda, new regulation is proposed by EU commission to ban the import of products with deforestation and biodiversity risks, which can be considered as a trade barrier for importing goods to Europe. These regulation changes can affect in higher trade competition as well as decreasing in revenues from sales and market shares.

1. Climate Variability

Potential Impact

- As the EU CBAM creates intense pressure upon GHG/Carbon accounting regulation for importing goods to Europe, this trade barrier can affect CPF's ability to export CPF products which decreases the number of exporting products/volumes as well as lowers the market share. CPF might also be charged with additional costs from the declaration of carbon footprint.
- To meet the additional EU requirements and regulation as the trade barrier, CPF need to adjust its processes within the supply chain and its procurement of agricultural products that has a high risks in deforestation and biodiversity, such as corn, soybean, palm oil, in order to conform with the new regulation. If CPF cannot adjust or create the visibility in their raw material sourcing through the supply chain management, this can result in loss of sales volume, hence revenue.

Key Mitigation

- Set targets to reduce GHG emissions through continually operating and monitoring such as setting a target to reduce 25% of direct and indirect GHG emissions per production unit by 2025 compared to the base year 2015. The Company has also made a commitment to reduce its GHG emissions in accordance with the Science Based Targets criteria as well as being a member of Business Ambition for 1.5 Celsius Campaign, which is an urgent call for action from a global coalition of UN agencies, business and industry leaders, in partnership with the Race to Zero.
- CPF continuously develops the standard as a key mechanism to manage and develop the environmental quality to achieve resource efficiency in the aims of reducing the carbon footprint and GHG emissions through renewable-energy initiatives, including biogas generation from livestock maneuver at swine and chicken layer farms and solar energy projects.
- CPF improves its sustainable agricultural sourcing standards and tractability of key raw materials that emit high GHG emissions, and has deforestation / biodiversity risks. This can help CPF in screening and managing high risk suppliers of key raw materials on its own supply chain. Nevertheless, the transparency of the supply chain can help adjust the performance of the industry as a whole including trade partners and industry partners in accordance with the adaptation to the Net Zero Commitment in the agricultural and food industries in Thailand.

2. Risk from Innovation on Plant-Based Protein

Description	Potential Impact	Key Mitigation
<p>Since livestock industry is one of the highest GHG contribution industries and could be one of the factors that contribute to climate action failure, consumers are more interested in consuming more plant-based protein instead of meat-based protein to minimize environmental impacts and GHG emissions. Moreover, the new lifestyle of health conscious is introduced to consumers and couples with the COVID-19 that influenced the perception of positive health and well-being creating flexitarian which allows consumers to be temporary vegetarian and shift between consuming plant-based protein and meat protein, creating more demand for the plant-based protein.</p>	<ul style="list-style-type: none"> • The plant based protein food production requires advanced technology and innovation to produce high quality plant based products • It has been forecasted that sales volume of alternative protein products will increase by 12% per year in 2022-2029, which may affect CPF's sales volume whose position is the world leader in livestock and food production • Due to the low barrier to entry of the plant based market, other major food producers are also expanding their product lines as well as Startup business offers new technology and innovation every year. This creates variety of products and increase market competition to secure a market share. 	<ul style="list-style-type: none"> • Establish CPF Food Research and Development Center in collaboration with experts from abroad to be the center for food research and development, as well as extending research results to develop food products including protein from animals and plant-based protein • Study trends and analyze consumer requirement and behavior • Develop a variety of plant-based protein products for both ready to cook and ready to eat foods for both domestic and international distributions

3. Technology and Innovation Disruption

Description	Potential Impact	Key Mitigation
<p>Technology and innovation nowadays are applied in all industries and businesses to increase their efficiency, reduce costs and create competitive opportunities. In order to reduce errors, labor works, process control, and develop new products, CPF has also been implementing technology, digital, and innovation, which involve analysis of big data, implement blockchain technology to enhance traceability systems, develop process systems through robotics, artificial intelligence, or automatic systems. These technology and innovation, however, are costly and rapidly changed. Without active monitoring or effective technology applications, CPF might be charged exorbitant prices from not utilizing the maximum capacity of technology, which will affect CPF business in the long term.</p>	<ul style="list-style-type: none"> • New competitors who invest in newer technology could have more opportunities and competitive edge in the markets. • Due to ineffective uses of the invested technology, CPF might have higher financial costs. • The Company might lose opportunities, competitiveness, customers and consumers, sales and market share if technology is used improperly or inconsistent based on customers and consumers' needs and expectations. 	<ul style="list-style-type: none"> • Promote corporate culture of "Innovation" and encouraging employees with opportunities to showcase their talents and innovative works through the project "CEO Award" • Study trends and assessments of suitable investments and making decisions to appropriate technology, digital and innovation to enhance operations and increase competitiveness • Develop an operation platform similar to the Leadership Development Program "Thao Kae", focusing on applications of technology, digital and innovation to enhance processes, increase sale volume and create new business

4. Consumers' awareness on environmental protection

Description	Potential Impact	Key Mitigation
<p>Based on the global consumer survey of 2021, it was found that up to 50% of consumers have placed more importance on the environmentally friendly aspect as they prefer purchasing goods that contains less plastic content to reduce food loss and food waste or reduce carbon emissions throughout the supply chain.</p>	<ul style="list-style-type: none"> • The Company may be subjected to an increasing production cost in conforming to the trends of customers that are aware of reducing the use of resources, decreasing waste generation, and increasing recycled materials. • The Company may receive a decrease in sales amount, market share, and customers. The Company also may not be able to attract new customers because the supply chain and food production activities may not proceed in accordance with consumer expectations. 	<ul style="list-style-type: none"> • Develop Supply Chain ESG Management Approach including partner networks with government and private sector such as Seafood Business for Ocean Stewardship (SeaBOS) • Enhance animal farm process and increase environmentally friendly production; for example, develop green animal feed innovation to reduce nitrogen emissions in livestock manure, gather farm waste to produce biogas, seek ways to reduce excess food and food waste • Develop low carbon products • Promote and develop environmentally friendly packaging such as use of renewable materials from sustainable sources, reusing, development of packaging that helps extend a product life, etc. • Reduce the use of paper and plastic in food packaging

5. Demands for higher standard products

Description	Potential Impact	Key Mitigation
<p>Responsible consumption and sustainability in the supply chain became one of the decision-making criteria for customers and consumers. The production companies are required to raise product standards and supply chains to be higher than the expectations from customers and consumers. Moreover, key customers might request additional purchasing conditions as well as regulatory authorities in destination countries or non-governmental organizations may enforce new regulations, laws, and agreements. For example, Better Chicken Commitment (BCC) has been signed by customers of the Company in the European region. This must be done accordingly by 2026. The company has to make decisions, plans and preparation in advance before the enforcement because the agreement requires a higher standard than its current operations.</p>	<ul style="list-style-type: none"> • The Company must invest in production machines and develop farming processes according to standards and new conditions, which increase investment and operation costs. The company also has to validate formulas and processes to maintain product quality and safety. • The Company might lose business opportunities and competitiveness, in case that the company is not able to enhance the supply chain to meet new expectations, rules, standards and agreements. 	<ul style="list-style-type: none"> • Communicate new or adjusted standards of business operations to stakeholders in order to understand the principles, rationales and benefits that occurred throughout the value chain • Enhance the CPF Food Standard to achieve consistency throughout the supply chain • Study trends and expectations of society, customers and consumers continuously for further business operations

