

2022

SUSTAINABILITY REPORT

Thai Wah Public Company Limited

Creating Innovation
and Sustainability
from Farm to Shelf



บริษัท ไทยวา จำกัด (มหาชน)
Thai Wah Public Company Limited

VISION

Creating Innovation and Sustainability from “Farm” to “Shelf”

MISSION

To be a leading regional agri-food company to serve our customers with Pride, Integrity, and Consistency

CORE VALUE

PRIDE

We take PRIDE in everything we do as individuals and one team to deliver excellence to our associates, customers, and stakeholder.

INTEGRITY

We lead with INTEGRITY and the highest values of excellence, honesty and transparency.

CONSISTENCY

We act with CONSISTENCY to always improve and learn every day.

AWARDS AND RECOGNITIONS

ESG 100 by Thaipat



HR Asia Award



Thailand Sustainability Investment (THSI)



Outstanding Investor Relations Awards by SET



Sustainability Excellence: Rising Star by SET



Steward Leadership (SL25)



Sustainability Disclosure Recognition by Thaipat



CSR-DIW Continuous Award 2022
by Department of Industrial Works,
Ministry of Industry, Thailand



Thai Private Sector Collective Action Coalition
Against Corruption (CAC)



Corporate Governance Report (CGR)
of the Thai Listed Companies in 2022
by the Thai Institute of Directors (IOD)



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Thai Wah at a Glance



Message from the Chief Executive Officer Dear Thai Wah's Friends and Family

Thai Wah is driven by our core purpose to *"Create Innovation and Sustainability from Farm to Shelf,"* as we seek to serve our global customers and consumers with Pride, Integrity, and Consistency. As we close our chapter on 2022, we are eager to share the stories of our journey of being better and doing better every day.



Thai Wah at a Glance

It has been a challenging journey for our company to navigate through the uncertainty of the previous three years, but thanks to the steadfast commitment of my colleagues, our customers, and our partners, Thai Wah has emerged from the pandemic stronger, faster, and better. More importantly, stakeholder excellence in collaboration with partners and customers around the globe – as we think about how to communicate our core vision around Sustainability and Innovation – has become more important than ever before, as we work harder and collectively towards a more sustainable future. With 15 operations in 5 Asia-Pacific countries and a global reach of over 35 countries, we aspire to be a leading Agri-Food company in the region. Our commitment across all aspects of our value chain – from farm and sourcing, to manufacturing and delivery – has a profound impact on the community and stakeholders we interact with. As we seek to provide our global consumers with the best tapioca, mung bean, rice, and other plant-based ingredients, Thai Wah is committed to creating shared value and bringing the best of Southeast Asia to the rest of the world. As we continue to expand our reach and look to create Traceability, drive Transition, and lead the Transformation of our value chain, we remain focused on our four Pillars of Sustainability – *Farmer Development, Green Factory and Community, Family and Well-Being, and Food and Finished Good.*

Much of our efforts over the last year – as you will see in this year’s Sustainability Report – has been focused on operationalizing these goals and frameworks into concrete measures of progress, both internally within the Thai Wah community, and externally with our partners as well. The progress has undoubtedly been very encouraging, but there is still much to be done.



In 2022, we continued to push forward and support the building of sustainable farming communities across Thailand and Cambodia. Serving over 30,000 farmers in the region, we continued to build on the best-in-class regional Thai Wah farming solutions to create more agricultural value and improve the overall global supply chain. The portfolio of solutions comprises a team of Agronomists in Thailand and Cambodia, Thai Wah Pioneering Agri Technology Solutions, and an abundance of leading crop and soil experts in the region as we endeavor to tackle climate challenges from a deeply important agricultural perspective. At the factory level, we continued to transform the *“Thai Wah Business Systems”* across all factories to enable all of our operations to serve customers better and faster.



Thai Wah at a Glance

As part of the Group's carbon footprint reduction project, we expanded the baselining of GHG (greenhouse gas) emissions to our Pimai, Thakhantho, Maesot, and Rayong plants, taking into account scope 1, 2 and 3. Climate change must be tackled by all parties, and we are firmly devoted to doing our part by becoming Carbon Neutral and cutting Scope 3 emissions by 50% by 2030.

As agricultural crops and foods are one of Southeast Asia's most important exports, we dedicate our time and effort to better serve our consumers and customers by putting innovation and sustainability at the core of everything we do every day. We have doubled the capability of our R&D regional hub at Chulalongkorn University in Thailand, as well as built a global network of Food and Biotech partnerships in the United States, Israel, Japan, Singapore, and India. Through our regional commercial teams in China, Indonesia, Vietnam, and the rest of the world, we are continuously building a bridge closer to our customers every day. Through our five regional Innovation Application Centers, each year we can roll out more than 20 new plant-based ingredients and food products. At Thai Wah, Sustainability and Innovation go hand in hand as we have seen with the launch of our new bioplastic business, Thai Wah agri-biotech solutions, and Thai Wah Ventures, which are all key future platforms in the important Southeast Asia ecosystem that will foster growth and more sustainable partnerships.

Last year, we doubled down on our Digital and People Transformation efforts across the Thai Wah Group. Initiatives included group-wide efforts to digitally link and optimize supply chain and profitability from farm to shelf or supply to customer, pilot IIOT (Industrial Internet of Things) at factories to track efficiencies and reduce wastage, and building supplier and customer big data and insights. We also continued to listen to our associates. We conducted the Associate Engagement Survey, and we received an engagement score of 95%. We take pride in fostering and supporting a diverse and inclusive workplace. Our top leaders are 55% female, and the overall group associate ratio is 1 to 1.

We are also proud to announce that Thai Wah was selected to be on the list of the *"Thailand Sustainability Investment" (THSI)* for the 4th consecutive year by the Stock Exchange of Thailand (SET) and was awarded the *"Sustainability Disclosure Recognition"* by Thaipat and *CSR-DIW Continuous Award 2022* by Department of Industrial Works, Ministry of Industry. Thai Wah also received the *"Sustainability Excellence: Rising Star"* Award by SET and the *"Best Companies to Work for in Asia 2022"* Award by HR ASIA for the first time in 2022. This year, Thai Wah was also a recipient of the inaugural *"Steward leadership Asia 25"* Award this year, which was given to the Asian companies that showcased strategies that had greater purposes beyond profit making to tackle the existential challenges that our society is facing today. We deeply thank our community for the recognition. This serves as a tried-and-true testament of our dedication to the Environmental, Social, and Corporate Governance (ESG) principles. All this is done to transform our company into one that is sustainable, consistently generating returns and encouraging all related companies to likewise operate in an awareness of the ESG principles and responsibly towards all stakeholders.

Last year, as we celebrated 75 years of Thai Wah's past, present, and future, we celebrated a milestone in our Company's history. As we move forward on the road to being a more sustainable, innovative, and purposeful company. I am proud and committed to working together with our colleagues, our customers, and our partners to move ahead swiftly, creatively, and decisively, and forge a more equitable and sustainable future for generations to come.

Mr. Ho Ren Hua
Chief Executive Officer



Business Overview

Thai Wah Public Company Limited, or TWPC, is Southeast Asia’s leading agri-food platform. We take pride in our comprehensively overarching portfolio of products, from food ingredient products to food solution products, we have parlayed into becoming Southeast Asia’s largest tapioca starch producer and one of the largest vermicelli and noodle producers in Thailand and Vietnam, serving approximately 1 million global consumers.

Founded in 1947 with a commitment to being an enduring pioneer in all the businesses we operate in, we never cease to innovate; We have since been on a winning stride, and this is particularly true of the last few decades, starting with our sprouting as a key player in a variety of businesses and culminating in our sprawling into a wide range of global markets laden with opportunities and potentials. Of particular note among the 35 countries worldwide we export our products to are the USA, China, Vietnam, Cambodia, and Indonesia, where we currently conduct business in addition to Thailand.

Our core businesses comprise starch and starch-related products, food products, and biodegradable products.

- **Our starch and starch-related products**, including tapioca flour and starch, modified starch, glucose syrup, tapioca pearl, alpha starch, rice flour and starch, and other organic products, are made using an innovative range of high-quality locally-sourced farmed materials to enhance the values of food solutions globally;
- **Our food products**, such as bean vermicelli, rice noodles, rice vermicelli, starch, flour, and pearl, meal kit, and instant noodle, among many others, are used in preparing many popular Thai and other Asian dishes due to their well-known taste and high quality, both domestically and abroad;
- **Our biodegradable products** are a special type of thermoplastic starch resin made from tapioca starch that can be used in various applications, from single-use packaging, agricultural mulch-film, consumer goods, among many others.



Thai Wah’s Product Portfolio



Value Chain

Thai Wah is dedicated to fostering long-term business growth while creating sustainable values for its extended network of stakeholders throughout its value chain. Our commitment is reflected in our meticulous attention to detail and our ongoing embrace of cutting-edge technologies and innovations in all aspects of our business operations with one clear vision in mind: to ensure that they are held to international standards and respectful towards the needs and interests of our seven groups of stakeholders: farmers, associates, partners and suppliers, customers and consumers, communities, government bodies, shareholders and investors. This has enabled us to implement initiatives, such as Sustainable Farming, Green Factory, Next Generation Product, and Supply Chain Diversification, allowing us to secure supplies of high-quality raw materials, improve product quality and community relationships, and produce a more diverse range of high-quality products that are both safe for consumption and friendly to the communities and environment. Through these practices, we continue to be a leader in the industry, setting a positive example for others to follow.





Sustainability at Thai Wah

We view our long-term mission in cultivating *“Innovation and Sustainability”* — strands of our DNA — from *“Farm”* to *“Shelf.”* By integrating such philosophy into our daily operations across our four *“Pillar”* strategies: *Farmer Development, Green Factory and Community, Family and Well-Being, and Food and Finished Good*, we, as Southeast Asia’s leading agri-food platform, seek to contribute to the value creation of agri-food products through sustainability-oriented innovations, all while inspiring all stakeholders to take action in a purposeful and sustainable manner.



For over 75 years, we have always been going above and beyond in our commitment to the value creation of agri-food products. We constantly introduce and incorporate innovations into our production process to ensure our products are of the highest possible quality and meet ever-rising consumer expectations. Well aware that our operations may have more or less impact on stakeholders, we also run our business with strict adherence to the *Environmental, Social, and Corporate Governance, or ESG, principles*.

Meanwhile, deeply convinced that a company's capability and readiness to adapt to changes is what propels it forward, efficiently and sustainably, we give a high priority to all stakeholders across all sectors by driving four key "Pillar" strategies, with our consumers as their centerpiece. This ensures our farmers' health and well-being; our factories' work-conducive, environmentally-friendly, socially-responsible working environment; our associates' health, well-being, and safety as well as their potential occupational development; and our food and finished goods' value, quality, and safety as expected of Thai Wah.

Through a holistic approach to stakeholder care – from health and well-being, to workplace and environment, and to welfare, benefits, and respect for human rights and gender equality –, we consistently raise the bar for sustainable business operations across the entire value chain. And this commitment invariably results in benefits for our stakeholders, surrounding communities, and society as a whole.

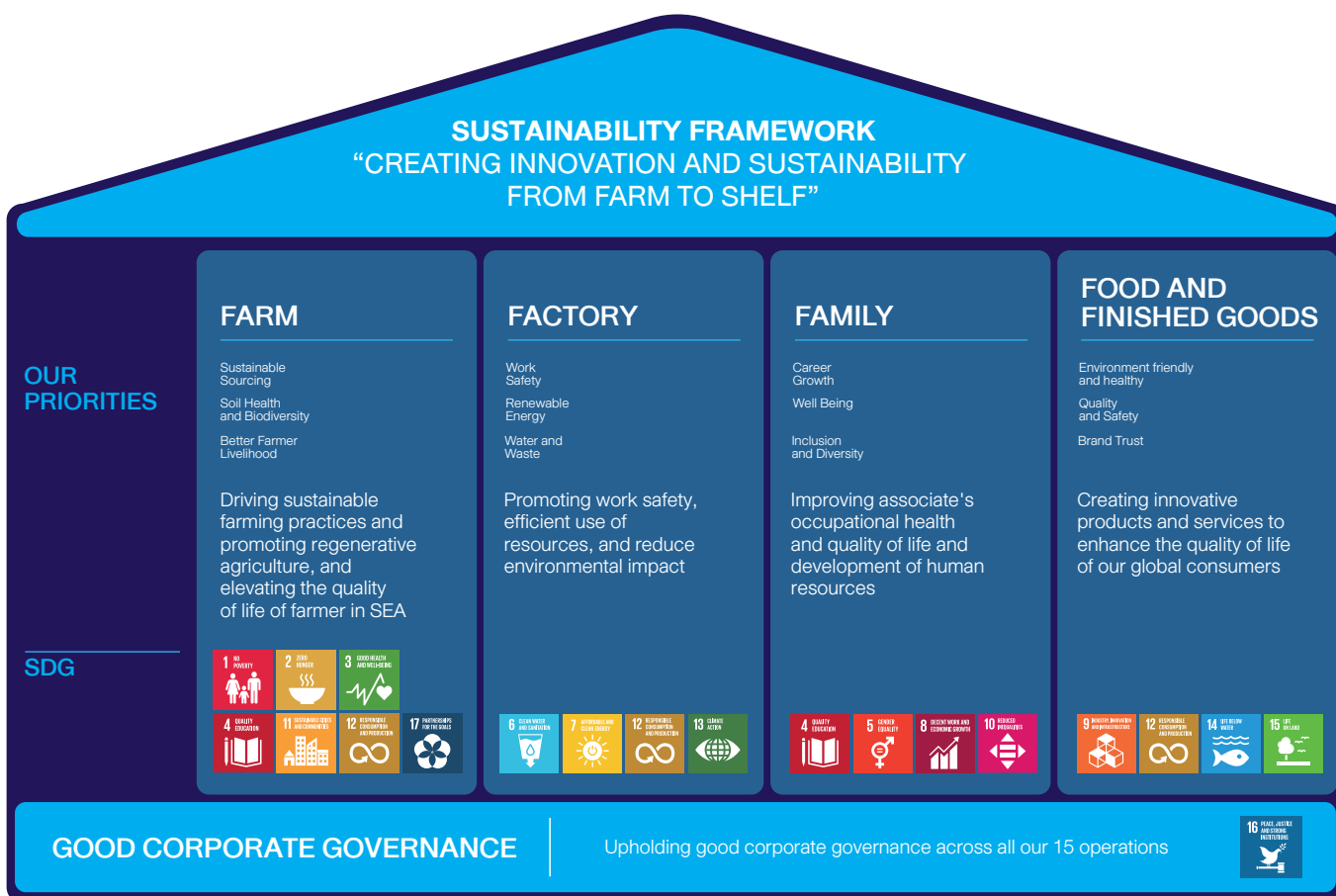
Suffice it to say, the focus of our Pillar strategies lies not only in delivering high-quality products and services that are valuable and safe to consumers, but also having a role and responsibility for setting social and environmental standards for all aspects of operations in the value chain. From the procurement of raw materials to the production of finished goods, our operations under the sustainability strategy support and propel changes in various fields to promote sustainable development, be it economic, social, or environmental.





Sustainability Framework

Well aware that its operations may have more or less impact on its stakeholders, Thai Wah runs its business with the utmost regard for the environment it operates in, the people it serves, and the personnel it hires. We have put in place the stringent Sustainability Framework to ensure that every aspect of our business operations – from sourcing raw materials to disposing of waste – is as environmentally friendly, ethically upright, transparent and accountable, and beneficial to all stakeholders as possible. By upholding the highest standards of environmental stewardship, social responsibility, and corporate governance, we seek to make a lasting difference in the environment and the lives of its stakeholders, all while advancing the Environmental, Social, and Corporate Governance, or ESG, principles.





Supporting United Nations Global Compact and Sustainable Development Goals



United Nations Global Compact Network Thailand Forum 2022

Thai Wah is committed to integrating into our strategy, culture, and day-to-day operations the UN Global Compact (UNGC) and the Guiding Principles on Business and Human Rights, which have been widely embraced by business organizations all across the world. We intend to engage in collaborative projects that advance the UN's broader development goals, in particular the Sustainable Development Goals, or SDGs, in order to identify and implement sustainability goals that are compliant with international standards and contribute to our continuous growth and development.

In order to mobilize sustainable development in all stages of our production process, enhance the life quality and well-being of our stakeholders, and promote our country's sustainable economic growth, we pledge to use our knowledge, capability, experience, and expertise in support of all 17 SDGs that are pertinent to our capacity and potential. As a member of the UN Global Compact (UNGC), this report also serves as our annual Communication on Progress (COP) to stakeholders. The COP details our accomplishments in implementing the UN Global Compact's Ten Principles within our sphere of influence as well as in advancing the broader UN SDGs' environmental and social obligations.



Key Performance Summary

Financial Performance for Sustainable Growth

Revenue	10,421 million THB
EBITDA	923 million THB
Dividend	190 million THB

Revenue contribution by country

Thailand	6,124 million THB
Vietnam	1,461 million THB
China	2,711 million THB
Indonesia	43 million THB
Cambodia	82 million THB

Revenue contribution by business

Starch	8,406 million THB
Food	2,014 million THB

	Performance	UNGC	SDG
GOOD CORPORATE GOVERNANCE	Environmentally Friendly Starch Business Suppliers Accounted for 5 Percent of All Starch Business Suppliers	7, 8, 9	
	Environmentally Friendly Food Business Suppliers Accounted for 15 Percent of All Food Business Suppliers	7, 8, 9	

	Performance	UNGC	SDG
FARMER DEVELOPMENT	Disease-Free Cassava Stems Distributed to Farmers Increased by 30% to 797,102 Stems	7, 8, 9	



Performance	UNGC	SDG
Knowledge Sharing and Training Provided for 560 Farmers in Thailand and 110 Farmers in Cambodia	1, 2, 9	
Farmer Members on Thai Wah's Farming Application Increased by 100% to 15,000 Members	7, 8, 9	

Performance	UNGC	SDG
Consumption of Electricity Generated by Solar Power Increased to 2,400 MWh	7, 8, 9	
Consumption of Electricity Generated by Biomass Was at 27,012,152 Units	7, 8, 9	
Water Consumption Reduced by 351 Million Liters	7, 8, 9	
Treated Water as a Percentage of Used Water Remained at 100%	7, 8, 9	
Lost-Time Injury Frequency Rate (LTIFR) Reduced by 33% to 5.3	3, 4, 5, 6	

**GREEN
FACTORY AND
COMMUNITY**

Performance	UNGC	SDG
Average Training Hours was 69 Hours/Person/Year	1, 2	
Ratio of Female Associates to Male Associates Remained at 1:1	1, 2	
Associates with Disabilities was 18 persons with 1,485,185 Baht to Department of Empowerment of Persons with Disabilities	1, 2, 3, 4, 5, 6	

**FAMILY AND
WELL-BEING**



FOOD AND FINISHED GOODS	Performance	UNGC	SDG
	Number of Patents Increased by 1 Patent, Totaling 1 Patent		
	R&D Spending Increased by 2.5 Million Baht to 36.3 Million Baht		
	Number of Newly-Added Health- and Environment-Oriented SKUs Remained at 5 SKUs, Accounting For 80% of Total Newly-Added SKUs	9	
	Plastic Packaging Consumption Reduced by 4.8 Tons	9	
Cardboard Consumption Reduced Approximately by 134 Tons for Every SKU That Use Green Carton	9		

Details of "Sustainability Materiality Analysis" and "Stakeholder Engagement" are disclosed on the Company's website (<http://sdjourney.thaiwah.com/th/home>) under the heading "SD Journey by Thai Wah" and "Stakeholder Engagement and Key Sustainability Issues", respectively.



Good Corporate Governance



Thai Wah is committed to upholding the highest standards of social responsibility and environmental sustainability in our business operations, with corporate governance and ethical practices taking precedence. We prioritize the well-being of our stakeholders, including directors, executives, associates, and other stakeholders, taking their rights, needs, and interests into account and treating them fairly and equitably. We recognize that good corporate governance is essential for our sustainable growth and success, as it will earn us the trust and confidence of our stakeholders. As such, we are unwavering in our dedication to ensuring fairness, transparency, and accountability in our corporate governance practices. Our commitment to socially responsible and environmentally sustainable operations will always remain at the forefront of our business as we strive for continued success.



Corporate Governance for Sustainability



In an effort to ensure sustainable growth in the future, Thai Wah’s Board of Directors renamed the Audit and Risk Committee to the “Audit, Risk and Corporate Governance Committee,” or ARGC, on August 6, 2019. This approval also entailed an increase in the ARGC’s scope of duties and responsibilities. The new duties and responsibilities of the ARGC are as follows:

- To supervise management performance to ensure that it is in strict compliance with our corporate governance policy;
- To review our corporate governance policy and business code of conduct at least once a year;
- To monitor our anti-corruption policy to ensure that it is sufficient and appropriate for our business; and
- To supervise and offer advice regarding operations relevant to our sustainable development

Furthermore, our Board of Directors also approved a policy on corporate governance and business code of conduct, which ensures that executives and associates comply with criteria, such as fairness, anti-corruption, respect for human rights, and equitable treatment of one another. This policy is monitored, assessed, and verified on a regular basis to ensure the guidelines are being met.

At its meeting on February 18, 2022, the ARGC reviewed our progress on corporate sustainability and stakeholder engagement for the year 2022 to identify and prioritize stakeholders throughout the business chain and discussed efficient and effective strategies to address the issues raised by these stakeholders. For two consecutive years, we have been rated “Excellent” in the Corporate Governance Report (CGR) of Thai Listed Companies Program 2022 by the Thai Institute of Directors (IOD). This acknowledgment is a culmination of our commitment to sustainability and transparency in our business operation since 2021.

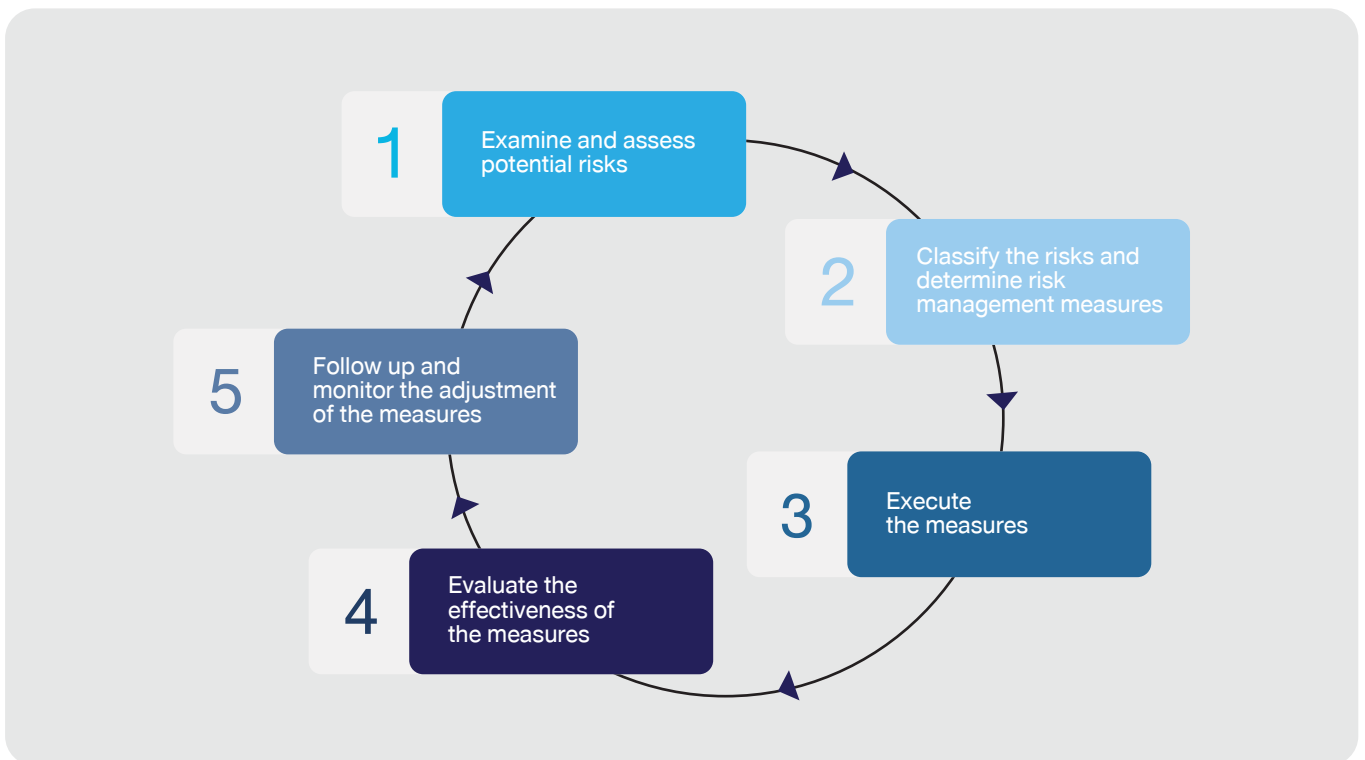


Risk Management

Thai Wah is dedicated to providing its associates and stakeholders with a safe and secure working environment. As such, we have been taking all necessary steps to ensure that our risk management practices are robust and effective in preventing and mitigating potential risks, and as a result, we have put in place a comprehensive system of components, which is in full compliance with the internationally-recognized COSO Enterprise Risk Management (ERM) framework. This system is designed to help identify strategies and objectives, manage risks, review and improve risk management performance, and report on and evaluate the effectiveness of our risk management practices. With this system in place, we are certain that we can effectively contain potential risks and bring accidents to zero. This system comprises five components, namely Governance and Culture; Strategy and Objective-Setting; Performance; Review and Revision; and Information, Communication and Reporting.

1. Risk Governance Structure

The Board of Directors that all of our associates are aware of our risk management policy, and that all departments work together to reduce potential risks that may impact our growth strategy. To further this, each department is required to evaluate the effectiveness of their Internal Control and Risk Management systems on an annual basis. Additionally, the ARGC, which is responsible for overseeing risk management practices, has established a clear organizational structure that is appropriate, independent, capable of performing duties and communicating information effectively.



Workflow Chart of the Audit, Risk and Corporate Governance Committee and Relevant Units



2. Strategy and Objective Setting

The Board implement a comprehensive risk management system to ensure that our operations are conducted in strict compliance with all applicable laws and regulations and in line with our growth strategy. The system provides clear objectives and operational guidelines for each level of the organization, enabling them to identify and assess the economic, social, and environmental changes that could impact our business within the next three to five years. By assessing and reducing the impacts of potential risks to an acceptable level or to a level that is of no significance, we are able to ensure that our operations are conducted with fairness, transparency, and efficiency. Additionally, to ensure that our policies and goals are met, we also monitor subsidiaries and transactions with conflicted individuals or related parties to guarantee accurate financial reporting.

3. Performance

The Board conduct an extensive risk assessment process, beginning with the management and working our way through each subsidiary, department, and factory. Our inquiry/review method is based on the Internal Control and Risk Management Assessment framework, meeting all of the Securities and Exchange Commission's guidelines. Through this process, we strive to ensure that operations are carried out in a safe and efficient manner, allowing us to confidently move forward with our growth strategy.

4. Review and Revision

The Board conduct a thorough sufficiency evaluation of our Internal Control and Risk Management system on an annual basis, in order to ensure that it is comprehensive, effective, and up to date. We carefully assess whether our current system and guidelines are adequate and effective in order to make necessary updates if needed, ensuring that they are operating effectively and aligned with our current needs and objectives. By taking proactive steps, we are able to stay resilient and proactively prepare for any potential issues that may arise in the future.

5. Information, Communication and Reporting

The Board receive a comprehensive report on an annual basis from our Internal Audit and Risk Management unit, which is responsible for auditing, reviewing, and verification of data to ensure their accuracy. This provides an in-depth account of our operations with regards to risk management and enables us to identify potential risks and develop strategies to mitigate them. With the valuable insights provided, we are able to make informed decisions, allowing us to stay ahead of potential risks and uphold our commitment to the highest standards of quality and safety as well as to sustainable growth and our stakeholders' value addition.

Thai Wah recognize the importance of risk management planning to anticipate and address external risks, internal risks, and emerging risks, such as global economic downturn, aging society, climate change. Despite the difficulty in predicting the impacts of these risks' impacts, we nevertheless understand that it is essential to be proactive in our risk management planning to bring their impacts to minimum in order to ensure that our operations remain in line with our growth strategy.



Risk Culture

Thai Wah is dedicated to fostering an organization-wide risk culture, embedding it as a part of its core values. As such, we have formulated an extensive plan to ensure that every executive and associate is well-informed and -trained in risk management. In 2022, we launched a series of comprehensive training courses for plant managers and heads of departments to ensure that they are fully aware of the critical importance of risk management planning. Not only did this initiative equip them with the knowledge and skills needed to assess risk and develop strategies for their respective units, but it also enabled us to carry out an organization-wide risk management reassessment as well as the subsequent sharing of knowledge and understanding of risk management across our organization, with a priority being placed on the selection of strategies that align with our vision, missions, and operations.

Besides, in 2022, we, through the ARGC, implemented a set of Key Risk Indicators (KRIs) to prepare for potential risks to our operations, with a focus being placed on Cassava Mosaic Disease (CMD), global rising energy prices, floods in Thailand, and the global COVID-19 pandemic. In doing so, we identified objectives and risk factors that would prevent us from reaching our objectives to be used in assessing the key risks of each department.

To ensure that our operations and those of our stakeholders remained unaffected in risk-related scenarios, we also set up Business Continuity Management or BCM Teams to prepare and review Business Continuity Plans or BCPs. These plans are comprehensive and cover both our headquarters and factories, outlining the organizational structure, roles, responsibilities, and personnel for each department's team, from management to operative. This ensures that each department has a systemic, continuous, and up-to-date crisis management plan that can be readily implemented in the event of any operational disruption. Additionally, to monitor the performance of the BCP teams, a crisis drill plan is conducted at least once a year, and the results are reported to the Board of Directors.

Additionally, we also designated risk management performance as one of the key performance indicators for specific units and as a criterion for evaluating and approving new investments. With these measures in place to promote risk management, we are confident that we will be able to meet our goals and objectives effectively and in compliance with existing national or organizational strategies. This way, our organization can remain resilient and prepared for any disruptions in operations.



Emerging Risk

Increasing Energy Cost

Since 2021, the rising prices of oil had been posting a risk of increased production costs, from electricity to transportation, and a potential increase in product prices due to subsequent inflation and increased raw material costs. This situation was further exacerbated by the war between Russia and Ukraine in early 2022, making the impact of oil and natural gas prices even more salient. In response, we implemented an energy-saving policy to reduce electricity consumption in non-essential areas. Meanwhile, we started the shift to solar power generated by Solar Rooftop, Solar Farm, and Solar Floating to offset electricity during peak usage times, and replacing coal with alternative fuels for production, such as palm kernel shell and chopped wood. All together, these proactive guidelines helped keep production costs within a manageable range and reduce the impact on our overall performance as well as on our consumers and partners.

Climate Change

By 2022, the effects of climate change had taken their toll on us, with natural disasters such as flooding wreaking havoc on our lives. Not only did these disasters lead to shortages of materials, but they also caused prices to skyrocket. In 2022, our factories and associates were in the line of fire. Some of our factories had to plan their budgets for flood prevention, far beyond what they had initially anticipated, while some of our associates were left in a trying position as they were unable to come to work due to the severity of the disasters.

Environment and Social Sustainability

With the ever-changing global business landscape placing a heightened emphasis on environmental and social sustainability, it has become increasingly important for us to abide by the environmental and social regulations set by foreign countries, particularly those in the European Union. To maintain a competitive edge, we have developed a series of strategies to ensure our production processes are safe, healthy, and environmentally and socially sustainable, in order to promote environmental and social sustainability. Through these measures, we are able to stay ahead of our competition and continue to reap the rewards of success in the global marketplace.

Uncertainty of Socio-Economic Conditions

The consequences of the global inflation have been far-reaching, leading to a rise in interest rates across the world and consequently an increase in exchange rates. This, in turn, has exacerbated economic downturns in multiple countries, leading to a decrease in purchasing power of foreign consumers and skyrocketing costs of raw materials imported from abroad, putting a strain on us. Meanwhile, the ongoing political uncertainty between China and Taiwan as well as in Thailand could potentially have further implications for us. The former case could lead to the stability of our sales in those markets, which are an integral part of our business, while the latter case could have a direct impact on agricultural policies, such as price insurances, energy costs, and other factors that contribute to our production costs. These factors could all have a severe effect on our bottom line, and it is important that we remain vigilant to the changes in the socio-economic landscape.



Cyber Security and Data Privacy Protection

In light of the increased traffic to our digital platforms due to the COVID-19 pandemic, we have developed an Internal Privacy Policy to protect the personal information of our consumers in strict compliance with the Personal Data Protection Act B.E. 2562. To this end, we have appointed Data Protection Officers (DPOs) to work closely with the management to ensure that appropriate measures are taken to keep our consumers' personal data secure and confidential. This culminated in that in 2022, we had not received any complaints regarding cybersecurity and data privacy protection. In the unlikely event of any such complaints, they will be investigated and addressed in accordance with our Internal Privacy Policy.

Furthermore, we understand that it is our responsibility to ensure that we are respectful of customer privacy when it comes to marketing and communication. As such, we have made our Internal Privacy Policy available on our website for easy access. This includes guidelines regarding the types of personal information we collect from individuals under our control, be it associates, business partners, vendors, or third parties, and their definitions; how this information is used for commercial purposes; and that such individuals have the right to opt out of receiving information at any time. Additionally, we have a plan to analyze and assess the potential risks to our system by running Vulnerability Assessment and Penetration Test once or twice a year.

At Thai Wah, we remain vigilant in staying ahead of the ever-shifting environment to identify emerging risks that could have short, medium, and long-term implications for our business. As such, we regularly assess our risk management framework to ensure that we are taking into consideration any global issues that may impact our operations. Now, we have the Internal Control and Risk Management system in place to help us keep the risks at an acceptable level and enable us to develop proactive measures to anticipate and mitigate risks before they arise, allowing us to stay ahead of the competition and remain on the path to success. Additionally, we have created an Existing Control and Mitigations plan and have continuously been monitoring any emerging risks, both medium- and long-term, enabling us to take action to reduce their impact on our operations and achieve our established goals and strategies.



Risks Associated with Partners and Suppliers

Thai Wah recognizes the importance of effective supply chain management in driving our business operations towards sustainable development. To ensure our operations remain uninterrupted, we consistently conduct an evaluation of potential risks that may arise from our partners and suppliers, whether it be economic, social, or environmental. By identifying and addressing any risks that arise, we can avert any interference with our operations, such as shortage of raw material, and ensure our relentless pursuit of sustainable growth remains unhampered. Additionally, we are devoted to collaborating with our partners to foster sustainability.

We commence our evaluation process by listing major partners for risk analysis and assessment on social and environmental aspects, such as human rights, worker and labor care, business ethics, and compliance with environment-related laws. We then provide a summary of the annual performance of these key partners to our internal units to enhance their capacity in various areas. Subsequently, based on the summary, we develop a procurement process that guarantees fair treatment for all business partners and selection of products and services according to environmental requirements. In doing so, we prioritize the use of products produced using renewable and clean energy sources, such as those with a green label or those that are part of a waste reduction program. Additionally, we make sure all business partners are aware of our anti-corruption policy to guarantee they comply with our rules.



Sustainable Procurement Policy

Thai Wah is committed to upholding a socially responsible business strategy, taking into account economic, environmental, and social issues. Our stringent procurement policy requires suppliers to comply with our Supplier Code of Conduct, which serves as a criterion for selecting and monitoring trading partners. To ensure that our policy is having a positive impact, we conduct risk assessments of our partners to minimize any environmental damage, while simultaneously creating benefits for society and the economy. With this policy in place, we are dedicated to continuing to operate in a socially responsible and ethical manner.



Environment

- Comply with environmental, health and safety requirements;
- Promote safety and environment development;
- Take into account quality and safety of products;
- Use resources efficiently to reduce waste to be released to the environment;
- Reduce negative impacts on biodiversity, climate change, and water shortage



Society

- Respect human rights while combating forced and child labor;
- Allow for the rights to collective bargaining and freedom of association;
- Follow the laws regarding to concerning the minimum wage, the number of hours worked, and the guarantee of payment for these hours;
- Treat equally and with respect free from any form of discrimination;
- Report unlawful and unethical behavior;
- Protect the lives, health, and safety of associates and surrounding communities;



Governance

- Conduct business with integrity, ethics, and honesty;
- Uphold applicable laws and incoterms;
- Prevent all forms of corruption;
- Refrain from accepting gifts;
- Respect privacy and confidentiality of information

Additionally, we ensure that our production of environmentally friendly, safe products and services is not only met but exceeded. We are dedicated to domestic procurement, sourcing raw materials from local farmers. Not only is this beneficial to the farmers, allowing them to gain economic support, but it also significantly reduces the transportation time. By doing so, we are making a strong statement about our values and setting an example for others who share our vision: to make a positive difference in environmental sustainability and worker safety.



In 2022, the procurement from local farmers accounted for 100 percent of the total domestic procurement budget, while the procurement of environmentally-friendly products and services – 28 percent of the total suppliers of starch and food business. All of our procurements can be divided into starch and food businesses, as follows:

	2020	2021	2022	Target 2023	3-Year Target
Proportion of procurement of local suppliers (local sourcing)	51	53	55	58	60
Proportion of procurement of environmentally friendly products and services (starch)	1	3	5	8	10
Proportion of procurement of environmentally friendly products and services (food)	10	13	15	20	30



Anti-Corruption

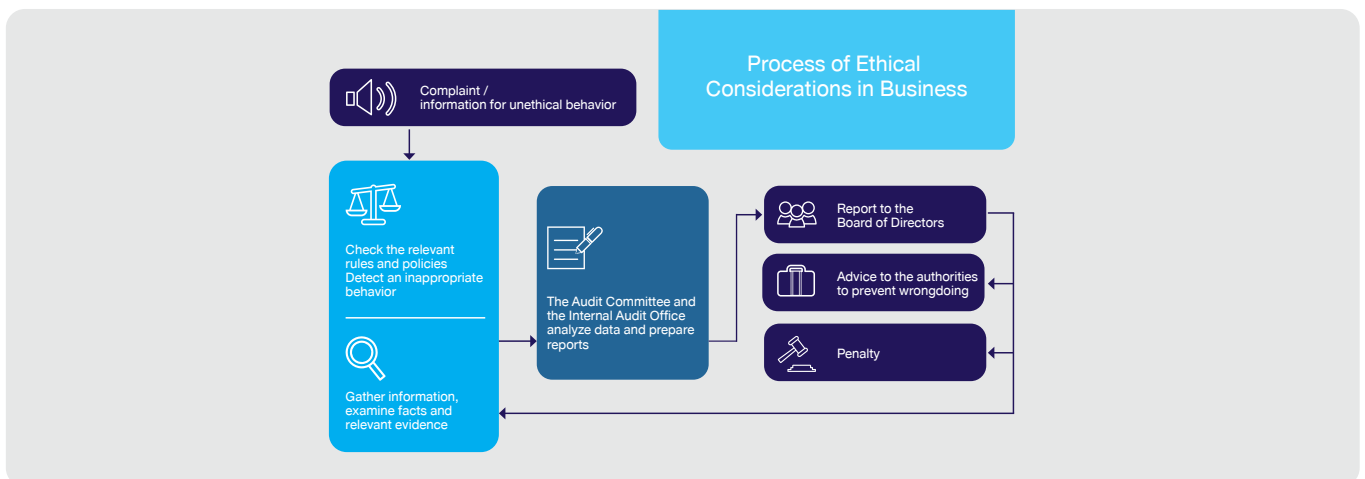
Thai Wah takes a firm stance against corruption. We implement a strict anti-corruption policy to ensure our business is conducted with complete efficiency, integrity, transparency, accountability, and fairness, and provide operational guidelines for associates of all levels to do their part. Our commitment to these values has been recognized by the Thai Private Sector Collective Action Coalition Against Corruption (CAC) not once, but twice already, with our certification first achieved on February 21, 2017, and then renewed on September 30, 2021, further demonstrating our dedication to upholding high anti-corruption standards.

Meanwhile, we are also determined to foster transparency within our organization. To this end, we have been prioritizing raising our associates' awareness and understanding of organizational transparency through “Thai Wah Anti-Corruption the Series,” an e-learning anti-corruption VDO animation. Through its engaging animated animation, our associates will gain a better comprehensive understanding of corruption, its current status in Thailand, our anti-corruption policies, and relevant laws. Additionally, they will learn how to contribute to the cause. In 2022, the proportion of participants in the anti-corruption training session relative to the number of target groups is shown in the table below.

	Associate Level	Person	Percentage
Management		10	100
Associate		2,236	98.59
Total		2,246	98.60

Whistleblowing Channel and Complaint Management

Thai Wah takes a firm stance on their commitment to not allow any unethical practices to go unnoticed or unresolved. With the implementation of our groundbreaking Whistleblowing Policy, our associates and third parties can now report any misconduct or grievances without fear of retribution. This policy provides a secure platform for those who become aware of any wrongdoing, fraud, corruption, or violation of laws and regulations to speak out and have their voice heard without fear of discrimination or mistreatment. This policy is a major milestone for us, providing a safe and secure environment for our associates to speak out and address any unethical issues.





Whistleblowing Channel

Board of Directors	Email: bod@thaiwah.com Facsimile: 02-285-0268 Post: Board of Directors	Thai Wah Public Company Limited Thai Wah Tower 1, 6th Floor, 21/11, 21/13 South Sathorn Road, Tungmahamek, Sathorn, Bangkok 10120
	Email: arc@thaiwah.com Facsimile: 02-285-0268 Post: Audit and Risk Committee	Thai Wah Public Company Limited Thai Wah Tower 1, 6th Floor, 21/11, 21/13 South Sathorn Road, Tungmahamek, Sathorn, Bangkok 10120
Audit and Risk Committee	Email: ia@thaiwah.com Facsimile: 02-285-0268 Post: Internal Audit	Thai Wah Public Company Limited Thai Wah Tower 1, 6th Floor, 21/11, 21/13 South Sathorn Road, Tungmahamek, Sathorn, Bangkok 10120
	Internal Audit	

In 2022, we received 3 complaints related to non-compliance with company regulations or inappropriate behaviors. The incidents were investigated and had no impact on reputation and financial performance. Disciplinary action has been taken, and preventive control -- put in place. The details of the complaints investigated are as follows:

Type of Complaint	Case
Corruption (Case)	0
Non-Compliance with Company Regulations or Inappropriate Behavior (Case)	3
Cases That Underwent Disciplinary Action in Accordance with Company Regulations as a Percentage of All Cases (%)	100



Farmer Development



Thailand is currently regarded as one of the countries that produces the agricultural products that serve as SEA's primary exports and the foundation of sustainable economic development. In the Farmer Pillar, Thai Wah, a manufacturer and exporter of starch and starch-related food products with farmers serving as the main suppliers of their raw materials, views its mission in driving the adoption of sustainable farming practices and advocating regenerative agriculture, all while elevating the standard of living for farmers – and by extension, those all along the value chain – in Southeast Asia. This allows for joint value creation with innovation so that our food production can continue to satisfy consumer needs and wants in a sustainable manner, and that the Thai agricultural industry can reach higher standards. And the prerequisite to all that is none other than professional raw material management.



Farmers have a significant role in driving the global economy and determining its direction. Over the past few years, we have been placing a high priority on developing their potential and encouraging them to practice more sustainable farming in accordance with international principles. In doing so, we have been developing and deploying our agronomists into communities to equip them with the knowledge and access to cutting-edge smart agricultural technologies and innovations they need, all while assisting in building a sustainable business foundation for the next generation of farmers to return and develop their homelands.



Agricultural Technology

Sustainable Supply Management

Thai Wah is no stranger to the pressing need to transition its agricultural product value chain to sustainable practices in order to remain competitive in the face of a rapidly changing business climate. With the intensifying strain on resources due to a burgeoning global population, the quantity and quality of agri-food products have been significantly affected, while trade barriers have been imposed, preventing exports to countries with stringent environmental regulations. In response, we have been actively focusing on developing innovations and technologies that not only enhance the capacity of our agricultural and related food supply chains, as they are the cornerstone to business efficiency and success, but also ensure the sustainability of our business operations. Meanwhile, we have also been striving to conserve and restore watershed areas in an effort to improve natural resource security, which is essential to people's livelihoods as well as to elevating the standard of living all along the entire value chain.



Plang Yai Cassava Community Enterprise Establishment Project at Non-Sa-at District for Sustainable Agriculture

For many years, we have a track record of being highly conscious of our social responsibility. We have established strong partnerships with farmers and various world-renowned organizations, which have been proven to be instrumental in developing sustainability innovations and promoting sustainable agriculture as an economically-viable, environmentally-friendly business foundation for future generations of farmers.

After years of hard work and dedication, our efforts have culminated in the launch of the TWPC Sustainable Agriculture Project. This all-encompassing endeavor is designed to tackle the three pillars of sustainability: social, economic, and environmental. Its mission is to create a sustainable food supply chain, giving our stakeholders, such as farmers and suppliers, the tools and resources they need to build a better future for sustainable agriculture. Our first successful implementation is in the Non Sa-at Project, We are committed to continuing our efforts to ensure a sustainable raw material supply for our products and a brighter future for all.



X20 Clean Stem Multiplication

Thai Wah is making impressive strides in cassava stem multiplication. Thanks to the innovations and know-hows from the Greenhouse Farming Project for Urgent Propagation of Cassava Stems, a joint project with the Thai Tapioca Development Institute (TTDI), our propagation of cassava stems has skyrocketed from a modest 4-5 to a remarkable 20. Now, there is a total of 10 greenhouses in 3 provinces in Thailand – 5 in Rayong, 2 in Kalasin, and 3 in Tak, close to our factories, which has enabled us to provide our farmers with the best quality cassava stems, allowing them to reap the rewards season after season.



Meeting with the TTDI on Waxy Breed Development

In 2022, we achieved a remarkable feat of distributing 797,102 X20 stems from the greenhouses. These stems were then distributed for planting, supplanting those suffering from CMD or furnishing a new variety for higher yields. This innovative project has been a real boon to these farmers, who can now significantly lower their cultivation costs by 500 baht per rai and have access to disease-free stems when it comes time to plant the next season. Looking towards 2023, we look to expand and increase our efforts, with the goal of adding 2 more standard greenhouses, producing and distributing to farmers at least 980,000 X20 stems, and planting at least 600 rai of agricultural land.

Additionally, we strive to raise farmers' incomes and uplift their standard of living. We have been cultivating a new superior variety of waxy cassava with a higher quality, a higher yield, and a higher value, for which starch manufacturers are willing to pay more for it than other variants for its particular properties. This new initiative not only benefits the farmers and the local economy, but also serves to put Thailand on the map in the global tapioca starch industry by substantially boosting tapioca starch exports and economic values.



Farmer Development

	2019	2020	2021	2022	Target 2023
Number of Closed-System Greenhouses (Greenhouse)	3	10	10	10	12
Number of Disease-Free X20 Stems Distributed Annually (Stem)	174,454	362,151	613,000	797,102	980,000
Number of Farming Areas Using X20 Stems (Rai)	109	226	383	494	600
Cost Saved Calculated at 500 baht/rai (Baht)	54,500	113,000	191,500	247,000	300,000



X20 Cassava Stems at Rayong Greenhouse

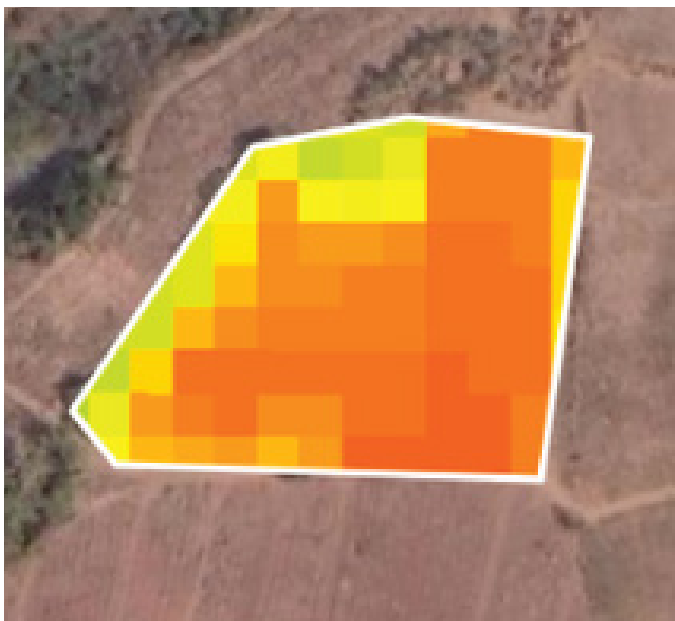
The project originally commenced with an ambitious goal of assuaging the Cassava Mosaic Disease (CMD) outbreak, which had been wreaking havoc on the cassava industries of Thailand, Vietnam, and Cambodia since 2018, resulting in a devastating decline in productivity. To achieve this, the project sought to disperse cassava disease-free stems to the farmers, helping to secure their incomes. The project then grew to encompass additional initiatives including the establishment of a clinic for cassava diseases and pests, the expansion of waxy cassava breeds and special cassava breeds, the development of a mung bean production foundation, and the growth of organic cassava growing areas in Laos, Vietnam, and Cambodia. Together, these efforts are aimed at providing practical and sustainable solutions to this farming community.



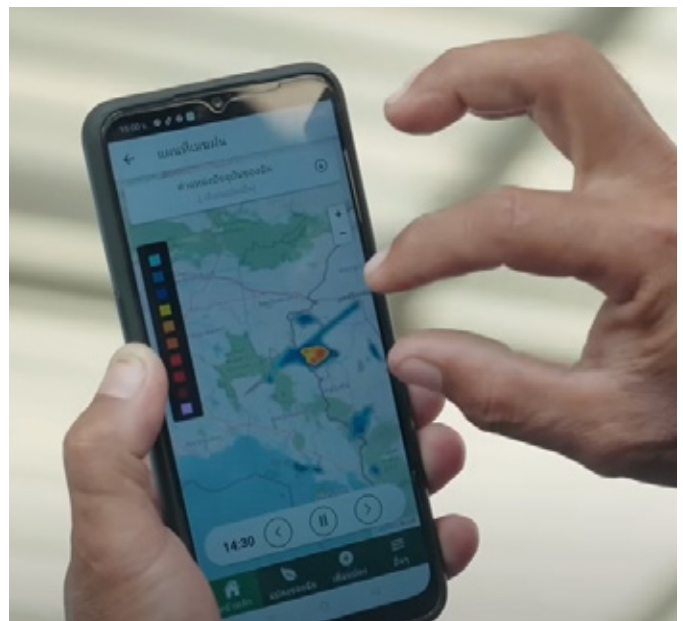
Crop Growth Analysis and Monitoring System

Thai Wah is committed to promoting its digital platform services for farming. The platforms are constantly updated, particularly in terms of data accuracy and service offerings. Of particular note is our crop growth analysis and monitoring system. The system has been developed based on farmer and cultivation databases with data gathered from vegetation index and cultivated area surveys as well as from satellite images with an accuracy rate of over 90%. Its features are extensive and include, but are not limited to, analyzing and forecasting daily, weekly, and monthly rainfall up to nine months in advance. The accuracy rate of the analysis model for yield forecasting, productivity, and quality (% of starch content) has increased by 75% from the 1st phase to 90%. Farmers have since been benefiting from the system in that they can plan harvests for the optimum yield and price, which is consistent with our production plan.

In 2022, we placed a priority on soil management and conservation to ensure the viability of farmers' continuous cultivation. Our platform began to be used for the collection and analysis of soil data and the identification of the optimal soil management model for effective cultivation, as well as for the creation of Crop Advisory, which offers guidance on cultivation, maintenance, and cultivation account management. The system not only helps us with our plans for sustainable raw material sourcing, but also assists Thai Wah farmers in better preparing themselves for technological changes and enhancing their decision-making on tapioca cropping to ensure optimum efficiency and effectiveness.



Picture of crop field from Satellite and crop analysis



Digital platform services for farming



Farmer Development

	2018	2019	2020	2021	2022	Target 2023
Number of Farmer Members on the Platform (person)	121	501	1,242	7,500	15,000	50,000
Monthly Active User (person)	N/A	N/A	70	84	1,400	8,000
Monthly Active User (percent)	N/A	N/A	5.6	1.12	9.5	16
Number of Farming Areas on the Platform (rai)	2,950	9,577	39,992	52,683	90,000	250,000
Proportion of Thai Wah Farmers' Cultivated Area (Percent)	2	6	25	35	46	75

Over the past few years, we have witnessed a remarkable surge in the numbers of our farmer members joining us through the digital platform. Becoming part of our Thai Wah farmer network allows them to have access to a wide range of our newly-introduced products and services, including biofertilizers, bio-plus liquid fertilizers, and high-organic content soilless growing media. All of these products are designed to help our members increase their yields, reduce their costs, and maximize their profits. With these initiatives in place, we believe that we can create an even more sustainable, prosperous farming community that will continue to thrive well into the future.



Bio-Plus Liquid Fertilizer



High-Organic Content Soilless Growing Media



Bio-Fertilizer from Fermented Cassava Pulp and Soil with Cow Manure



Farmer Development

Additionally, the detailed data and insights provided by the system into the health of a crop, such as irrigation, soil nutrition, and other environmental factors, can be used to accurately estimate the potential yield and financial return of the crop. Furthermore, as the system can also be used to monitor the progress of the crop, ensuring it is meeting expectations.

Thai Wah Thank You Farmer Day



*Thai Wah Thank You Farmer Day at Ban Chang District, Rayong,
Where Outstanding Farmer Awards Were Bestowed Upon Excellent Thai Wah Farmers*

Thai Wah respects and values farmers as much as partners as a long-term component of its growth strategies. We are excited to work with farmers and communities to see how we can together strive for sustainable development over the long term through “Thai Wah Thank You Farmer Day,” an activity held to express our sincere gratitude to all the farmers who deliver cassava roots to our starch factories. Every quarter, we distribute dividends to farmers in the Pimai district, Nakhon Ratchasima; Mueang district, Udonthani; and Tha Khantho district, Kalasin.

Next Gen FarmX

Thai Wah is committed to transforming the agricultural landscape of Thailand, ushering in a new era of environmental sustainability, social responsibility, and economic prosperity. As such, we seek to empower farmers to return to their homelands and make a living through their farming ventures. We have developed Next Gen FarmX, a revolutionary project crafted to optimize sourcing, anticipate and mitigate risks in the supply chain, and promote sustainable farming practices. This project serves as a new source of income for the farmers and raises the bar for the quality of Thai agriculture to a level of global recognition and acceptance. We are confident that this initiative will bring about a more prosperous and sustainable future for the farmers and their families.



Knowledge Sharing on Sustainable Farming Practices including, Bio-Fertilizer, x20 Clean Stem Multiplication, Mung Bean Promotion as an Alternative Crop

At Thai Wah, we are acutely aware that climate change may have far-reaching implications for industries — and we are taking proactive steps to ensure our operations remain resilient and ahead of the curve. With the effects of climate change continuing to be felt around the world, along with the potential for consequent disease outbreaks threatening our agricultural raw material procurement and production, we have developed a comprehensive and multi-faceted strategy for sustainable supply sourcing and management to build resilience and mitigate the risks. The strategy for attracting farmers to join our network is a multi-pronged approach, from creating activities for farmers to recognize their hard work and dedication; to ranking sustainable farmers into tiers according to their production yield and dedication to sustainable practices, to actively expanding our farmer network to increase production yields and ensure a steady and constant procurement. To further our mission, we have devised short-, medium-, and long-term management plans that include researching and developing new durable varieties, exploring alternative raw material sources, and identifying additional raw material sources. Already, we have successfully collaborated with numerous agricultural and research organizations to further our mission, and the results of these partnerships have been promising. Through these measures, we aspire to bring a brighter future to farmers, empowering them to return to their homelands and thrive in their farming ventures all while raising the bar for Thai agriculture to a level of global recognition and acceptance and ultimately contributing to our efforts to achieve the Sustainable Development Goals.



Green Factory and Community

The cornerstone of a successful operation of a factory lies in the meticulous provision of occupational health and safety for its associates and business partners. In the “Green Factory and Community” Pillar, Thai Wah places a high priority on consistently organizing associate training sessions to ensure that its associates are kept up-to-date and well-versed in the latest occupational health and safety standards. Furthermore, we are dedicated to upholding the industry-standard compliance of our factory environments and establishing meaningful relationships with the communities around us to promote sustainable development, with a focus being placed on protecting both society and the environment.

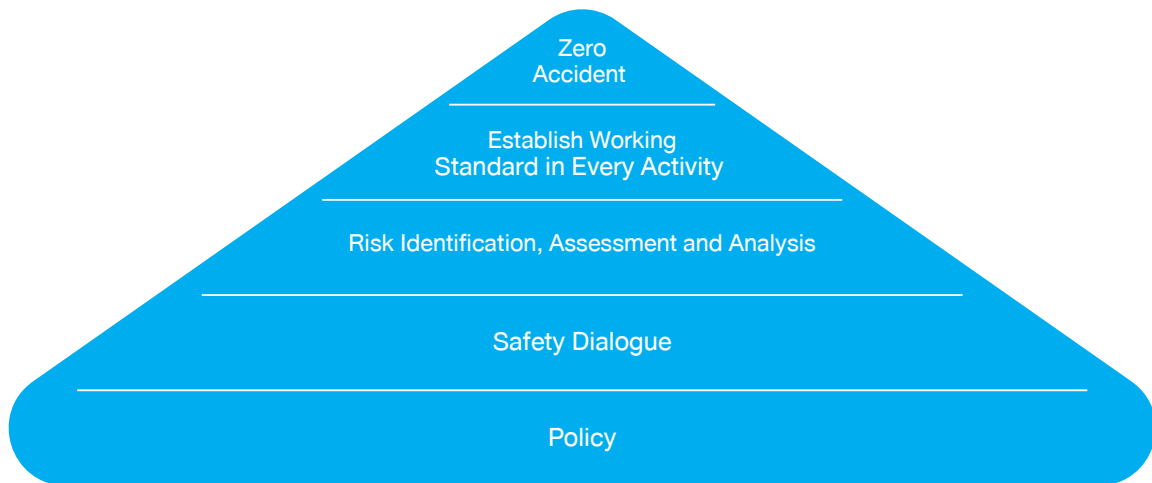


Meanwhile, in light of the serious implications of climate change continuing to be felt, we have taken steps to mitigate its effects. We have implemented a factory management system that optimizes resources and minimizes environmental impacts. In doing so, we have turned to renewable energy sources, such as solar and biogas, and adopted effective water management and wastewater treatment innovations to reduce the strain on our communities and environment. Furthermore, we have also been providing educational opportunities for community development to promote their strength and sustainability, laying the groundwork for them to eventually become long-term self-sufficient. By doing so, we are taking positive steps to make sure that our communities can prosper in the face of climate change.



Thai Wah's starch factory in Kampangpetch

Safety, Occupational Health, and Working Environment (SHE)



Safety Pyramid



Thai Wah is unwavering in its commitment to the safety, health, and well-being of its associates and business partners. We understand that a safe and healthy working environment is a prerequisite for our associates and business partners to perform their duties at their utmost capacity. To this end, we have implemented stringent Safety, Occupational Health, and Working Environment, or SHE, regulations and have made sure that they are closely adhered to by anyone entering the factory area. Additionally, we have been steadfast to our dedication to upholding strict compliance with all relevant laws and standards pertaining to safety management, such as TIS 18001, ISO 45001, and ISO 14001. By following these guidelines, we can guarantee our associates and business partners a secure and pleasant working environment. To ensure the effective implementation of the SHE management system, the SHE committee has been assembled, made up of representatives from each of the factories we and our subsidiaries operate. The committee meets regularly every month to review the SHE risks encountered during the operational processes of each of the factories, with the goal of identifying potential risks and preventing them from occurring. The committee also evaluates the effectiveness of the regulations and makes adjustments if necessary. These crucial processes are essential in order to ensure that our SHE management system is effective and that our factories remain safe and healthy working environments.

Safety Performance Indicator

Thai Wah is dedicated to delivering and improving SHE standards across its operations. To ensure these standards are met and exceeded, we have put in place a comprehensive system of monitoring and evaluation where indicators, such as Lost-Time Injury Frequency Rate (LTIFR), Incident Severity Rate (ISR), and Fatality Rate (FR), are used to measure the SHE performances of our operations. In addition, each step of our operations is closely monitored and analyzed to detect any potential risks, and the statistical data gathered allow us to take proactive steps to minimize the chance of an accident occurring, further strengthening the efficiency of our operations in each stage. By taking this proactive approach to SHE, we are able to achieve a safe and secure environment for all our associates, customers, and stakeholders. The statistical data on our SHE performances are as follows:

	2019	2020	2021	2022	Target 2023
Lost-Time Injury Frequency Rate (LTIFR)	9.7	8.2	7.9	5.3	Total Accidents Reduced by 30% Compared to 2021 and Zero Accident by 2025
Incident Severity Rate (ISR)	13.1	39.9	65.9	27.6	
Fatality Rate (FR)	0	0	0	0	

In 2021, our ISR was higher than any previous year due to a lack of associate awareness on work safety, as well as unsafe working conditions. In response, our senior management team and safety committee conducted an in-depth analysis of injury severities to identify their root causes and appropriate measures to prevent further accidents. This review culminated in the implementation of two main measures across all factories, namely Behavior-Based Safety and SHE Application. Following this implementation, LTIFR and ISR decreased significantly. As a result, these measures will continue to be used in 2023 in order to prevent further incidents and maintain a safe working environment.



Behavior-Based Safety Training



Behavior-Based Safety Training

In order to ensure the safety of its associates, Thai Wah has consistently been focusing on increasing awareness and understanding of proper work safety measures. To achieve this goal, we organize SHE training sessions for our associates of all levels in an effort to raise awareness of occupational safety in each and every process among them and ultimately cultivate the safety culture in our organization. These sessions focus on providing recommendations to enable our associates to identify risks and dangers that may occur while working, make decisions, and stop the operation when noticing potential dangerous hazards. Additionally, we also encourage our associates to actively participate in these training sessions and to provide feedback on how they can better apply the knowledge they have gained. Through these training sessions, we provide our associates with the tools they need to stay safe in the workplace. The following are the sessions that were organized in 2022:

1. Legal Requirements Course
 - Safety, Occupational Health, and Working Environment or SHE Committee Formation;
 - Safety Officer Appointment;
 - Firefighting and Fire Evacuation Drill;
 - Water Pollution Treatment System Training;
 - Preparation of Workers for Confined Spaces.
2. Safety Behavior Promotion Course
 - Basic Safety Review;
 - Safety Awareness for Supervisors;
 - Workplace Safety Behavior Promotion with BBS;
 - Chemical Spill Emergency and Evacuation Drill;
 - First Aid.



The number of participants in various courses as a percentage of all targeted participants is shown in the table below.

	2020	2021	2022	Target 2023
Legal Requirements Course	>90%	>93%	>98%	100%
Safety Behavior Promotion Course	>50%	>60%	>80%	>90%

SHE Application



As Thai Wah undergoes a digital transformation, the SHE Application has been developed to usher it in a new era of safety, efficiency, and collaboration. Fully digital, paperless, and engaging, this revolutionary system enables our associates and business partners to be more actively engaged in their own occupational safety as well as that of their colleagues. Notifications of reports are sent to key personnel in real-time, ensuring that no safety issue goes unnoticed or unresolved. The features of the SHE Application are extensive and include, but are not limited to, Request to Enter a Factory, Report an Unsafe Condition, and Report an Accident.



Factory Environment Improvement for Safety

Factory environment improvements for safety are equally essential to create a safe workplace and reduce the risk of accidents and health issues. To this end, Thai Wah regularly conducts a comprehensive assessment and analysis of all existing and potential workplace hazards to implement measures to eliminate or reduce them. This includes regular workplace inspections to ensure that safety standards are being met as well as installation, maintenance, and repairs of protective equipment as needed to ensure a safe and secure environment for associates. Through this investment, we are able to create a safer and more productive workplace for our associates. The following are the factory environment improvements we made in 2022:



Constructing Cafeterias for Associates to Promote Hygiene and Reduce the Issue of Littering Around in the Factory Areas



Improving Traffic Routes and Installing Easily Visible Signage to Minimize the Risk of Accidents in the Factory Areas



Installing Fire Pumpsto Prepare for Any Unexpected Emergency Situations



*Organizing Big Cleaning Day and 5S activities
to Improve the Scenery of the Factory Areas and Reduce the Potential Hazards
Attributed to the Environment Surrounding the Factories*

Resource Management

Thai Wah is keenly aware that sustainable economic and social development starts with the effective management of natural resources. To ensure we remain compliant with environmental laws, standards, and regulations, we have established environmentally-conscious water and energy management guidelines. Most notably, we have implemented a state-of-the-art factory management system to make best use of limited resources and minimize environmental impacts. This system enables close monitoring of water and energy usage, waste disposal, and pollution control during production, as well as wastewater treatment and disposal following production. Meanwhile, we have put into practice energy conservation and greenhouse gas emission reduction measures, such as the adoption of renewable energy sources like solar and biogas. Through these initiatives, we are striving to ensure a sustainable future for ourselves and our society.

We are determined to systematically deploy environmental management practices, with dedicated evaluation and review. We measure, report, and disclose data on our corporate greenhouse gas emissions, and set a target to lower our emissions, so that they are in line with the national goal. As a result of our dedication to environmental protection, we have been awarded the “Green Industry Level 3” certification from the Ministry of Industry, Thailand, recognizing our business’s green efforts.



Thai Wah Business System

Thai Wah makes it its mission to ensure its production process is resource-efficient. To this end, we have been working hard to raise organizational awareness on the importance of environmental responsibility, and how it is linked to business success, with the focus being placed on continuous improvement of our factory system. Consequently, we have developed the “Thai Wah Business System” or “TBS,” a vital tool to increase efficiency and continuously enhance all of our operations in order to ensure optimal performances and outcomes. This is done to engage all associates to ensure that they are focused on this common goal.

Of particular note is the KAIZEN project, a strategy designed to revolutionize the way businesses operate. With a focus on encouraging innovation to reduce cost and improve management, it has enabled our factories to become more resource-effective. Furthermore, the participation methods have been enhanced to ensure involvement from all of our associates and personnel at all levels, further elevating the concept of collective effort in finding new approaches to streamlining processes and thereby reducing resource consumption. In short, the KAIZEN project has been a game-changer for us, enabling our factories to realize their true potential and reach even greater heights of success.

In 2022, we implemented the KAIZEN-powered work improvement system at all of our factories across Thailand. Through the whole work process improvement, we reduced costs by approximately 50.3 million baht across 33 different projects. We reduced manufacturing errors, decreased operating time, and minimized losses and resource usage all while increasing production efficiency. It was a huge success and an important milestone for us.

Energy Management

Coal Replacement with Biomass

By the end of 2021, Thai Wah had already begun the shift from coal to biomass, a renewable energy source that has a much lower environmental impact. With a commitment to reducing our carbon footprint, we have set a goal for the Bang Len factory to make the switch to biomass by 2022, replacing up to 80% of the coal that is currently in use. We are working hard to make sure that our factories are equipped with the latest technology and that our operations are sustainable for the long term. As we strive to make this transition, we are confident that our efforts will make a positive difference for the environment and for the people we serve.



Solar Rooftop Installation



Solar Rooftop

Thai Wah is unwavering in its determination to employ more renewable energy sources, leading the way in sustainable energy. Our shift to solar energy began in 2019 as we installed a 1 MW Solar Rooftop at the Bang Len factory. This is done not only to raise awareness of the importance of reducing our dependence on fossil fuels, but also to promote the use of renewable energy sources, reducing fossil fuel consumption among our factories, in the best interest of our factories and nearby communities. In 2021, we took the next step towards sustainability by started a 1.44 MW Solar Rooftop to enhance the amount of power produced from the renewable source, which reached the Commercial Operation Date, or COD, in March 2022. Nevertheless, we are continuing to make investments in solar rooftop projects, with our next venture at a tapioca starch factory. By continuing to invest in renewable energy sources, we are significantly reducing our carbon footprint, doing our part to save our planet.

	2019	2020	2021	2022	Target 2023	3-Year 2023 Target
Electricity Generated by Solar Rooftop (MWh)	589	1,405	1,406	2,440	6,000	10,000
Electricity Saved by Solar Rooftop (Million Baht)*	2.13	5.08	5.09	10.02	10.02	60.8

* Calculated at the electricity rate of 3.62 baht/kWh, from 2022, electricity rate inflated to over 4 baht/kWh

We are proud to announce that a part of the savings made possible by the solar roofs is used for the surrounding communities and farmers. In addition to helping the environment, this initiative is improving livelihood opportunities for the communities around us. This is creating a sustainable future for the environment, as well as the communities who are benefiting from the solar roofs. By investing in this renewable energy source, we are helping to create a brighter future for everyone.

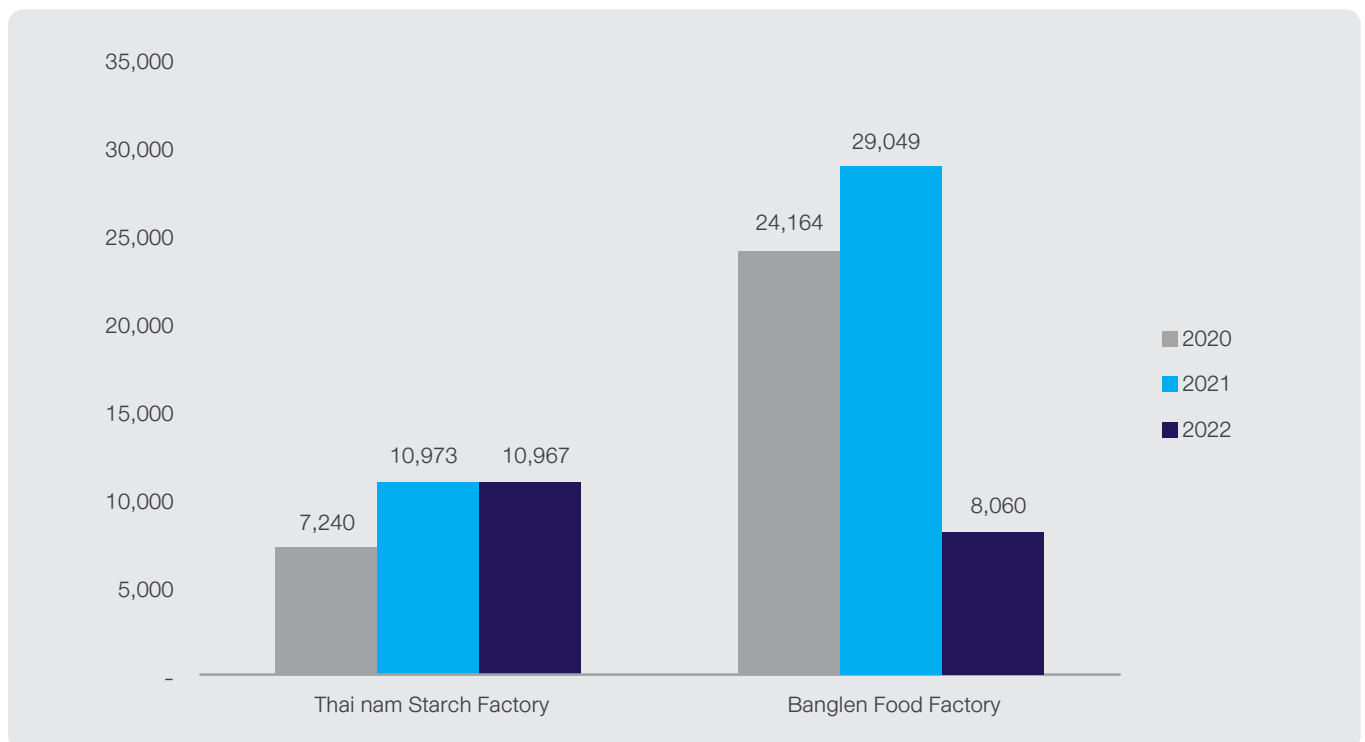


Carbon Footprint of Organization

To move towards Net Zero emission in the long run, Thai Wah has been managed to reduce GHG emissions through 3T Strategies:

- **Traceability** : Being able to identify and reduce carbon emissions along on whole value chain, key factors right now include NPK source, method and fertilization at farm level, diesel oil trucks and tractors as well as global ocean freight
- **Transition** : Transition for all our factory production systems to be carbon-neutral by 2030 with the implementation of renewable energy: solar energy (solar rooftop), biogas (biogas power plant from production waste), minimize coal and diesel oil, and also try to be carbon negative by planting more trees, or regenerative agriculture
- **Transformation** : Putting our customers at the core of our sustainability and innovation strategy and building the SEA Agri biotech platform with innovative solutions including soil health improvement solutions and waste upcycling, also scaling SEA B2B plant-based ingredient solutions production platform.

Greenhouse Gas Emission (tCO₂e)



We kicked off the quantification of the Carbon Footprint for Thakhantho, Maesot, Phimai, and Rayong factories in February 2022, the verification will be completed in May 2023.



Water Management

As an agri-food producer, Thai Wah requires huge quantities of water for its operations — a resource that is becoming increasingly precious in the face of a changing climate. We are committed to managing water sustainably and in accordance with relevant laws and regulations. We have implemented the 3Rs: Reduce, Reuse, and Recycle principles to improve water management effectiveness, with an aim to reduce water consumption by at least 5% every year by utilizing treated water. Our wastewater treatment system is equipped with an aeration system to ensure that the discharged water meets all necessary public wastewater standards. Now, 100% of our wastewater meets the public wastewater standards as required by the laws.

Reduce

Incorporate innovations into the production of starch, which helps reduce water usage in the production process

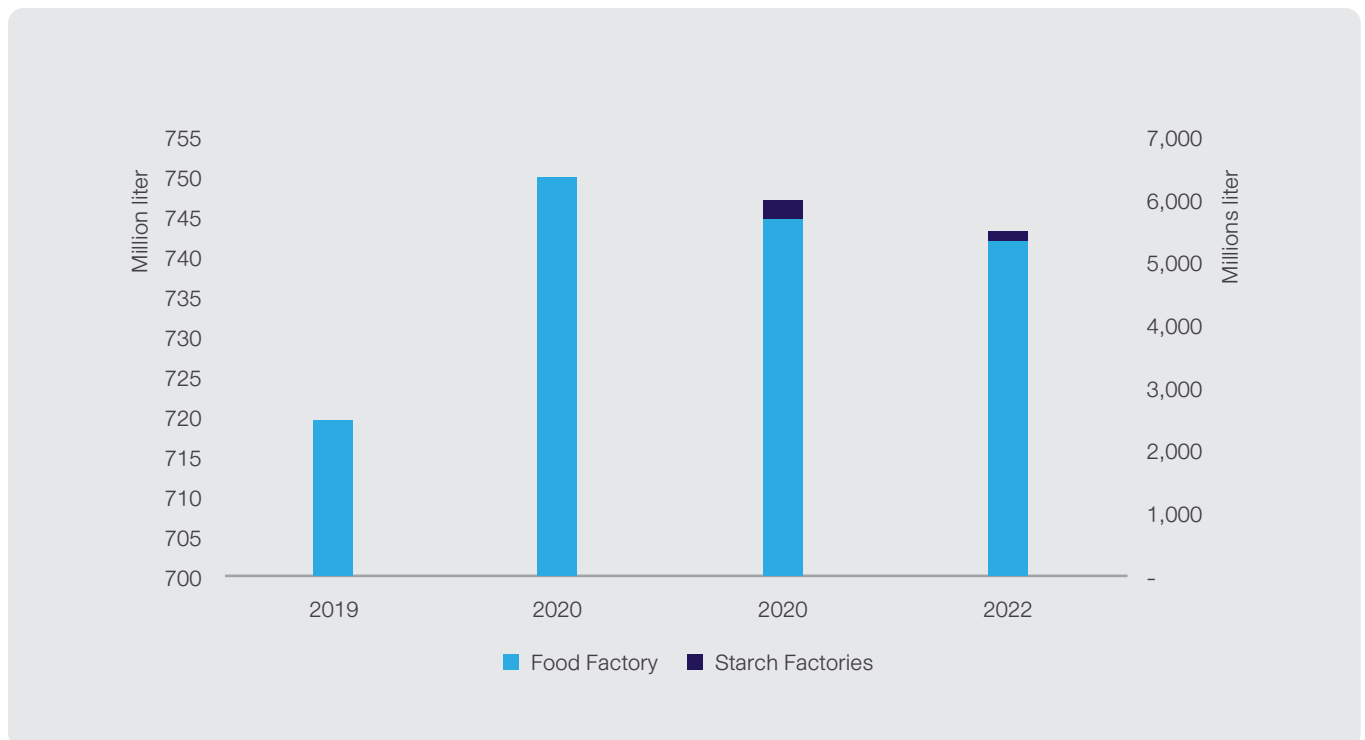
Reuse

Treat wastewater from the production process with sludge treatment

Recycle

Recycle treated wastewater through the AS system to be used in the production process of tapioca or in agricultural activities

Total water consumption of Food factory and Starch factories (million liter)





Green Factory and Community

Starch Factory	2020	2021	2022	Target 2023
Total Water Consumption (liter)	N/A	5,764,899,000	5,417,990,000	
Total Water Consumption Reduction (liter)	N/A	N/A	346,909,000	-5% YOY total water consumption reduction
Total Wastewater (liter)	N/A	5,764,899,000	5,417,990,000	

Food Factory	2020	2021	2022	Target 2023
Total Water Consumption (liter)	750,643,000	747,558,000	743,467,000	
Total Water Consumption Reduction (liter)	N/A	3,085,000	4,091,000	-3% YOY total water consumption reduction
Total Wastewater (liter)	177,951,000	176,933,000	179,512,000	

Furthermore, we stay aware and keep track of potential negative impacts from our operations and take corrective action when necessary. In doing so, we encourage our surrounding communities to voice their concerns and opinions on our water use. In addition, we have been working with local authorities and water suppliers to assess and control water risks associated with our operations, as well as to monitor water resource situations and develop strategies for management and mitigation to safeguard access to water resources in our surrounding communities. For example, the Company supported installing pipes for the delivery of treated water for agricultural use at the starch factory in Udon Thani Province.

Meanwhile, we have established collaborations with a variety of stakeholders to maximize water utilization, making sure that every drop of water is put to its highest use. Our initiatives include the implementation of a natural wastewater treatment system to provide treated wastewater for sustainable agriculture and the promotion of a drip irrigation system among Thai Wah farmers, which not only enhance farmers' cultivation efficiency, but also mitigate drought during the dry season. Additionally, on an annual basis, we join forces with the communities to store water, alleviate and delay drought, and add moisture to the soil during drought season, so that there is sufficient water for both consumption and sustainable agriculture. These efforts aim to not only meet our own objectives, but also respond to the social needs and problems of the community.



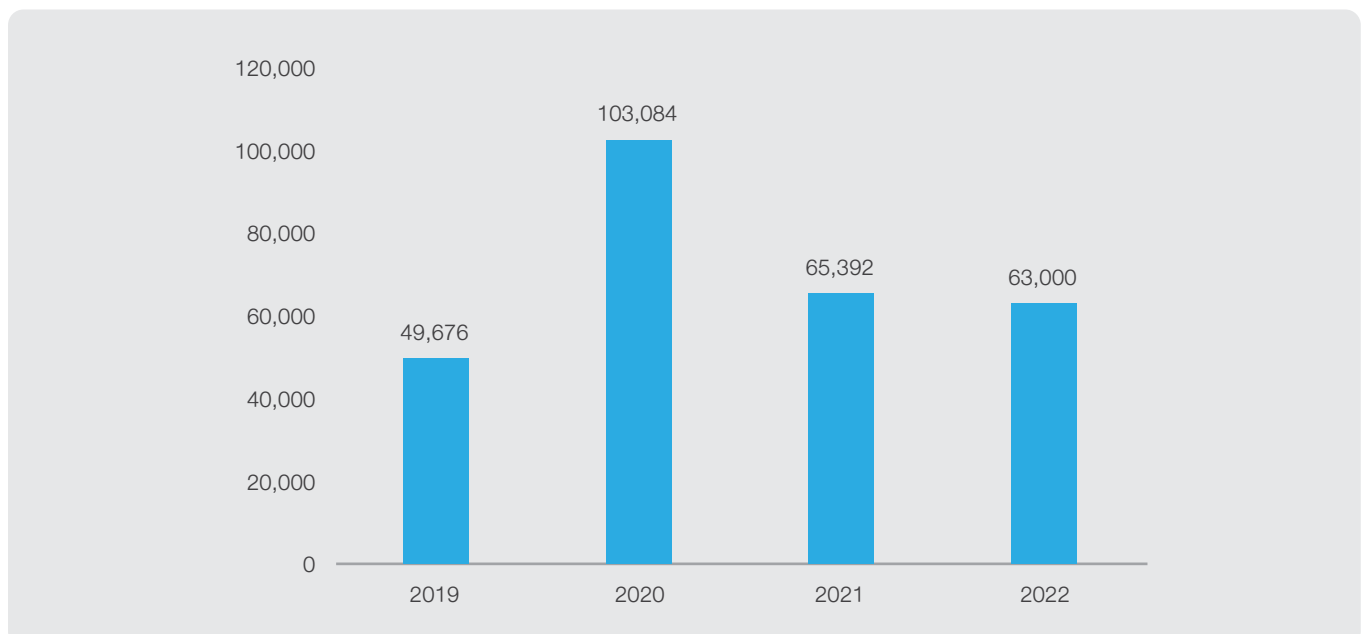
Waste Management



Making Organic Fertilizer from Cassava Pulp Collaborating with Farmers and the Agricultural Office of Tha Khantho District, Kalasin Province

Thai Wah is dedicated to reducing waste and making the most of our resources. We have implemented a strategic goal to optimize the use of raw materials and existing resources while minimizing waste throughout the production process. We have been repurposing and recycling waste into new products, such as cassava pulps for producing animal feeds, organic fertilizers, and biogas for generating heat and electricity. To reduce pollution to the standard level set forth by the Ministry of Industry, Thailand, we have also installed a range of advanced production waste treatment systems, such as Activated Sludge System, an air treatment system with wet and cyclone scrubbers to trap dust and exhaust before it is ventilated out of the factories. Our dedicated engineers and experts are monitoring and maintaining the waste treatment systems, ensuring that the environment remains clean and healthy.

Cassava Pulp Used for Producing Biogas at Tha Khan Tho Factory (Ton)



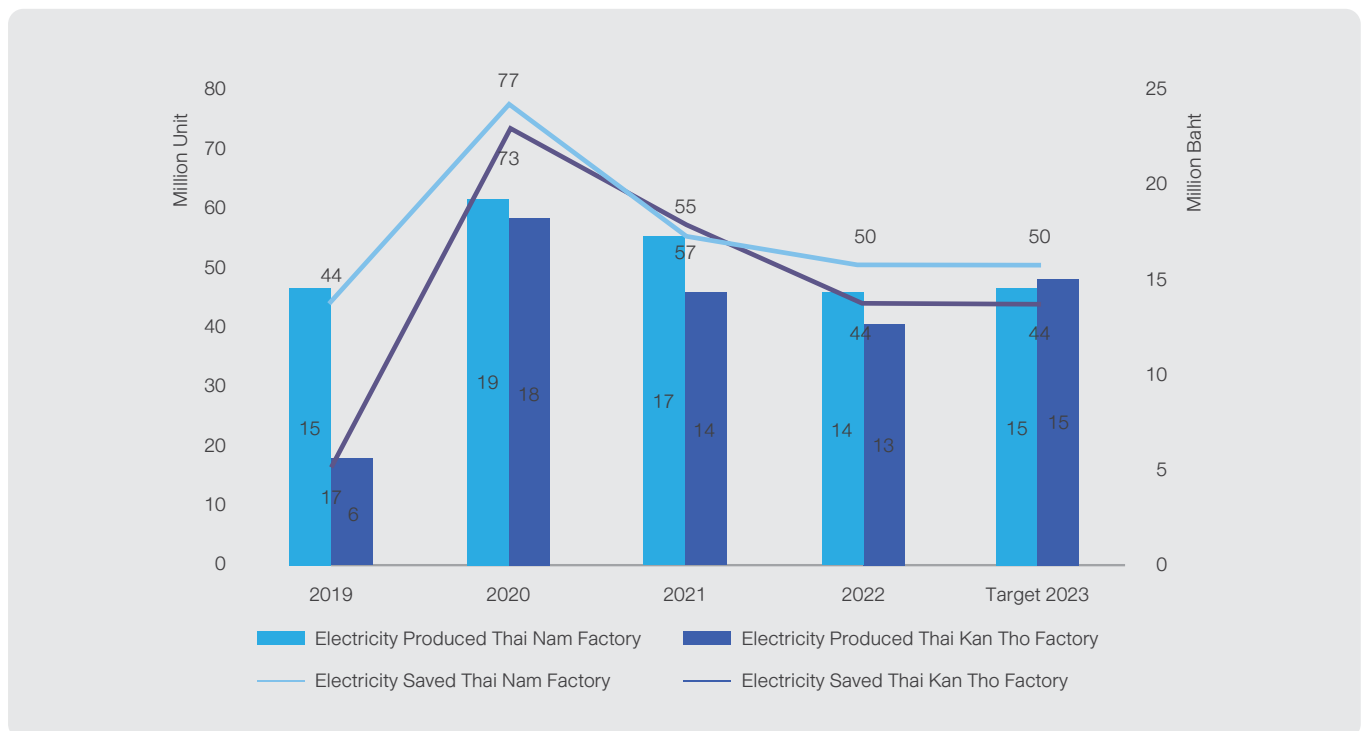


Biogas Power Plant



Thai Wah is on a relentless mission to find innovative ways to maximize energy efficiency and reduce environmental impact. Our factories have been implementing a number of energy management measures to maximize energy use, ranging from production efficiency improvement to electricity generation from wastewater and cassava pulps. At present, approximately 75% of the tapioca waste we produce goes into our biogas systems to generate electricity. Meanwhile, we are studying the potential to generate electricity in the future using only tapioca waste. With these measures in place, we are firmly on our journey to becoming an even more energy-efficient

Electricity Produced and Saved at Thai Nam Factory and Tha Khan Tho Factory from Biogas Power Plant



**Thai Nam factory's biogas power plant has started the COD on 31 August 2017 and Tha Khan to has started the COD in September 2020 **Calculated at the electricity rate of 3.62 baht/kWh*



Green Factory and Community

At Thai Wah, we are passionate about our commitment to giving back to society. Our goal is to make a meaningful impact to the communities we operate in and the people we serve, and we are proud to say that we have achieved this. The following are the CSR activities we conducted in 2022:



*Repairing the Water Supply System
at Ban Wang Hin Community,
Nakhon Ratchasima Province*



*Dredging a Public Well
in Nong Chok Sub-District,
Nakhon Ratchasima Province*



*Solving the Issue of Wastewater from the Tha Khantho Factory
Seeping into the Farming Areas of Villagers in Kalasin Province.*



Green Factory and Community

At Thai Wah, we feel a strong sense of responsibility towards our stakeholders' rights. In the "Green Factory and Community" Pillar, we take great care to ensure that our business practices are ethically and lawfully sound, never infringing on the human rights of those in the communities surrounding our factories and in society at large. To empower the communities we operate in, we collaborate with various organizations to elevate the quality of life of the local communities and generate long-term economic growth with a commitment to social and environmental responsibility. So far, we have implemented a number of policies that are designed to promote innovations to secure the sustainability of the local communities. These policies are essential to addressing issues of social inequality and economic instability. As part of our dedication to the United Nations' Sustainable Development Goals (SDGs), we are committed to providing everyone with good health and well-being. We have been dedicated to developing the communities we serve, and we are determined to continue to foster positive, lasting change.





Family and Well-Being



With numerous never-before-seen changes happening one after another at an accelerated rate, the capability and readiness of a company's organizational structure and personnel to adapt to such changes is what propels it forward efficiently and sustainably. In the Family Pillar, we are committed to enhancing all aspects of our associates' quality of life — from health and well-being, to workplace and environment, and to welfare, benefits, and respect for human rights and gender equality. This is so that they feel safe and secure at work, which in turn results in their professional advancement and our progress towards sustainability. We also promote a creativity-based learning environment where all associates are encouraged to develop and realize their potential while also continuously learning with one another in an effort to forge bonds among all associates and make them feel proud of being a part of Thai Wah.



Engagement has been a priority for us, and this is especially true in light of the outbreak of the COVID-19 pandemic. Our business operations have consistently been disrupted. We now operate in a way that is influenced by the emergence of new business models, exponential technological advancements, innovative working practices, and regulations. The pandemic has merely accelerated this transformation, which is grounded in human experience and has the potential to bring about sustainable change at the behavioral, cultural, and organizational levels. However, there are some crucial lessons that this new way of working has taught us about how to boost associate engagement. With our three-year plan, we have implemented a number of enhancements to deal with our associates' behavioral changes under these three “Right” cores:

- **Right People** : To draw in and keep the appropriate individuals who respond to our corporate direction;
- **Right Quality** : To enhance capabilities that lead to our outstanding performance and competitive advantage in order to secure our future;
- **Right Place** : To create a supportive environment and culture that encourages our associates to give it their all to cooperate, perform better, and stay motivated.

Right People

Diversity and Inclusion

Thai Wah has been attaching great importance to the fundamental rights that every individual is entitled to, consistently upholding fairness, equality, and non-discrimination. We support human rights and respect for equality in all aspects by publishing open positions without regard to discriminatory criteria like gender, age, race, or marital status. The fair, equitable, and non-discriminatory employment practices that are viewed as essential for achieving sustainable business growth have also traditionally been included in our Code of Conduct. In 2022, we hired 54 women and 66 men, therefore there are a total of 1,789 women and 1,653 men across our company.

Memorable ‘Best Start at Thai Wah’

To make a good first impression, Thai Wah starts off with “On-Boarding Program,” which takes care of new associates. This is done to ensure the new hires feel welcome and forge strong relationships with them, kick-starting their best working experience at our organization since day one. The program not only introduces them to our corporate history, culture, and structure as well as their supervisors and colleagues, but also helps them become accustomed to the workplace by appointing mentors to offer guidance and advice. This enables the new associates to adapt more quickly, work more efficiently, develop their potential more sustainably, and eventually make a greater contribution to the business. Our new on-boarding program got a 100% Net Promoter Score.



Before
Day One

- A gift set with a welcome note from CEO/EXCO;
- A check-in call from the HR team;
- A buddy designated;



Day One

- A welcome from Line Manager;
- A welcoming package to express a warm welcome and introduce our products;
- An induction to our company;
- An introduction to corporate history, culture, structure, and facilities as well as how departments that make up our company work within it;
- A provision of office equipment



Week One

- A functional induction;
- A set of expectations and R&R shared by Line Manager;
- A 'My First 120 Days' Reinforcement;
- A team lunch



Week Two
and Beyond

- A check-in from EXCO/Function Head at least once every quarter;
- A probation discussion and evaluation.



On-Boarding Program

Sustainable Knowledge for Internship Students

Thai Wah views its commitment as equipping associates with the knowledge and capabilities they need to thrive in the workplace of the future by offering apprenticeships and training opportunities. We provide opportunities for interested students in a variety of fields to join our internship programs with us. In 2022, there were 29 students from Thai and international educational institutions participating in our internship program where they were provided with opportunities to learn about our business, put their classroom knowledge to use, collaborate with others, and gain first-hand experience working in a leading company. This was done so in order to prepare them for the workforce of the future all while cultivating creativity, innovation-driven attitude that will allow them to reach their full potential, corporate governance, work ethics, and social responsibility that will promote sustainable development. We organized knowledge- and experience- sharing activities for students to exchange knowledge, skills, and work experiences, and build a network of collaboration with universities.

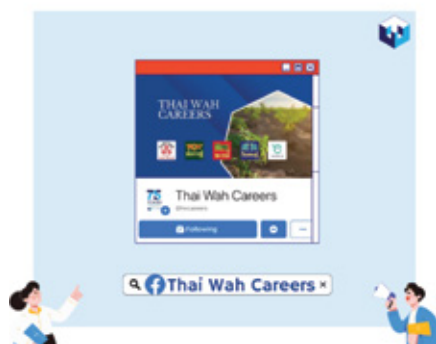
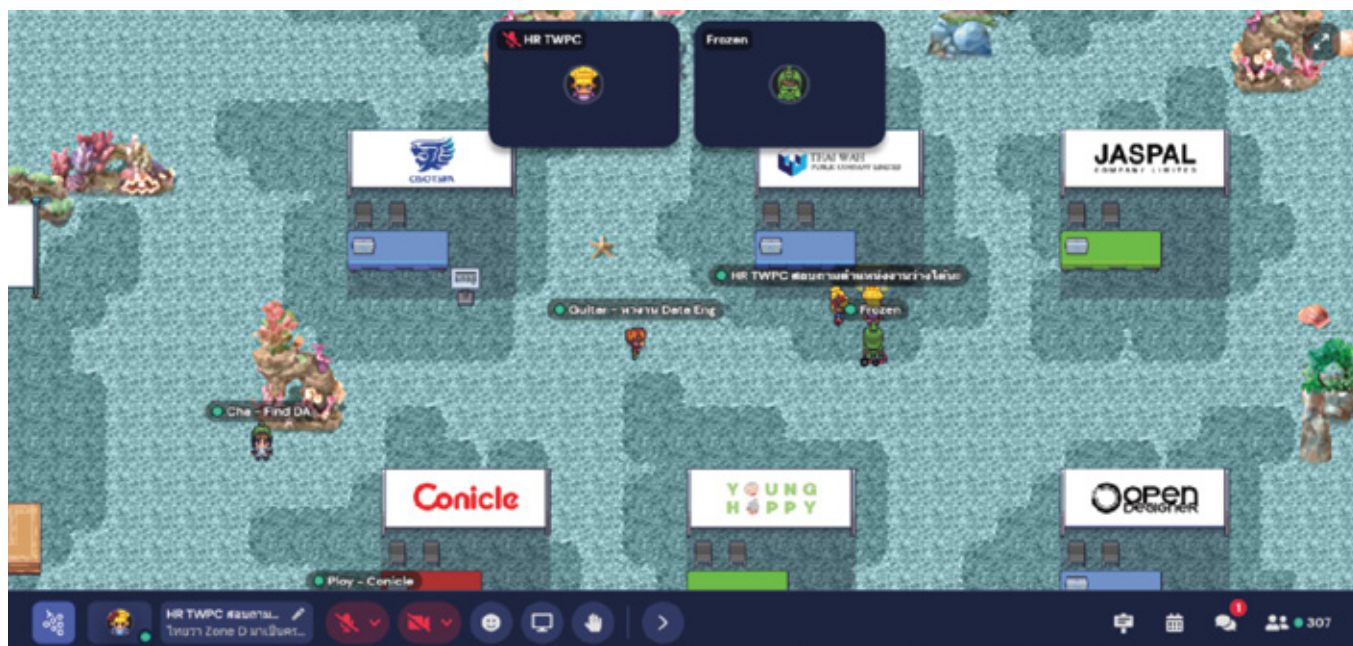


Internship Program



Innovative Recruitment Channel

Businesses nowadays must contend with the increasingly rapidly changing world. It is consequently exceedingly challenging to find the appropriate personnel who fit companies. In 2022, Thai Wah developed a corporate image that is consistent with the core values it upholds, which resulted in its managing to attract the potential new associates and inspire the current associates to be proud of their work-place. In 2022, a number of new channels were added to raise public awareness of our products, our associates' livelihood and well-being, and our activities both inside and outside the organization. Of particular note are online channels like “Thai Wah Careers” Facebook page and Metaverse Job Fair, through which open positions are posted. Proactively expanding our online recruitment channels allowed us to tap into a more diverse pool of qualified potential talents. Besides, we formed partnerships with universities and attended job fairs, which proved to be an effective strategy that enabled us to tap into larger young talent pools who might be interested in working in our organization.



Online Recruitment Channel and Partnership with Universities and Participation in Job Fairs



Right Quality

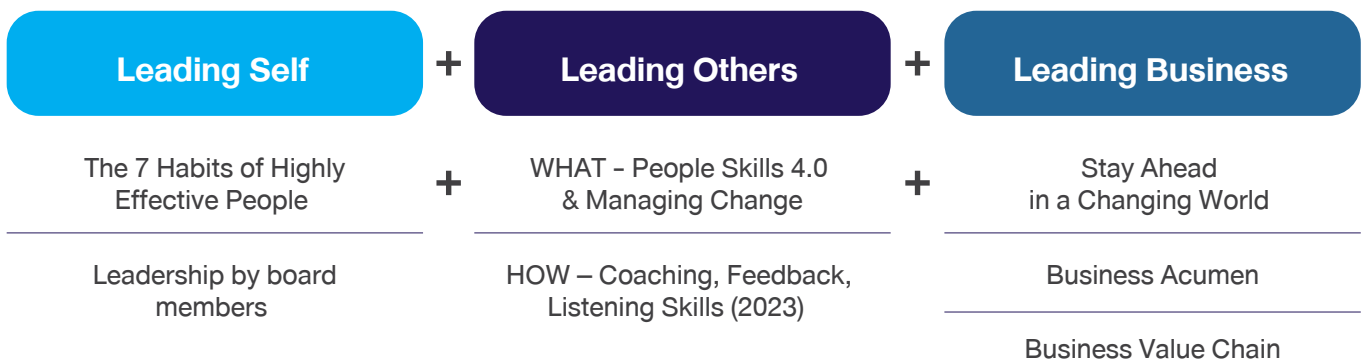
Thai Wah Leadership Academy (TLA)

The world is constantly changing, and one must stay up-to-date with the latest developments in order to stay successful in the face of global challenges and fierce competition. Thai Wah is deeply convinced that associate development is crucial, not only for the company itself, but also for associates themselves – its most valuable asset – to have the opportunity to grow sustainably. Each of our associates has distinct skills, knowledge, and abilities, associate development is therefore based as much on their needs as on what they should have – and this has led to the establishment of the Thai Wah Leadership Academy or TLA project. In order to support our associates' individual development plans and equip them with the knowledge and skills they need to work together to address current challenges, TLA offers a range of transformative, associate-centered leadership programs that are developed based on our Core and Leadership competencies and are categorized into three layers: Leading Self, Leading Team, and Leading Business, which will affect the way they think and work and consequently the overall picture of our business. Through face-to-face and virtual formats, they will be able to grow and thrive alongside us, both personally and professionally, and to forge a clear path forward in their career for whatever the future may hold. We have already conducted more than 30 classes and have 500 associates taking part.

Thai Wah Competency Framework



THAI WAH FRAMEWORK TO SUPPORT ASSOCIATES' GROWTH : The People Manager Development Journey





"Leading through Change, Crisis and Courage" Class by Mr. Ho KwonPing

Talent Management and Succession Planning

To ensure continuity in business operations, Thai Wah has set up a planning and development process called "Talent Management and Succession Planning" to ensure that associates are developed to serve as successors for key positions in the future. The processes are as follows:

1. **Talent Management** — the management of high potential associates, which includes the following processes:
 - 1.1 **Talent Identification** — we identify high potential associates using the following two primary criteria:
 - Sustained Performance based on associates' capability to complete the tasks assigned to them as well as their Functional Competencies and Past Performance.
 - Learning Agility based on associates' performance potential, which includes both expertise and knowledge.
 - 1.2 **Talent Development** — we develop a group of high potential associates' so that they can take on key positions for the organization as successors. We establish an Individual Development Plan (IDPs) for each of them using a 70:20:10 learning and development methodology:
 - 70% Learning Through Practice so that they are ready for actual work and can see the results of the development more clearly;
 - 20% Learning Through Mentoring and Coaching so that they are given with guidance and feedback and supervised throughout the development progress; and
 - 10% Learning Through Training and Lecturing to enhance knowledge, skills, attitudes, and behaviors that should be in work.



Family and Well-Being

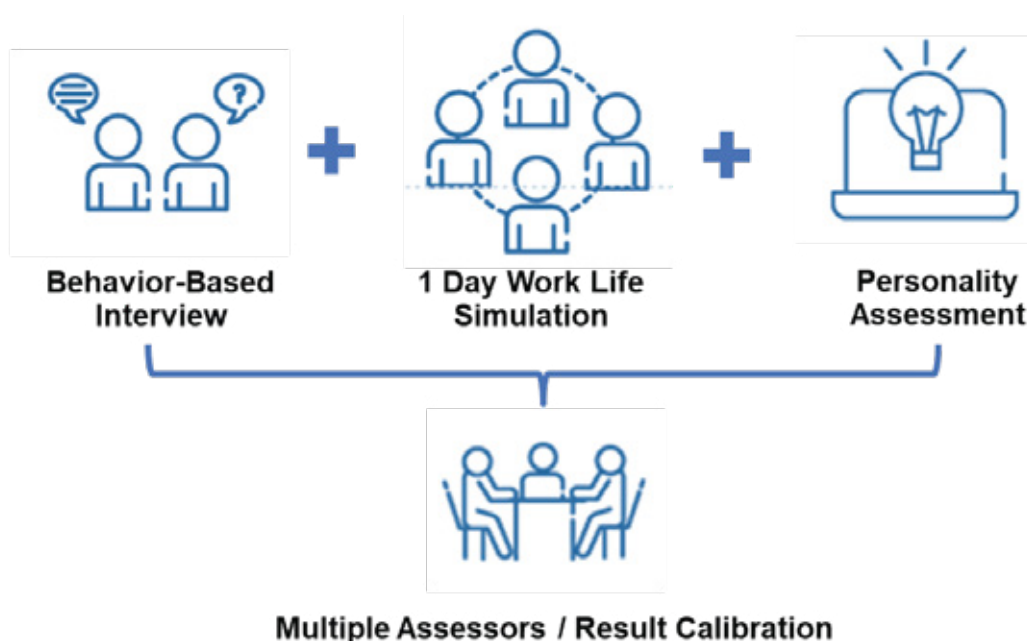
2. **Succession Planning** – in order to ensure that the talent management processes align with the continuation of our business operations, we establish the succession planning processes as follows:

- 2.1 **Critical Position and Successor Review** – we review key positions and successors to such positions according to our business plans and strategic plans in each period to ensure that there is a successor who is qualified, competent, and prepared to serve in each of the positions within a year.
- 2.2 **Retention Risk** – we analyze risks in the event that we are unable to retain associates in each of the key positions by taking into account the risk of leaving and the impact of leaving.
- 2.3 **Successor Follow-Up and Development During Transition** – we follow up and further develop the successors during the transition in order to build their confidence during their tenure. During the first term of their tenure, we have plans to develop and monitor their performances that are in line with their Individual Development Plans.

Thanks to the above-mentioned processes, a total of 33 high potential associates were initially identified in 2022, representing 42% of all target associates assessed for succession planning. These associates included those at the Assistant Manager level and above in the operational line and those at the Manager level and above in other fields.

Development Center

Development Center is a series of diagnostic tools used to assess and pinpoint strengths, weaknesses, and insights of successors in order to construct their respective personalized executive development plans based on the Thai Wah Leadership Competencies. The tools include Behavior-Based Interview, One-Day Work-Life Simulation, Personality Assessment, and Result Calibration.





Behavior-Based Interview

In the situational interview, successors are given hypothetical scenarios to act out their roles, drawing on their prior working experiences. This allows us to evaluate how they would perceive, approach, and respond to the scenarios in real life, as well as to project how they would typically carry out the responsibilities that are expected of them.

One-Day Work-Life Simulation

Based on the Thai Wah Leadership Competencies, the simulation accurately simulates workplace interactions based on what our company expects of each successor so that they can engage accordingly. This allows us to evaluate how they perform using a variety of tools to determine whether they are able to successfully manage circumstances and, if not, where they need to improve.

Personality Assessment

The comprehensive feedback is made based on information obtained from a number of sources and viewpoints, including interviews with individuals who have worked with successors, including supervisors and subordinates, to the Cross Functional Team, to give insight into their perceptions, behaviors, and intentions as well as into what needs to be developed.

Result Calibration

The results obtained from the previous three tools are calibrated to determine where the evaluators agree and where they disagree when it comes to successors' strengths and weaknesses to shed light on their competencies. This provides a starting point for their development plans.

Right Place

Non-Discriminatory Policy Women's Empowerment Principles (WEPs)

The fair treatment of all associates in accordance with international human rights standards is among top priorities for Thai Wah. Not only do we have a transparent non-discriminatory policy in place for our recruitment, employment, compensation and benefit, training, assignment, and promotion processes, but we also support and promote female associates' career advancement and leadership development through standardized assessments. We are dedicated to fostering a safe and healthy working environment and providing the facilities required for that environment. It is urged for us to cultivate an all-inclusive culture in order to raise our associates' life quality and value. As a result, our people may experience self-esteem boosts and fulfill their potentials. In 2022, 46% of our managers and above are female and 45% of our top management are female.

Associates with Disabilities

Thai Wah does not conduct any actions that violate human and labor rights and related laws, as evidenced by the fact that we have a policy against the use of forced labor, labor from human trafficking, unlawful child labor, and other forms of labor rights violations. We treat all associates equally without discrimination on the basis of race, nationality, religion, gender, age, language, skin color, education, social status, and physical and mental abilities, in all aspects of our business operations, from hiring to paying wages, to setting working hours and holidays, to assigning tasks and evaluating performance, and to training and planning future advancement. In 2022, we have a total of 18 differently abled associates and contribute THB1,485,185 to disability funds.

We support the government's policy to improve the quality of life of people with disabilities in Thai society. We are one of the private organizations that supports people with disabilities to have a career with a stable income and be self-reliant, thereby reducing social disparities and creating equality for people with disabilities in Thai society, which is in line with our commitment to sustainable operation in tandem with value creation for society.



Associate Recognition Award (ARA)

Another methodology Thai Wah employs to establish itself as the right place for its people is the Associate Recognition Award (ARA), a program to celebrate and recognize our associates that produce significant influence and inspiration and continue to lead the Thai Wah Way. The ARA aims to:

- To recognize our associates' contributions to success of their teams and by extension our company as a whole;
- To emphasize our associates' expected behaviors we would like to encourage, from Teamwork, Commitment, Leadership to Core Values, which include Pride, Integrity, and Consistency;
- To celebrate our associates' achievements across all Thai Wah locations. In 2022, we gave ARA awards to 69 associates.



Flexible Work Arrangement

As the new way of working was taking shape, we introduced Flexible Work Arrangement in 2022. Our work hours are now flexible, with an option to work from home once a week. By balancing the frequently incompatible demands of work, family, and self-care, our associates' health and well-being are improved when given the opportunity to exercise flexible work options.



Thai Wah Care & Community Day

As part of its 75th-anniversary celebrations, Thai Wah initiated the “Thai Wah Care & Community Day” with an aim of cultivating a right outlook and positive mindset. Through entertaining and engaging activities like cooking competitions using Thai Wah products, free lunches, and creative plant pot making workshops, the project enables our associates to give back to the communities by passing on smiles and happiness to children in need across the country.



Additionally, we also gave out scholarships to students in 67 schools all over Thailand, totaling over 2 million THB, enabling them to pursue their aspirations. In addition to the Thai Wah Care & Community Day, we also regularly support our communities to drive sustainability. Examples include:

- Donation of money and our vermicelli at Chao Mae Thapthim Shrine, Bang Len Old Market;
- Donation to dog shelters in Nakhon Pathom;
- Donation of food, drinking water, and our products to Bang Len Hospital and Don Tum Hospital;
- Donation of medical equipment to Bang Len Hospital and Don Toom Hospital;
- Donation of our products to the Nakhon Pathom Provincial Industry Office;
- Donation of drinking water and our products to the Bang Len sub-district community to alleviate the COVID-19;
- Donation of THB20,000 to the Nakhon Pathom Red Cross Chapter, received by the representative of the Bang Len District;
- Donation of drinking water and our vermicelli to the Bang Len Police Station to alleviate the flooding; Offering of scholarships to students on our 75th anniversary celebrations: 6 scholarships, 3,000 baht each, to Bang Len Wittaya School, and 6 scholarships, 2,000 baht each, to Ban Bang Len School;
- Donation of THB20,000 to Bang Len District to alleviate the flooding.



Associate Engagement Survey (AES)

As Thai Wah is working together towards Thai Wah 2025, its management team is committed to the professional development of each and every associate, creating a better workplace for them. In order to give our associates the opportunity to express their opinions about working in our company in a secure and worry-free manner, we announced a partnership with Willis Towers Watson (WTW), a global research and consulting firm, to carry out an Associate Engagement Survey (AES). This will help make us a more inspiring, fulfilling, and open workplace.

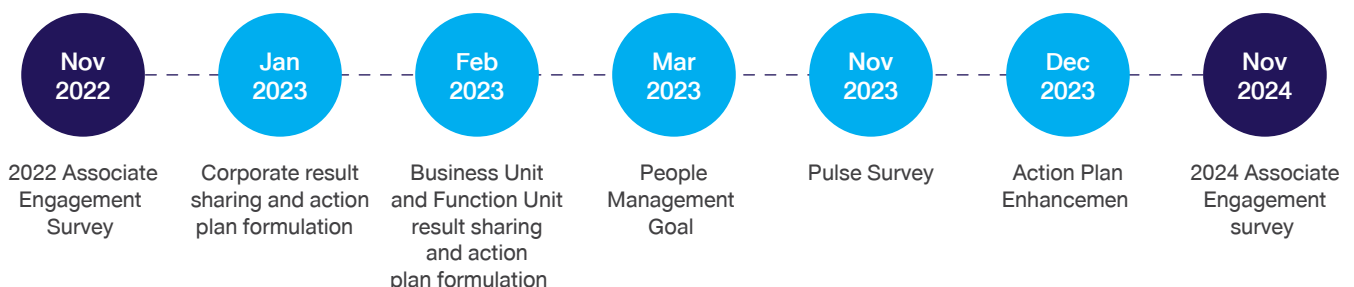
The survey was conducted from October 31 to November 11, 2022 with 3,271 associates in Thailand, Vietnam, China, Indonesia, and Cambodia participating in the survey, representing 96% of the total workforce. Our 2022 sustainable engagement score is 95%, and all drivers are above the Thailand norm, Global High performing norm, and Asia Pacific manufacturing norm.

- 98% of our associates are willing to work above and beyond their job descriptions to help our company succeed and strongly believe in the goals and objectives;
- 97% of our associates are proud to be associated with our company;
- 97% of our associates strongly believe in our products and services.

Even with this positive score, we are continuing to build an even better organization by focusing on Growth and Capability, Security, Efficiency, Drive and Inspiration & Understanding for 2023-2025

For continuous development and improvement of associate engagement, we have a plan to develop associate engagement, starting with conducting associate engagement surveys to gather information from associates at all levels, followed by summarizing findings results from the data collection to make a plan to increase the level of associate engagement and raise awareness among executives that they are involved in developing the engagement of employees in their teams. The purpose of the survey is to establish whether what has already been done can boost engagement levels or directly address engagement issues, and whether it is appropriate to keep moving forward with the development plans.

Associate Engagement Survey Plan





HR Asia Awards

As a result of all the efforts from management and everyone in Thai Wah, we received a regional recognition from HR Asia, crowned one of the Best Companies to Work for in Asia 2022. Best Companies to Work for in Asia 2022 is an awards recognition program that recognizes organizations that have been named by their associates as one of Asia's employers of choice and ascertains the best employers to work for. The award, which honors companies with the best HR practices, high levels of associate engagement, and excellent workplace cultures, is targeted at companies across Asia. The high-profile nature of this award attracts applications from Fortune 500 companies as well as other companies of various types, including multinational corporations and government-linked companies.

The awards are granted based on associate engagement and organizational culture in various dimensions. There are experts from leading organizations and academics from prestigious universities in Asia participating in the judging under the Total Engagement Assessment (TEAM), which can be divided into three following main criteria:

- CORE: Collective Organization for Real Engagement comprises culture and ethics, leadership and organization, and active initiatives;
- SELF: Heart, Mind, and Soul comprises emotional engagement, intention and motivation, and behavior and advocacy;
- GROUP: Think, Feel, and Do comprises collective consciousness, workplace sentiment, and team dynamics.





Family and Well-Being

In addition, as we are determined to develop the right workplace for our associates, our efforts were recognized by the following local institutions:

- **Best Workplace Award on Labor Relations and Welfare** at the national level achievement for the second year in a row, which aims to promote positive relationships between employers and associates in the workplace and encourage them to recognize the importance of developing labor relationships and providing welfare in the workplace that is appropriate and fair for the associates to be comfortable, stable, and safe in their employment. As a result, associates and their families enjoy a better livelihood and quality of life at work, which enhances teamwork and improves interpersonal relationships between employers and associates;
- **Sedex Members Ethical Trade Audit or SMETA Award**, which is related to the development of corporate ethics in terms of labor standards, health and safety, business ethics, and environment;
- **TLS 8001 Certification**, which aims to ensure that all associates are equally protected, which contributes to their better quality of life, safety, relationships, and morale at work.





Food and Finished Good

Thai Wah recognizes that the quality of its products is of utmost importance to the health and well-being of its consumers. As such, we pay meticulous attention to every step apparent in our business operations. In the “Food and Finished Good” Pillar, we, as a leader in the agri-food industry, attach great importance to raising quality and safety standards across the whole production process with a single goal in mind: promoting consumers’ health and enhancing their quality of life. To this end, we are constantly striving to stay ahead of the curve. We have forged partnerships with a whole host of business partners and leading research institutes, most notably Chulalongkorn University, on developing food innovations that will enable us to produce products that are healthy and tasty, convenient and easy to prepare, and full of nutritional value. As always, our ambition is to continue pushing the boundaries and set the bar higher when it comes to product quality and safety, in order to maintain our leadership in the agri-food industry.



The COVID-19 pandemic has however caused a seismic shift in consumer behavior, with safety, health, and cleanliness becoming paramount concerns. In response, we, as an international agri-food producer and exporter that supplies consumers in ASEAN countries and more than 35 other countries, must stay up to date and ahead of the ever-changing market demands and innovate to ensure optimal safety across our operations – from raw material selection and production supervision, to quality control before products are delivered to the hands of consumers all over the world. We have boldly stepped up to the plate, determined to ensure our consumers feel secure in their purchase of our products. We will continue to prioritize the three utmost needs all while attending to all other needs. We have made it our mission to ensure that with each purchase of our products comes the best innovation-enabled agri-food experience possible.

Sustainability-Oriented Innovation on Processes, Products, and Services

Thai Wah understands that the road to good health and well-being begins with making informed, mindful dietary choices. We are passionate about providing our consumers with quality, safe, nutritionally-rich products that are not only tailored to meet the individual health needs of our consumers, but are also conscious of their impact on the environment. To this end, we strive to constantly innovate, developing more innovative and sustainable agri-food products in a way that puts minimal strain on the environment – alternatives that can be enjoyed by our consumers while also respecting the planet.

As a strategy for ensuring the success in promoting healthy living and sustainability, we consequently make it our mission to utilize the latest breakthrough innovations from our research and development to develop at least 50% of our products to be beneficial to society and the environment. In doing so, the main considerations include using locally sourced raw materials, improving nutritional quality, having appropriate prices, and meeting market and consumer trends.

In 2020, we embarked on an ambitious journey to champion a healthier, more sustainable lifestyle by introducing a range of plant-based food products that have been carefully crafted to promote consumer health, protect the environment, and promote sustainable agriculture. We also offered prototype products to targeted groups of consumers, both domestically and internationally, for purchase and testing. In 2022, a total of 5 new products were released over the course of the year, and 80% of all products underwent the product development process with a focus being placed on consumer nutrition, health and well-being, and convenience. Additionally, we disseminated knowledge and understanding of products that promote better health.



	2020	2021	2022	Target 2023
Number of Consumer Health and Well-Being Products (SKU)	5	5	5	7
Newly-Developed Health and Well-Being Products as a Percentage of All New Products (%)	50	70	80	85

We are passionate about revolutionizing the way we approach health and well-being. It is our passion that drives us to explore and bring to the table the most cutting-edge and innovative solutions to ensure the health and well-being of our consumers. Through investing in research and development, we are taking a proactive approach to create a healthier future, and in turn, cultivate a more sustainable society. Our mission is to be at the forefront of progress, and to ultimately change the course of human health and well-being for the better.

Thai Wah Innovation Network

Thai Wah is unswerving in staying ahead of its contemporaries. We push the boundaries of innovation to bring into life innovative products and services that keep up with the ever-growing consumer demands. To this end, we have laid the groundwork for this with our extensive “Innovation Network,” comprising four key hubs and centers: Ideation Hub at our headquarters in Sathorn, Innovation Hub at Chulalongkorn University, Application Hub in Shanghai, China, and Innovation Application Centers in Indonesia and Vietnam. Through this collaboration, our research teams have been built up, to be able to build upon their findings and Application Hub’s resources to create process innovations and innovative products and services. These are then taken to our Innovation Application Centers to be put to test, ensuring that our customers’ needs are met. Through this network, we are able to deliver products and services that are of the highest quality and safety and ahead of the curve.





Product Quality and Safety Innovation

Thai Wah takes quality and safety seriously. From the moment ingredients are sourced to the moment products are packaged, we remain vigilant in our efforts to ensure that our products are of the highest quality and absolutely safe for consumption. Our production process is carried out in accordance with HACCP and GMP management systems, two of the industry’s most stringent systems, to ensure the optimal quality and safety of our food products in strict compliance with the laws and regulations of both Thailand and other countries. Additionally, by constantly reinforcing our internal control process, implementing advanced, cutting-edge traceability and production validation systems throughout the production process, we can guarantee that all related data and information are accurate, complete, and ready to be explicitly disclosed to interested parties at all times. Our commitment to excellence has been recognized with certification from a number of international standards, including:

Starch Factory



Food Factory





In 2022, we took a bold leap towards safeguarding the environment by switching to 100% green carton packaging for our export food product deliveries. Developed by our partner, this pioneering paper box helps decrease paper use by 25 grams per square meter, while being robust enough to hold up to stack weight and deliver up to 4-25% better protection than traditional packaging. By doing so, we managed to cut back on the consumption of non-recycled paper used to make cardboard box packaging approximately by a staggering 134 tons.

Meanwhile, we took action to revolutionize our packaging. We drastically slashing the amount of non-recycled paper used in making cardboard box packaging by 152 grams in the process. This bold move not only saves on energy costs, but also reduces shipping costs.

Additionally, to further cut down on our environmental footprint in our concerted efforts to create more sustainable practices, in 2022, we reduce a 4.8 ton in plastic usage, which in turn reduces the energy used in shipping. Not only is this move an effort to reduce the amount of plastic used per unit, but it is also another statement of our commitment to a more sustainable approach to packaging. By embracing these new ways of doing things, we set forth on a journey to make the world a greener and more sustainable place for future generations to come, setting an example for others to follow. These undertakings payoff has been tremendous — not only for the environment, but for our business as well.



Innovative Product

Thai Wah's commitment to pushing the boundaries of product safety and quality innovation is relentless. Through our Innovation Network, we are also constantly introducing consumer health and well-being products with the goal of providing healthy and convenient options. From exotic flour, to low-calorie, low-fat healthy noodle, and to food fiber with functional and physiological benefits, we are constantly striving to stay ahead of the game and remain abreast of the ever-evolving industry, with one single goal in mind: to bring our consumers the best of the best in health and well-being products.

Ready-to-eat products

Double Dragon Ready Yentafo Tom Yum Hot Pot Flavor



Thai Wah keeps up with the ever-evolving palate of its customers and stops at nothing to appeal to their tastes and cravings. Parlaying the success of three flavors of instant vermicelli products, we, through the collaboration between our marketing and R&D teams, developed our newest flavor: Yentafo Tom Yum Hot Pot. We crafted a seasoning paste that produces an immediately recognizable pink colored broth that is rich, mellow, and unique, perfectly encapsulating the tantalizing flavor and aroma of fermented bean paste. When coupled with non-fried vermicelli, the result is a product that is healthy, tasty, and nutritious, perfectly catering to the needs of Thai customers of every healthy lifestyle and staying true to its tagline “Delicious Vermicelli with a Satisfying Flavor for You to Eat Whenever You Want.”



Biodegradable Products



In 2021, we decided to take action against the unrelenting issue of plastic waste that had been plaguing our planet. We launched “RosEco,” a range of biodegradable products developed to help reduce the amount of plastic that typically ends up in landfills and oceans, doing our part in helping tackle this pressing global issue. However, our work did not stop there. We have continued to listen to our consumers and have been working diligently to perfect the products’ formulae to meet our consumers’ exact needs, staying true to the products’ tagline “Nature’s Responsible Plastic.”

Driven by the passionate belief that our planet and its people matter, our bioplastics are developed to meet our consumers’ needs for a plastic alternative that not only delivers on its promise of being eco-friendly, but also provides them with a safe and reliable product, and this gives way to our RosEco’s purpose: to create a sustainable, renewable, zero-waste solution for a better world. Our bioplastics are nature-based, made from the leftovers from our production process, allowing users to reduce the amount of not only plastic waste, but also food waste in our world, ultimately revolutionizing the way we use plastics and paving the way for a sustainable, zero-waste future that we envision.



With RosEco, our consumers can be confident that their choice will not only benefit them, but also their communities and the planet as well. Our commitment to this cause is unwavering and we remain steadfast in our mission to make a lasting difference in the fight against plastic waste.

With a heightened focus on health safety and well-being, consumers have shifted their priorities when selecting food products, now placing safety, health, and cleanliness above taste, variety, and convenience. This challenging situation offered us a seminal opportunity to stand out from the competition and solidify our position as an industry leader. This prompted us to step up our game in terms of product research and development, ensuring our products meet the needs of consumers looking for healthy, safe, and nutritious food products. To ensure our food products maintain the highest quality and safety standards, we have also implemented stringent quality management systems throughout the entire production process and have implemented quality monitoring along the supply chain.

Additionally, our research and development team has been working hard to strengthen our laboratory capacities, and as a result, we are proud to announce that our QA&QC capacity has been certified with ISO/IEC 17025 certification from the Ministry of Public Health. This certification is a testament to the dedication and commitment of our research and development team in ensuring the highest standards of quality and safety in all of the products we provide. The certification is a necessary step in ensuring the quality and safety of our products, and we are confident that this accomplishment will help us provide even better products to our customers.

Brand Equity

Thai Wah is unyielding in delivering only the best products to our consumers, with nutritional values that can be trusted and enjoyed by our customers around the world. We understand that in today's market, it is not enough to simply offer the highest-quality products; We have to go above and beyond to create an unforgettable experience. To this end, we are consistently exploring ways to improve our labeling and marketing communication. From providing detailed nutritional labels that our consumers can trust, to creating marketing campaigns that truly capture the heart and mind of our consumers, we are dutiful in providing the ultimate customer experience.

Additionally, we hold ourselves to the highest industry standards, implementing the most stringent production and quality controls, as we strive to produce only the highest quality, safest, and healthiest products that are delivered on time. This is done so that our consumers can be sure they are receiving the best of our products and services. We use customer satisfaction as a measure of our performance and as a stepping stone to further improve and develop our products and services.



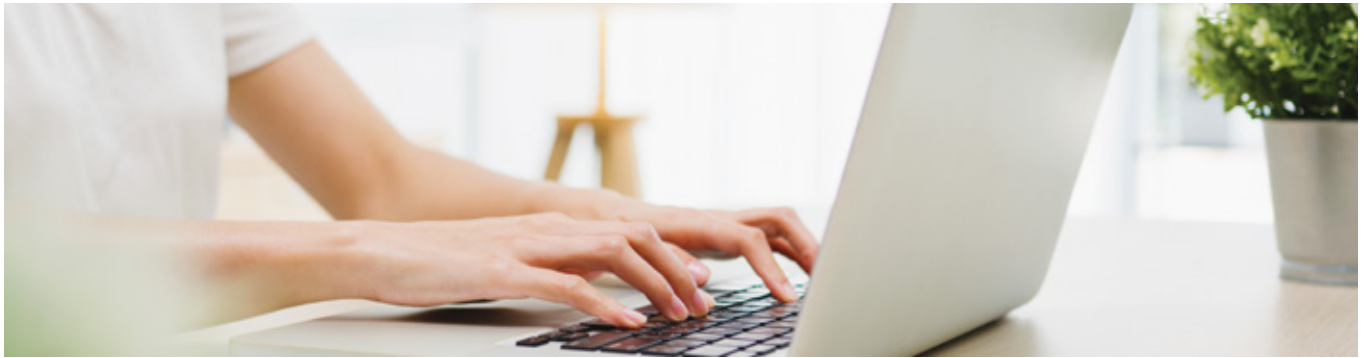
Labeling



Double Dragon Brand Bean Vermicelli Balance's Label





Thai Wah places a paramount importance on accurately displaying product information. As such, we take it upon ourselves to guarantee that all nutritional facts, cooking instructions, and other relevant information are present on all of our product packages and/or labels in accordance with applicable laws, regulations, and international standards. Moreover, we are a passionate advocate of the belief that providing accurate product information is a key element of the consumer experience. We feel an obligation to ensure that our consumers have the most current and reliable data at their disposal in order to make informed decisions that impact their health and safety.

Additionally, we go an extra mile, investing in extensively training our personnel, right down to the operational level and down to the minutest detail. This is done to ensure that they are knowledgeable and fully aware of the significance of providing consumers with complete and correct product information. This way, our consumers can be confident that they can get the most out of our products by using them correctly and to their fullest potential, leading to a superior product experience.



Marketing Communication

Thai Wah has taken bold steps forward to keep up with the ever-shifting times, understanding that more and more people are searching for information, connecting with manufacturers, and buying goods online. In response to this, we have worked hard to enhance our online marketing communication channels and ensure their effectiveness, as well as implementing a secure data security system to establish a sense of trust with our consumers. This has been complemented by the assertive implementation of online advertising via various social media platforms, including our website, Facebook, YouTube, LinkedIn, and Line@, in order to enhance the capacity and diversity of communication platforms all while gaining direct consumer feedback and promoting consumer engagement.

Main Website	https://www.thaiwah.com/
Sustainability Website	https://sdjourney.thaiwah.com/en/home
Facebook	https://web.facebook.com/Thaiwahofficial
Youtube	https://www.youtube.com/channel/UC_gvEJXW1PpPHbuXGjhrKjw
Linkedin	https://www.linkedin.com/company/thai-wah-public-company-limited https://www.linkedin.com/showcase/thai-wah-ventures/ https://www.linkedin.com/showcase/rosecobythaiwah/
Rose Starch Website	https://www.rosestarch.com/
Double Dragon	http://doubledragonbrand.com/
Thai Wah Food Online	   
Thai Wah Vietnam	https://vn.doubledragonbrand.com/en/
Thai Wah Ventures	https://www.thaiwahventures.com/
Line@	@ThaiwahStarch , @Thaiwahlovenoodles
TW Knowde	https://www.knowde.com/stores/thai-wah
Blockdit	https://www.blockdit.com/thaiwah



Additionally, to ensure consumer satisfaction, we have also introduced a comprehensive marketing strategy that takes into account the changing consumer preferences, while staying true to its core values of sustainability, innovation, and customer service. The end goal is to provide consumers with a safe, convenient, and cost-effective online shopping experience.

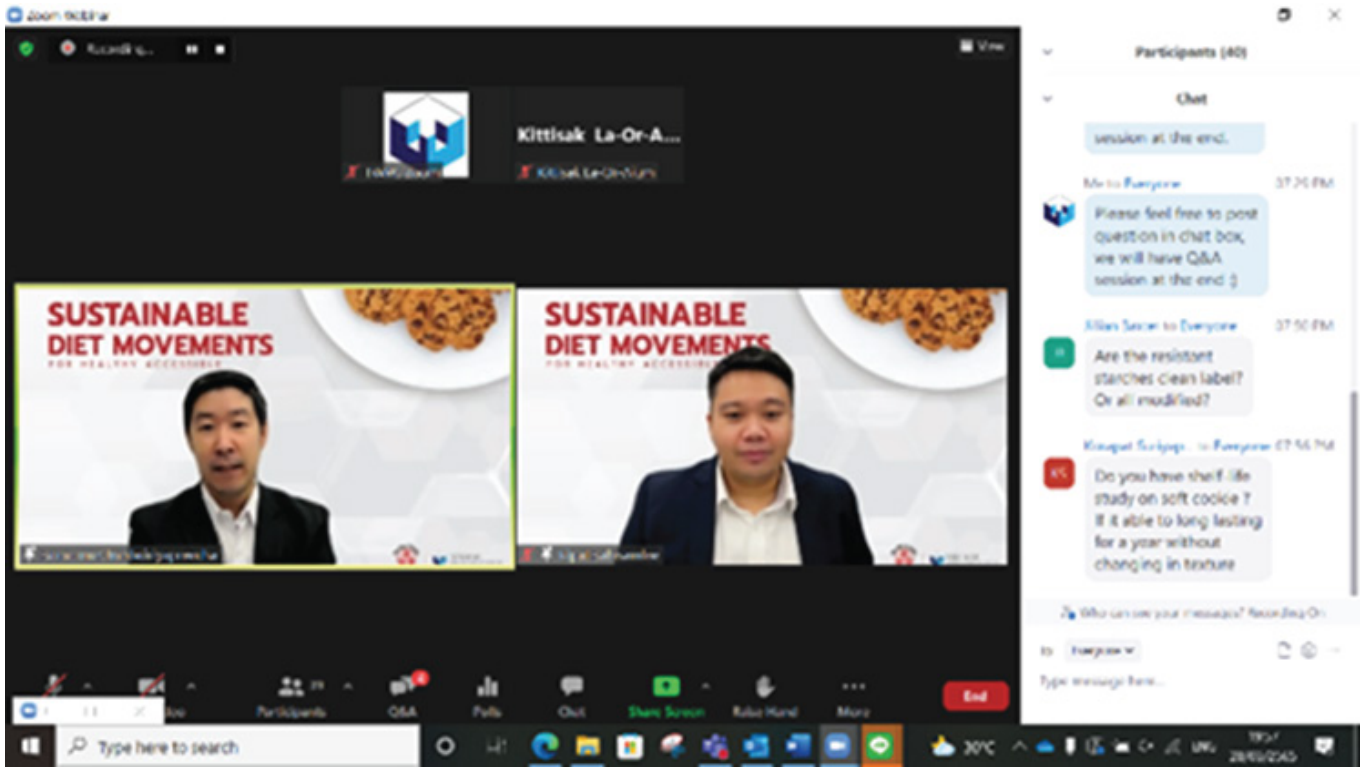
ROSE BRAND Webinar

Thai Wah recognizes that Creating Innovation and Sustainability from “Farm” to “Shelf” starts with its global customers. To this end, we have developed “ROSE BRAND Webinar,” a platform designed to bring together industry experts, professionals, and customers from all over the globe to exchange valuable insights on trends, opportunities, and breakthrough innovations in the food and beverage industry. Through this webinar, we can meet people who have an interest in our cutting-edge ROSE BRAND products, gain a deeper understanding of the market, all while marketing our products. By staying in touch with our customers and consumers, we are better able to equip our sales team with the best possible tools and resources for success and further develop our products. This forward-thinking approach to engaging with our consumers keeps us at the forefront of the industry and ensures we are always one step ahead.



Food and Finished Good

In 2022, the webinar was held under the theme “Sustainable Diet Movements for Healthy Accessible” and “Global Food Crisis with the Option for Your Solutions” which was dedicated to finding solutions to the global food crisis and discussing how to ensure access to healthy and sustainable diets for all. Through this event, we were able to share our insights on how ROSE BRAND products were contributing to the global food crisis and how to develop strategies for the sustainable production of food. The webinar was a remarkable success, gathering participants from over 25 countries around the world.



ROSE BRAND Webinar on “Sustainable Diet Movements for Healthy Accessible” and “Global Food Crisis with the Option for Your Solutions”



Local Restaurant Promotion

<p>“ถ้วยข้าวมันแม่พลู” พลักรีกฤดูสุดชขายมากกว่า 120 ถ้วย/วัน 5 วันที่แล้ว · การรับชม 4.3 พัน ครั้ง 40</p>	<p>เปิดเคล็ดลับร้านอาหารตั้ง “ถ้วยข้าวมันแม่พลู” (สาขาพิทยาศึกษา)” 7 สัปดาห์ที่แล้ว · การรับชม 2.9 พัน ครั้ง 90</p>	<p>เปิดเคล็ดลับร้านอาหารตั้ง “ถ้วยข้าวมันแม่พลู” (สาขาอมตะนคร)” 8 สัปดาห์ที่แล้ว · การรับชม 3.4 พัน ครั้ง 51</p>
<p>เปิดเคล็ดลับร้านอาหารตั้ง “แม่ศรีเรือน” 11 สัปดาห์ที่แล้ว · การรับชม 765 ครั้ง 14</p>	<p>เปิดเคล็ดลับร้านอาหารตั้ง “คำพูน (สาขาเขินทรีเรลด์)” EP2 15 สัปดาห์ที่แล้ว · การรับชม 2.7 หมื่น ครั้ง 63</p>	<p>เปิดเคล็ดลับร้านอาหารตั้ง “คำพูน (สาขาเขินทรีเรลด์)” EP1 15 สัปดาห์ที่แล้ว · การรับชม 5.4 หมื่น ครั้ง 84</p>
<p>เปิดเคล็ดลับร้านอาหารตั้ง “เบียร์หมุกระตะจูด สาขา 9 (สาขาพุทธมณฑล สาย 2)” 19 สัปดาห์ที่แล้ว · การรับชม 8.9 พัน ครั้ง 56</p>	<p>เปิดเคล็ดลับร้านอาหารตั้ง “เบียร์หมุกระตะจูด (สาขาทรนทฤกษ์)” 20 สัปดาห์ที่แล้ว · การรับชม 8.5 พัน ครั้ง 28</p>	<p>เปิดเคล็ดลับร้านอาหารตั้ง “จ่าจู้หมุกระตะจูด (สาขาเตาปูน)” 24 สัปดาห์ที่แล้ว · การรับชม 8.5 พัน ครั้ง 48</p>

Local Restaurant Promotion

Thai Wah is deeply convinced that the strength of the restaurant industry lies in the ability to learn from the success of others and build on existing food businesses. As such, in 2020, we launched an inspiring YouTube campaign to help promote street food restaurants that had been heavily impacted by the pandemic, with the aim of reviving the crisis-plagued industry, and the campaign has still been up and running till this day. We take to the streets to feature the stories of our customers who are owners of street food restaurants. We ask them to share their unique stories of how they weathered the challenging times as well as the success strategies they use to keep their restaurants afloat and winning. Through this campaign, we created an atmosphere of mutual support and encouragement, and spread the word about the restaurants.

We are unwavering in our commitment to producing only the products that are of the utmost quality and safe for consumption, as well as ensuring our products are perceived as such. We understand that in order to achieve this, we must take a holistic approach to quality and safety control throughout our entire value chain, beginning with the sourcing of raw materials and extending all the way to the delivery of the final products. In addition to that, we are dedicated to educating the public about healthy eating habits through the use of nutritional labelling and marketing communication, so that everyone can stay informed about the changing landscape of the food industry. Together, these measures ensure that our products are of the highest quality and safety and that everyone has the ability to make smart, healthy choices.



Customer Satisfaction Evaluation

Thai Wah strives to ensure that its consumers are satisfied with its products and services. To this end, we conduct an extensive customer satisfaction evaluation every year. Through the evaluation, we can gain valuable insights into customer demand and behavior, enabling us to make informed decisions about future product and service developments, as well as sales promotion strategies. As we continue to expand our global reach, the survey is becoming increasingly expansive, allowing us to gain an even better understanding of our customers' needs, wants, and interests. This allows us to make sure that our products and services are always meeting the highest standards of customer satisfaction. Customer satisfaction surveys can be broken down into two distinct categories: Starch Business and International Food Business, and Domestic Food Business.

Starch Business and International Food Business

Methodology

Online self-completion survey by Nielsen IQ

Questionnaire Topic

- 1. Buying Factor;
- 2. Product Quality;
- 3. Package and Labeling;
- 4. Product Variety;
- 5. Service and support; and
- 6. Delivery



Overall Satisfaction Score

	2018	2019	2020	2021	2022	Target 2023
Starch Business and International Food Business (%)	86	90	83	83	88	91

The Overall Satisfaction Score grew by 5% from 2021, exceeding the 84% target.



Food and Finished Good

The survey results demonstrate that among our consumers' top considerations when making a purchase are Product Quality, Safety, and Variety. And our dedication to offering a wide variety of safe, clean, high-quality products to our consumers is evidenced by very high satisfaction scores across the board, measuring Product Quality, Product Cleanliness and Safety, and Product Variety. All of this illustrates our capacity to serve our consumers a larger variety of innovative, safe, clean, high-quality products.

We have always been committed to actively listening to its consumers, understanding that their opinions are essential to its growth. In response to the survey results that illustrate that Speed of Sales Response and Speed of Delivery are what our consumers value most, we have taken steps to enhance our digital and commercial platform services in order to ensure that consumer communication and response times are as fast as possible, keeping up with our rapidly-growing consumer portfolio, which has now reached across the globe. In 2023, we will make it our mission to further improve our consumer- centricity by bolstering communication and response times to ensure that our consumers' needs are met with the utmost efficiency. Additionally, we will also strengthen our position as the leader in the agri-food industry through the continued development of high-quality products and the maintenance of the stellar performance of our offerings to ensure that our consumers will walk out satisfied.

Domestic Food Business

Methodology

Phone call by independent party

Questionnaire Topic

1. Overall Product Satisfaction;
2. Overall Product Quality;
3. Overall Packaging Quality;
4. Overall Product Delivery Satisfaction;
5. Overall Sales Service Satisfaction;
6. Overall Marketing Satisfaction;
7. Overall Sales Promotion Satisfaction; and
8. Overall Satisfaction

Overall Satisfaction Score

	2018	2019	2020	2021	2022	Target 2023
Food Business (%)	85	84	86	85	91	91

The Overall Satisfaction Score grew by 6% from 2021, exceeding the 88.5% target.



Food and Finished Good

Thai Wah delves deep into consumer feedback in order to gain a comprehensive understanding of any concerns that are being expressed and thereby provide the best possible consumer experience. In 2022, we made sure to meticulously analyse consumer feedback for each questionnaire item in order to craft impactful solutions. This is key, as it enables us to fully comprehend and promptly respond to any feedback. Additionally, our Commercial and Operation teams have a monthly meeting to discuss consumer feedback, identify areas for improvement, and agree on specific goals to strive for. This enables us to be proactive in our response to customer feedback and ensure that their needs are being met in the most effective way.

We understand that in order to stay at the forefront of the industry, we need to work together with our regional partners in research and development to create the most innovative holistic solutions when it comes to agri-food products and services. By working together, we can ensure that not only are our products of the highest quality and safety, but they are also presented in a way that is highly- engaging with our consumers to ensure their best consumption experience. Our dedication to excellence, combined with our commitment to innovative solutions, will ensure that we will remain a leader in the industry for years to come.

At Thai Wah, we are steadfast in our commitment to providing our consumers with the finest products. Our dedication to delivering healthy, tasty, and convenient products that are packed full of nutritional value and can be enjoyed by consumers around the world is unwavering. In the “Food and Finished Good” Pillar, we strive for innovation-driven perfection with each step of our production process, with a single goal in mind — delivering the best innovation-enabled agri-food experience possible that is in line with UN’s Sustainable Development Goals (SDGs). And we understand that only through collaboration with business partners and leading research institutes in our innovation network can we deliver such the best experience. In light of the current pandemic, we are determined to prioritize safety, health, and cleanliness above all else. We are passionately devoted to staying ahead of the ever-evolving market needs and outbesting ourselves with sustainability-oriented innovations in every aspect of our business that can have a positive impact on our consumers’ health and well-being and our environment. We are committed to the UN’s SDGs and are continuously striving to improve our processes, products, services, as well as our labeling and marketing communication to provide our consumers with such remarkable experiences. We are investing in research and development in order to bring about a sustainable, innovation- enabled lifestyle that is beneficial for our consumers and our planet. We are confident that our efforts will help us build a better future for all.



Appendix

About This Report

Thai Wah Public Company Limited, or TWPC, reports on its sustainability performance every year. Through the dissemination of information on our performance on the crucial sustainability issues affecting our business operations and stakeholders, as well as on their economic, social, and environmental impacts, we aim for it to serve as a channel for communicating our corporate commitment to sustainability to the general public. We report on our key indicators, goals, and operational enhancements from our integrated sustainability strategies that are associated with corporate practices and responsibilities in line with our core values towards innovation development, all in an effort to advance sustainability from farm to shelf.



Reporting Period and Boundary

Thai Wah Sustainability Report 2022 covers the Company's and its subsidiaries' complete operations in each of its three primary businesses, namely 1) starch and related products, 2) food products, and 3) biodegradable products, throughout the year – from January 1st to December 31st, 2022.

Reporting Cycle

Annual

Report details and reporting references

This report is the 5th Sustainability Report of Thai Wah Public Company Limited. We report in accordance with the GRI Standards for the time frame of January 1st through December 31st, 2022. The Sustainable Development Goals (SDGs) are considered when carrying out our organizational operations.

Guidelines for report contents

The report's contents are consistent with the Company's sustainable development strategy and important sustainability issues. We attach great importance to stakeholder engagement in the process of identifying and defining sustainability issues, which can be broken down into the following four steps:

1. Select and improve reporting issues from the workshops with senior management while taking into consideration important factors, such as the interests of stakeholders, both inside and outside the organization, and the key issues of group companies in the same industry;
2. Analyze the issues and put them into priority order by taking into consideration significant impacts of our corporate operations to the economy, society and environment as well as external stakeholders;
3. Submit the issues to the Audit Risk Management and Corporate Governance Committee (ARCG) for yearly review and approval of significant sustainability issues with regard to both internal and external impacts;
4. Disclose information on how the organization addresses sustainability issues in the form of sustainability reports and provide channels for feedback and suggestions from external stakeholders, as well as recommendations on how to enhance the organization's operating model in compliance with its sustainability guidelines.



Assurance to this Report

The report's key contents have been reviewed and approved by high-level executives of each department and subsidiary to ensure their correctness and response to stakeholders.

Access to Sustainability Reports

Sustainability Reports for the year 2022 and prior years, as well as the Company's GRI Content Index and Sustainability Performance Data, are available on the Company's website in the "Sustainability" section.

Contact

The Company welcomes opinions and suggestions to develop and improve its operations as well as its performance reports in the following years. The contact can be done through the following channels:

Group Sustainability and Corporate Communications
Thai Wah Public Company Limited
Telephone : +662-285-0040 **Email** : sd@thaiwah.com



GRI content index

Statement of use	Thai Wah has reported in accordance with the GRI Standards for the period 1 January 2022 to 31 December 2022.
GRI 1 used	GRI 1: Foundation 2021

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			Mapped to SDGs
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
General disclosures						
GRI 2: General Disclosures 2021	2-1 Organizational details	Front cover, Back cover				
	2-2 Entities included in the organization's sustainability reporting	84				
	2-3 Reporting period, frequency and contact point	83-85				
	2-4 Restatements of information	Sustainability Performance Data 2022 (Human Capital)				
	2-5 External assurance	17, 85				
	2-6 Activities, value chain and other business relationships	7, 8				
	2-7 Employees	54, Sustainability Performance Data 2022 (Human Capital)				
	2-8 Workers who are not employees	54, Sustainability Performance Data 2022 (Human Capital)				
	2-9 Governance structure and composition	17, Annual Report 2022 (111-112)				
	2-10 Nomination and selection of the highest governance body	Annual Report 2022 (100-101, 118-119)				
	2-11 Chair of the highest governance body	Annual Report 2022 (111-114)				
	2-12 Role of the highest governance body in overseeing the management of impacts	Annual Report 2022 (111-128)				
	2-13 Delegation of responsibility for managing impacts	Annual Report 2022 (103)				



Appendix

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			Mapped to SDGs
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
General disclosures						
GRI 2: General Disclosures 2021	2-14 Role of the highest governance body in sustainability reporting	17				
	2-15 Conflicts of interest	Annual Report 2022 (80)				
	2-16 Communication of critical concerns	26-27				
	2-17 Collective knowledge of the highest governance body	17				
	2-18 Evaluation of the performance of the highest governance body	Annual Report 2022 (110, 114-128)				
	2-19 Remuneration policies	Annual Report 2022 (130-131)				
	2-20 Process to determine remuneration	Annual Report 2022 (130-131)				
	2-21 Annual total compensation ratio			Confidentiality Constraints		
	2-22 Statement on sustainable development strategy	31-32, 35				
	2-23 Policy commitments	9-11				
	2-24 Embedding policy commitments	11				
	2-25 Processes to remediate negative impacts	https://sdjourney.thaiwah.com/en/sd-journey-by-thai-wah/sustainability-framework				
	2-26 Mechanisms for seeking advice and raising concerns	https://sdjourney.thaiwah.com/en/sd-journey-by-thai-wah/sustainability-framework				
	2-27 Compliance with laws and regulations	Annual Report 2022 (83)				
	2-28 Membership associations	https://sdjourney.thaiwah.com/en/sd-journey-by-thai-wah/our-partners				
	2-29 Approach to stakeholder engagement	https://sdjourney.thaiwah.com/en/sd-journey-by-thai-wah/sustainability-framework				
	2-30 Collective bargaining agreements			Not applicable		



Appendix

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			Mapped to SDGs
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Material topics						
GRI 3: Material Topics 2021	3-1 Process to determine material topics	https://sdjourney.thaiwah.com/en/sd-journey-by-thai-wah/stakeholder-engagement-and-key-sustainability-issues				
	3-2 List of material topics	https://sdjourney.thaiwah.com/en/sd-journey-by-thai-wah/stakeholder-engagement-and-key-sustainability-issues				
Economic performance						
GRI 3: Material Topics 2021	3-3 Management of material topics	Annual Report 2022 (12-17)				
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	13, Annual Report 2022 (12)				
Indirect economic impacts						
GRI 3: Material Topics 2021	3-3 Management of material topics	31-32, 35				
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	31-32, 35				1, 2
	203-2 Significant indirect economic impacts	31-32, 35				1, 2
Procurement practices						
GRI 3: Material Topics 2021	3-3 Management of material topics	24-25				
GRI 203: Indirect Economic Impacts 2016	204-1 Proportion of spending on local suppliers	25				1, 12
Anti-corruption						
GRI 3: Material Topics 2021	3-3 Management of material topics	26-27				
GRI 205: Anti-corruption 016	205-1 Operations assessed for risks related to corruption	26-27				16
	205-2 Communication and training about anti-corruption policies and procedures	26-27				16
	205-3 Confirmed incidents of corruption and actions taken	26-27				16



Appendix

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			Mapped to SDGs
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Anti-competitive behavior						
GRI 3: Material Topics 2021	3-3 Management of material topics	Annual Report 2022 (18-24)				
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Annual Report 2022 (83)				
Water and effluents						
GRI 3: Material Topics 2021	3-3 Management of material topics	37-38, 47-48				
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	47-48				6
	303-2 Management of water discharge-related impacts	47-48				6
Emissions						
GRI 3: Material Topics 2021	3-3 Management of material topics	37-38, 44-46				
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	44-46, Sustainability Performance Data 2022 (Environment)				
	305-2 Energy indirect (Scope 2) GHG emissions	44-46, Sustainability Performance Data 2022 (Environment)				3, 12, 13, 14, 15
	305-3 Other indirect (Scope 3) GHG emissions	Sustainability Performance Data 2022 (Environment)				3, 12, 13, 14, 15
Waste						
GRI 3: Material Topics 2021	3-3 Management of material topics	37-38, 49				
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	49				13, 14, 15
	306-2 Management of significant waste-related impacts	49				13, 14, 15
	306-3 Waste generated	49				13, 14, 15
	306-4 Waste diverted from disposal	49				13, 14, 15



Appendix

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			Mapped to SDGs
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Supplier environmental assessment						
GRI 3: Material Topics 2021	3-3 Management of material topics	24, 25				
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	25				12
Employment						
GRI 3: Material Topics 2021	3-3 Management of material topics	54-57				
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Sustainability Performance Data 2022 (Human Capital)				5, 8, 10
	401-3 Parental leave	Sustainability Performance Data 2022 (Human Capital)				5, 8
Occupational health and safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	38-43				
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	38-43				3, 8, 16
	403-2 Hazard identification, risk assessment, and incident investigation	38-43				3, 8, 16
	403-3 Occupational health services	38-43				3, 8, 16
	403-4 Worker participation, consultation, and communication on occupational health and safety	41				3, 8, 16
	403-5 Worker training on occupational health and safety	40-41				3, 8, 16
	403-6 Promotion of worker health	66				3, 8, 16
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	38-43				3, 8, 16
	403-8 Workers covered by an occupational health and safety management system	38-43, Sustainability Performance Data 2022 (Safety)				3, 8, 16
	403-9 Work-related injuries	38-43, Sustainability Performance Data 2022 (Safety)				3, 8, 16



Appendix

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			Mapped to SDGs
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Training and education						
GRI 3: Material Topics 2021	3-3 Management of material topics	53-54				
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Sustainability Performance Data 2022 (Human Capital)				5, 8, 10
	404-2 Programs for upgrading employee skills and transition assistance programs	58-61				8
	404-3 Percentage of employees receiving regular performance and career development reviews	Sustainability Performance Data 2022 (Human Capital)				8
Diversity and equal opportunity						
GRI 3: Material Topics 2021	3-3 Management of material topics	54				
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Sustainability Performance Data 2022 (Human Capital)				5, 10
Customer health and safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	67-70				
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Annual Report 2022 (83)				3, 12
Marketing and labeling						
GRI 3: Material Topics 2021	3-3 Management of material topics	74-75				
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	74-75				3, 12



UNGC Communication on Progress (COP)

	Principle	Location
Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights	Annual Report 2022 (83-84)
	Principle 2: Business should make sure that they are not complicit in human rights abuses	Annual Report 2022 (83-84)
Labor	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Annual Report 2022 (83-84)
	Principle 4: Business should uphold the elimination of all forms of forced and compulsory labour	Annual Report 2022 (83-84)
	Principle 5: Business should uphold the effective abolition of child labour	Annual Report 2022 (83-84)
	Principle 6: Business should uphold the elimination of discrimination in respect of employment and occupation	Annual Report 2022 (83-84)
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges	28-36, 43-52
	Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility	28-36, 43-52
	Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies	28-36, 43-52
Anti-corruption	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery	26-27, Annual Report 2022 (84-94)



Sustainability Performance Data

Human Capital										
GRI	Disclosures	Unit	2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
102-7, 405-1	Number of Employee									
	Total employee	Person	3,282		3,282		3,282		3,442	
		Person	1,643	1,639	1,589	1,665	1,627	1,736	1,653	1,789
405-1	Total employee by area									
	Bangkok	Person	75	112	90	135	97	130	99	133
	Other provinces	Person	1,598	1,497	1,499	1,530	1,530	1,606	1,554	1,656
102-8	Total employee by employment contract and by area									
	Permanent contract	Person	1,574	1,566	1,445	1,583	1,440	1,626	1,464	1,426
	Bangkok	Person	75	112	90	135	97	130	99	132
	Other provinces	Person	1,499	1,454	1,355	1,448	1,343	1,496	1,365	1,294
	Temporary contract	Person	99	43	144	82	187	110	189	363
	Bangkok	Person	0	0	0	0	0	0	0	0
	Other provinces	Person	99	43	144	82	187	110	189	362
	Total employee by employment type									
	Full-time	Person	1,574	1,566	1,445	1,583	1,440	1,626	1,653	1,789
	Part-time	Person	0	0	0	0	0	0	0	0
405-1	Total employee by age group									
	<30 years	Person	872		883		978		978	
		% of total employee	26.57		27.14		29.08		28.41	
	<30 years	Person	453	419	419	456	475	503	489	489
		% of total employee	13.80	12.77	13.12	14.01	14.12	14.96	14.21	14.21
	30-50 years	Person	1,840		1,807		1,848		1,899	
		% of total employee	56.06		55.53		54.95		55.17	
		Person	914	926	889	918	878	970	895	1004
		% of total employee	27.85	28.21	27.32	28.21	26.11	28.84	26.00	29.17
	>50 years	Person	570		564		537		565	
% of total employee		17.37		17.33		15.97		16.41		
Person		276	294	273	291	274	263	269	296	
% of total employee		8.41	8.96	8.39	8.94	8.15	7.82	7.82	8.60	



Appendix

Human Capital

Total employee by employee category (level)

Executive	Person	5	3	4	2	4	2	3	2
	% of total employee	0.15	0.09	0.12	0.06	0.12	0.06	0.09	0.06
Management	Person	43	34	39	37	42	38	45	41
	% of total employee	1.31	1.04	1.20	1.14	1.25	1.13	1.31	1.19
Senior	Person	1.75	123	132	160	146	158	185	183
	% of total employee	0.05	3.75	4.06	4.92	4.35	4.70	5.37	5.32
Employee	Person	1,493	1,479	1,414	1,466	1,435	1,538	1,420	1,563
	% of total employee	45.49	45.06	43.45	45.05	42.67	45.73	41.26	45.41

People with disability

People with disability	Person	10	7	10	6	9	5	11	7
	% of total employee	0.30	0.21	0.31	0.18	0.27	0.15	0.32	0.20

401-1

New employee

New employee	Person	775		557		848		713	
		383	392	343	214	385	463	347	366
New hire rate	% of total employee	23.61		17.12		25.22		20.71	
		11.67	11.94	10.54	6.58	11.45	13.77	10.08	10.63

New employee by area

Bangkok	Person	NA	NA	NA	NA	21	27	21	26
	% of total employee	-	-	-	-	0.62	0.80	0.61	0.76
Other provinces	Person	383	392	343	214	364	436	326	340
	% of total employee	11.67	11.94	10.54	6.58	10.82	12.96	9.47	9.88

New employee hire by age group

<30 years	Person	476		386		581		416	
	% of total employee	14.50		11.86		17.28		12.09	
	Person	224	252	277	109	274	307	198	218
	% of total employee	6.83	7.68	8.51	3.35	8.15	9.13	5.75	6.33
30-50 years	Person	298		171		267		291	
	% of total employee	9.08		5.26		7.94		8.45	
	Person	158	140	66	105	111	156	144	147
	% of total employee	4.81	4.27	2.03	3.23	3.30	4.64	4.18	4.27
>50 years	Person	6		5		5		5	
	% of total employee	0.18		0.15		0.15		0.15	
	Person	1	0	0	0	0	0	5	1
	% of total employee	0.03	-	-	-	-	-	0.15	0.03



Appendix

Human Capital									
Turnover									
Total employee turnover rate	Person	669		631		762		958	
	% of total employee	21.30		19.39		22.66		27.83	
	Person	367	332	297	334	367	395	524	434
	% of total employee	11.18	10.12	9.13	10.26	10.91	11.75	15.22	12.61
Turnover rate by age group									
<30 years	Person	209	210	225	220	238	245	292	241
	% of total employee	6.37	6.40	6.91	6.76	7.08	7.29	8.48	7.00
30-50 years	Person	147	112	62	99	120	134	209	165
	% of total employee	4.48	3.41	1.91	3.04	3.57	3.98	6.07	4.79
>50 years	Person	11	10	10	15	9	16	23	28
	% of total employee	0.34	0.30	0.31	0.46	0.27	0.48	0.67	0.81
Turnover by area									
Bangkok	Person	NA	NA	NA	NA	NA	NA	29	26
	% of total employee	NA	NA	NA	NA	NA	NA	0.84	0.76
Other provinces	Person	NA	NA	NA	NA	NA	NA	495	408
	% of total employee	NA	NA	NA	NA	NA	NA	14.38	11.85
401-3	Parental leave								
Number of employees entitled to parental leave	Person	0	3	0	5	0	6	0	5
Number of employees taking parental leave	Person	0	3	0	5	0	7	0	5
Number of employees returning to work after parental leave	Person	0	2	0	4	0	6	0	5
Number of employees returning to work after parental leave who were still employed for 12 months after returning	Person	0	2	0	4	0	6	0	4
Employee returning to work retention rate	%	0	67	0	5	0	100	0	80



Appendix

Human Capital										
404-1	Employee training									
	Average hours of training by management level									
	Executive	Hour/person/year	NA	NA	NA	NA	NA	NA	NA	NA
	Management	Hour/person/year	116	116	140	140	95	95	118	122
	Senior	Hour/person/year	70	70	50	50	62	62	52	52
	Employee	Hour/person/year	33	32	26	24	30	31	35	36
404-3	Employee receiving regular performance and career development reviews									
	Executive	Person	5	3	4	2	4	2	3	2
		%	-	-	-	-	-	-	100	100
	Management	Person	43	34	39	37	42	38	45	41
		%	-	-	-	-	-	-	100	100
	Senior	Person	102	123	132	160	146	158	185	183
		%	-	-	-	-	-	-	100	100
	Employee	Person	1,493	1,479	1,414	1,466	1,435	1,538	1,420	1,563
		%	-	-	-	-	-	-	100	100
	Employee Engagement									
	Coverage	% of total employee								96
	Employee sustainable engagement result	%								95
	Gender Diversity									
Women in workforce	Person		1,639		1,665		1,736		1,789	
	% of total employee		49.94		51.17		51.62		51.98	
Women in management positions	Person		37		39		40		43	
	% of total employee in management position		43.53		47.56		46.51		47.25	



Appendix

Environment							
GRI	Disclosures	Unit	2018	2019	2020	2021	2022
	Greenhouse Gas Emission*						
	Total GHG emissions (scope 1+2)	tons CO2 equivalent	NA	NA	31,404	40,022	19,027
305-1	Direct GHG emissions (scope 1)	tons CO2 equivalent	NA	NA	21,175	26,429	5,900
305-2	Indirect GHG emissions (scope 2)	tons CO2 equivalent	NA	NA	10,229	13,593	13,127
305-3	Other Indirect GHG emissions (scope 3)	tons CO2 equivalent	NA	NA	47,799	NA	NA
	Supply Chain						
308-1	Percentage of new suppliers that were screened using environmental criteria	% of new suppliers	NA	NA	11	16	20

Safety and Occupational Health							
403-8	Work-related fatalities						
	Employees and Contractor						
	Covered by an occupational health and safety management system	Person	0	0	0	0	0
		%	NA	NA	NA	NA	NA
	Covered by such as system that has been internally audited	Person	0	0	0	0	0
		%	NA	NA	NA	NA	NA
	Covered by such a system that has been audited or certified by an external party	Person	0	0	0	0	0
%		NA	NA	NA	NA	NA	
403-9	Fatalities as a result of work-related injury						
	Employees and Contractor	Case	0	0	0	0	0
		Case/1 million manhours	0	0	0	0	0
	Bangkok	Case	0	0	0	0	0
		Case/1 million manhours	0	0	0	0	0
	Other provinces	Case	0	0	0	0	0
		Case/1 million manhours	0	0	0	0	0



Appendix

Safety and Occupational Health							
GRI	Disclosures	Unit	2018	2019	2020	2021	2022
403-9	High-consequence work-related injuries (excluding fatalities)						
	Employees and Contractor	Case	9	14	16	11	8
		Case/1 million manhours	13.45	20.93	23.92	16.44	5.3
	Bangkok	Case	0	0	0	0	0
		Case/1 million manhours	0	0	0	0	0
	Other provinces	Case	9	14	16	11	8
		Case/1 million manhours	13.45	20.93	23.92	16.44	5.3
	Recordable work-related injuries						
	Employees and Contractor	Case	48	130	17	20	9
		Case/1 million manhours	71.75	44.84	23.41	29.9	
	Bangkok	Case	0	0	0	0	0
		Case/1 million manhours	0	0	0	0	0
	Other provinces	Case	48	30	17	20	9
		Case/1 million manhours	71.75	44.84	25.41	29.9	
	Number of Hours Worked						
	Employees	Manhours	NA	NA	7,201,916	7,558,742	9,193,264
	Contractor		NA	NA	NA	NA	NA
	Loss Time Injury Frequency Rate: LTIFR						
Employees and Contractor	Case	57	44	33	31	17	
	Case/1 million manhours	65.4	13.1	39.9	65.9	27.6	
	% of revenue	NA	NA	NA	NA	NA	



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