

## JOINT MEDIA RELEASE

# **Food Manufacturing sector to benefit from new growth strategies in refreshed Industry Transformation Map 2025**

*Jobs Transformation Map designed in parallel to prepare food manufacturers and workers for the future*

MR No.: 074/22

Singapore, Wednesday, 14 December 2022

1. Minister for Manpower and Second Minister for Trade and Industry Dr Tan See Leng launched the Food Manufacturing Industry Transformation Map (ITM) 2025 today at the official opening of Sin Mui Heng Food Industries' new factory at Bedok Food City.
2. The Food Manufacturing ITM 2025, developed by Enterprise Singapore (EnterpriseSG) in collaboration with key industry players and other government agencies, aims to **establish Singapore as a trusted food and nutrition leader, and the preferred launchpad into Asia for quality brands. While internationalisation and innovation remain key staples under Singapore's strategy to achieve this, there is a new emphasis on sustainability and resilience.**
3. In line with the ITM, the Jobs Transformation Map (JTM) for the sector was also unveiled to enable employers to equip their workforce with the necessary skills and offer new job opportunities in tandem with transformation efforts.

### **Progress since the first Food Manufacturing ITM**

4. Since the launch of the first Food Manufacturing ITM in 2016, the sector has seen good progress in the following areas:
  - a. Internationalisation – Establishment of new market entry models via collaborations with local and overseas partners resulted in domestic exports growing at a compound annual growth rate of 3.3% from 2016 to 2019.

- b. Innovation – Set up of FoodInnovate<sup>1</sup> in 2018, which has facilitated the launch of more than 650 new innovative products and established a network of 16 shared R&D and pilot production facilities. There was also significant growth in the food tech startup ecosystem with 85 startups offering deep tech solutions in alternative proteins, functional ingredients, and processing technologies.
- c. Digitalisation and productivity – Close to 480 projects undertaken by food manufacturers to drive automation and operational excellence. The Food Manufacturing Industry Digital Plan, which is a step-by-step guide on digital solutions and corresponding roadmap of training programmes, was also rolled out in 2021 to help companies adopt suitable digital solutions at different stages of their digitalisation journey.
- d. Talent – Workforce was upgraded through the Skills Framework for Food Manufacturing and Career Conversion Programme (CCP) for Food Production Specialist that were introduced in 2018.

### **Strategies of the Food Manufacturing ITM 2025**

- 5. The Food Manufacturing sector is poised to see further growth and transformation, driven by rising consumerism in Asia, shifts towards sustainability and growing consumer demand for alternative proteins. Building on the success of the first ITM, the refreshed ITM 2025 lays out four key strategies to support the sector in its next phase of growth and transformation:

#### **Strategy 1: Groom local champions through internationalisation and innovation**

- 6. Overseas expansion and continuous innovation will remain as key strategies to drive the growth of food manufacturing companies, with added focus on fostering a supportive ecosystem and growing partner networks to enable greater access to markets, resource sharing and co-innovation.
- 7. As our borders reopen, it is timely for companies to step up internationalisation efforts to expand and diversify revenue streams.

---

<sup>1</sup> FoodInnovate was launched by EnterpriseSG in 2018, together with Agency for Science, Technology and Research, Economic Development Board, Innovation Partner for Impact, JTC Corporation and the then-Agri-Food and Veterinary Authority, to grow Singapore's food industry through innovation. The initiative aims to pool and optimise resources to drive food tech and innovations, particularly through access to shared infrastructure and industry knowledge.

- a. Those new to internationalisation can tap on the [Internationalisation Handbook](#) that provides an overview of the key steps and considerations for overseas entry to different markets, as well as market insights and tips.
  - b. EnterpriseSG will help companies who are already exporting overseas to deepen market penetration through initiatives like branding and connecting them with overseas contract manufacturing opportunities to scale production.
  - c. We will continue to partner trade associations and chambers (TACs), such as the Singapore Food Manufacturers' Association (SFMA), to drive internationalisation through participation in tradeshows and in-market business matching activities with overseas buyers.
8. To catalyse more innovation activities, we will expand the network of both local and international partners to help companies strengthen R&D and innovation capabilities, differentiate their products for the global marketplace, provide access to investments, and capture opportunities in new business segments such as alternative proteins and elderly nutrition. Initiatives like FoodPlant<sup>2</sup> and its partnership with Foodbowl New Zealand<sup>3</sup>, will develop capabilities in food innovation through resource and knowledge sharing, and extension of industry networks.
9. EnterpriseSG will also continue to work with industry partners to build a robust food tech ecosystem to support the growth of startups and develop new technologies for the sector. FoodInnovate, led by EnterpriseSG, will offer infrastructure, financing, market access networks, talent support and co-innovation platforms, with a view to grow a pool of quality food tech startups with transformative technologies. We will also drive more commercial partnerships between food tech startups and food manufacturers to help startups scale and accelerate innovation across the food value chain.

## **Strategy 2: Elevate Singapore's attractiveness as a regional food hub**

10. Many global food manufacturing brands and startups have chosen Singapore as their base and testing ground for new products in Asia due to our R&D capabilities, progressive regulations and strong network of cross-border partnerships. We will continue to build on this to attract global investments in high value activities such as R&D

---

<sup>2</sup> FoodPlant is Singapore's first shared facility for small-batch food production established to support innovation and accelerate the commercialisation rate of new products in the Food Manufacturing sector.

<sup>3</sup> Foodbowl New Zealand is a government-supported, pilot-scale food processing facility located in South Auckland, New Zealand. The facility provides food businesses a platform to innovate, scale up and commercialise new products.

and build capacity to scale manufacturing of novel food products through advanced technologies and Industry 4.0.

11. EnterpriseSG will continue to work with partners to help our companies build deeper regional consumer insights to support the development of food products that are relevant for Asia. For example, the Food Innovation and Resource Centre (FIRC) is partnering L'earth and HAO Mart to provide businesses with consumer sensory analysis and product customisation for the Vietnam market. Such insights and collaborations will reinforce Singapore's position as a launchpad for new products into Asia and facilitate more co-innovation and commercial partnerships between global and local companies.

### **Strategy 3: Build resilient and sustainable companies**

12. To cope with pressing challenges of supply chain disruptions and rising business costs, food manufacturing companies must develop business continuity capabilities to strengthen their supply chain resilience and ability to respond to business disruptions. EnterpriseSG will work with Workforce Singapore (WSG) and the TACs to develop a business continuity plan (BCP) training programme for companies. Companies are also encouraged to enhance their supply chain resilience through source diversification, stockpiling of key ingredients, upstream integration, and enhancement of production capabilities.
13. With the growing focus on sustainability globally, EnterpriseSG will work with National Environment Agency (NEA) and the TACs to encourage companies to adopt green manufacturing practices across the food value chain. These include the adoption of resource efficient solutions, reduction and optimisation of food waste, and use of sustainable food packaging. EnterpriseSG will also be supporting the Singapore Food Alliance<sup>4</sup> in developing a sustainability roadmap for food manufacturers.

### **Strategy 4: Step up workforce transformation and create quality jobs for locals**

---

<sup>4</sup> Singapore Food Alliance is made up of eight food-related trade associations namely Singapore Food Manufacturers' Association, Bedok Industrial Association, Meat Traders' Association, Seafood Industries Association Singapore, Singapore Bakery and Confectionary Trade Association, Singapore Noodles Manufacturer Association, Singapore Toys and Confectionary Dealers' Association and Woodlands East Industrial & Commercial Association.

14. In line with the Food Manufacturing ITM 2025, EnterpriseSG worked with the Ministry of Manpower (MOM) and WSG to develop the Jobs Transformation Map (JTM) to guide employers and workers on the skills and talent needed for this rapidly evolving sector.
15. The JTM identifies the trends and impact on key jobs within the sector over the next three to five years. It recommends strategies that companies can adopt to enhance the competitiveness and capabilities of their talent pool to support business transformation efforts. Within the next five years,
  - a. Close to a quarter of the 22 job roles studied in the JTM will undergo some change and require job redesign for enhanced scope or responsibilities. Example of roles include Production Operator, Maintenance Technician, Production Supervisor and QC Technician. Potential skills top-ups include *Process Improvement*, *Risk Management* and *Customer Behaviour Analysis*<sup>5</sup> for these roles;
  - b. The remaining job roles, while largely unchanged, will still require some upskilling to ensure workers are equipped with relevant skills as the sector transforms and adopts more automation and digitalisation;
  - c. Eight new or emerging roles have been identified. These include Novel Foods Technical Services Manager, Food Technologist, Automation Engineer, Sustainability Manager. Potential skills needed for these roles include *Laboratory Data Analysis*, *Novel Food Production Design*, *Automation Design* and *Sustainability Management*<sup>6</sup>.

More details can be found in [Annex 1 and 2](#).

16. Government agencies such as EnterpriseSG, WSG and SkillsFuture Singapore (SSG), along with partners such as NTUC, will continue to support more companies to redesign jobs, reskill and upskill workers for the roles identified in the JTM. For example, through the CCP for Food Manufacturing Professionals and Associates, newly hired individuals and existing employees can undergo skills conversion and move into new, redesigned or emerging roles, especially in areas such as food innovation and operating new machineries. This can be complemented with SkillsFuture Series courses and SkillsFuture Work Study Programmes.

---

<sup>5,6</sup> Source: SkillsFuture Singapore analysis, data from LinkedIn Talent Insights for one-year period between May 2021 – 2022.

17. Sin Mui Heng Food Industries is one such company that leveraged Industry 4.0 solutions for business transformation and job redesign. As one of the pioneers of the Industry 4.0 Human Capital Initiative (IHCI), Sin Mui Heng applied what they had learned to the conceptualisation of their new factory layout by optimising process layout and accurately analysing workload to calculate takt time<sup>7</sup>. This resulted in a 20%<sup>8</sup> reduction of manpower required for its siew mai production line. Seven employees were also upskilled and redeployed to take on new job roles – five change team members were upskilled in lean management, and two Production Operators were upskilled in quality and material management.
18. To improve the attractiveness of the Food Manufacturing sector, food manufacturers will need to offer quality internships to attract young talent, create more partnerships between large and smaller enterprises for knowledge and skills transfers, as well as enhance leadership competencies to grow talent from within. To support these efforts, an Internship Playbook for food manufacturers will be rolled out in Q1 2023. SSG will also continue to work with industry partners such as Sheng Siong via the SkillsFuture Queen Bee programme to enhance the training ecosystem by helping companies identify skills gaps and develop customised training plans to address them.
19. Ms Dilys Boey, Deputy Chief Executive Officer of EnterpriseSG (Industry Clusters) said: “The Food Manufacturing sector is a growing sector with opportunities, especially with the rise of consumerism in Asia. We hope to grow a collaborative ecosystem and position Singapore as a regional food hub that brands can use as a springboard to expand to Asia and beyond. The refreshed ITM lays out the growth strategies that will help our food manufacturing companies become innovative global brands, build resilience, and seize emerging opportunities in sustainability. We look forward to working closely with our industry partners to support the companies on their transformation journey.”
20. “The achievements made since the first ITM are commendable, and I believe we are in a good position to achieve our vision to be a trusted food and nutrition leader and the preferred launchpad of quality brands into Asia. The Government will scale up transformation efforts in the refreshed ITM and work closely with partners such as TACs, Unions and Institutes of Higher Learning to accelerate the growth of the Food Manufacturing sector,” said Mr Alvin Tan, Minister of State for Trade and Industry and

---

<sup>7</sup> Takt time is the speed with which the product needs to be created in order to satisfy the production demand.

<sup>8</sup> From 20 hours a day to 16 hours a day.

Culture, Community and Youth, and Future Economy Council (FEC) Advanced Manufacturing and Trade Cluster Co-chair.

21. “An interconnected ecosystem backed by strong partnerships with local establishments and overseas food hubs will be crucial for the Food Manufacturing sector to thrive, innovate and scale. I hope that food manufacturers will tap on the resources available in the ITM to grow and transform, and seize opportunities in this competitive environment,” said Mr Chen Kok Sing, Future Economy Council (FEC) Advanced Manufacturing and Trade Cluster Co-chair.

- Annex 1: Existing and Emerging Job Roles in the Food Manufacturing Sector**  
**Annex 2: Additional Technical Skills and Competencies (TSCs) required in the future, as identified in the Food Manufacturing JTM**  
**Annex 3: List of company examples and initiatives**

-End-

For media enquiries, please contact:

**Ms Joyce HO**

Business Partner  
Corporate Communications, Enterprise Singapore  
Mobile : +65 9815 8373  
Email : [joyce\\_ho@enterprisesg.gov.sg](mailto:joyce_ho@enterprisesg.gov.sg)

**Ms Amanda Wong**

Manager, Communications  
Communications and Engagement Department, Ministry of Manpower  
Mobile : +65 8814 1143  
Email : [amanda\\_wong@mom.gov.sg](mailto:amanda_wong@mom.gov.sg)

**Mr Lim Kok Haw**

Manager, Communications  
Corporate Marketing & Communications Division, Workforce Singapore  
Mobile : +65 9674 6304  
Email : [lim\\_kok\\_haw@wsg.gov.sg](mailto:lim_kok_haw@wsg.gov.sg)

---

**About ITM 2025**

The Future Economy Council (FEC) was set up in 2017 to support the growth and transformation of Singapore’s economy for the future, including the development and implementation of the Industry Transformation Maps (ITMs). ITMs are sector-specific roadmaps to drive industry transformation, support the growth of our enterprises, and help Singaporeans take up quality jobs and seize opportunities. Co-created by the Government, industry stakeholders, and unions, each ITM covers areas such as productivity,

internationalisation, innovation, digitalisation, resilience, sustainability, and jobs & skills. To address the systemic shifts arising from the COVID-19 pandemic and other changes in the global economy, the FEC has embarked on ITM 2025, to refresh all 23 ITMs to address the challenges and opportunities for Singapore, our businesses, and our workers.

### **About Enterprise Singapore**

Enterprise Singapore is the government agency championing enterprise development. We work with committed companies to build capabilities, innovate and internationalise.

We also support the growth of Singapore as a hub for global trading and startups, and build trust in Singapore's products and services through quality and standards.

Visit [www.enterprisesg.gov.sg](http://www.enterprisesg.gov.sg) for more information.

### **About Ministry of Manpower**

MOM's vision is to develop a great workforce where Singaporeans can aspire to higher incomes and fulfilling careers. Complementing this is a great workplace where companies are lauded for having outstanding employment practices and organisational cultures. To achieve this vision, our mission is to improve the skills and productivity of the Singaporean workforce as the basis for better jobs, higher incomes and a secure retirement. For more information, please visit [www.mom.gov.sg](http://www.mom.gov.sg).

### **About Workforce Singapore**

Workforce Singapore (WSG) is a statutory board under the Ministry of Manpower that oversees the transformation of the local workforce and industry to meet ongoing economic challenges. WSG promotes the development, competitiveness, inclusiveness, and employability of all levels of the workforce to ensure all sectors of the economy are supported by a strong, inclusive Singaporean core.

WSG, in partnership with key stakeholders also addresses the needs of enterprises by providing support to help them transform and remain competitive, while developing a future-ready talent pipeline to support industry growth and match the right people to the right jobs. Visit [www.wsg.gov.sg](http://www.wsg.gov.sg) for more information.



**Background on Singapore’s Food Manufacturing Sector**

1. Singapore’s Food Manufacturing sector comprises more than 1,000 companies, ranging from traditional manufacturers to emerging food tech startups. In 2020, the sector contributed about \$4 billion to Singapore’s economy and employed about 51,000 workers. Over the years, the sector has built up a strong reputation for producing high quality and safe food, with about 60% of the output exported to more than 120 markets.

**Existing and Emerging Job Roles in the Food Manufacturing Sector**

2. The sector will experience stable and continuous growth in terms of headcount from 2021 to 2030. More than 2,500 jobs across all functions and roles over five years will be created to support food manufacturers’ aspirations to expand and innovate. These redesigned job roles will allow employees to take on higher value-added tasks, which can help the food manufacturers improve productivity and enhance sector appeal.
3. For instance, the role of a production supervisor could tap on automation, digitalisation, and the use of other advanced technologies such as Internet of Things to augment manual tasks. The food technologist, on the other hand, could make use of the acquired emerging technology to keep pace with scientific food developments and create innovative food products.

<b>Small Degree of Change</b>	<b>Medium Degree of Change</b>	<b>Emerging Job Roles</b>
1. Chief Executive/Managing Director	1. Supervisor / Production Planner	1. Head of Regulatory Affairs
2. Director of Operations / Plant Manager	2. Process Technician / Maintenance Technician	2. Novel Foods Technical Services Manager
3. Engineer / Engineering Manager / Maintenance Manager	3. Section Head / Team Leader / Line Operator	3. Process Engineer
4. Assistant Engineer / Assistant Maintenance Manager	4. Production Operator	4. Sustainability Engineer
5. Production Manager	5. QC Technician / QC Assistant / Laboratory Technician	5. Food Biotechnologist
6. QA&QC Manager		6. Bioprocess Engineer
7. QA&QC Specialist / Food Safety Specialist / Laboratory Manager		7. Data Analyst
8. QA&QC Supervisor / QA&QC Executive / Laboratory Supervisor		8. Automation Engineer
9. Chief R&D Officer		
10. Product Technologist / Innovation Manager		
11. Food Technologist		
12. Assistant Food Technologist		
13. R&D Chef		
14. General Manager		
15. Regional Manager / Export Manager		
16. Market Development Manager		

Assistant Market 17. Development Manager / Market Development Executive		
--	--	--

**Note:**

- Jobs with a small degree of change will remain largely unchanged but will still require some upskilling to ensure workers are up to date with developments in the sector.
  - Jobs with a medium degree of change will require Job Redesign (JR). These job roles will transform to take on additional duties and will require upskilling or reskilling.
  - Emerging job roles can be filled by existing workers in the sector with moderate upskilling as well as hiring talent outside the sector to fill the roles.
4. To aid food manufacturers in their business and workers transformation plans, they could tap on the following programmes offered by various government agencies and partners.
- a. Career Conversion Programme [WSG]
  - b. Career Trial [WSG]
  - c. Capability Transfer Programme [WSG]
  - d. Industry 4.0 Human Capital Initiative [WSG]
  - e. Support for Job Redesign under the Productivity Solutions Grant [WSG]
  - f. SGUnited Mid-Career Pathways Programme [WSG]
  - g. SkillsFuture Series Courses [SSG]
  - h. SkillsFuture Work Study Programmes [SSG]
  - i. Company Training Committee [NTUC]

**Additional Technical Skills and Competencies (TSCs) required in the future, as identified in the Food Manufacturing JTM**

<b>TSC</b>	<b>Description</b>
Business Performance Management	Implement the organisation's performance systems to meet business plans and objectives by establishing performance indicators, tracking progress and addressing gaps to enhance productivity and performance.
Business Relationship Building	Formulate business partnership strategies and establish relevant networks of strategic partners that provide value to the organisation to enhance networks with other industry players, including food manufacturers, associations, unions, and research houses.
Customer Behaviour Analysis	Devise customer behaviour analysis tools and approaches, perform analysis on information pertaining to customer behaviours, and deriving insights to inform innovation and formulation of new products.
Data Analytics	Collect, organise, and analyse structured or unstructured data to create insights systematically across various job roles and levels.
Emerging Food Technology	Review new developments in emerging food technologies as well as lead the analysis of such technologies for incorporation into product innovation and development.
Emerging Technology	Review new developments in emerging technologies as well as lead analysis of emerging technologies for potential adoption into the operating environment.
Infographics and Data Visualisation	Present data using meaningful visual illustrations, iconographies, graphs and charts for easy and accessible discovery and communication of data insights aimed at specific business objectives.
Preventive Maintenance	Perform scheduled maintenance procedures on equipment without halting business operations to reduce and minimise failures.
Technology Application	Integrate technologies into operations of the organisation to optimise efficiency and effectiveness of processes.

**List of company examples and initiatives****A. Groom local champions through internationalisation and innovation****Alchemy Foodtech**

Established in 2015, Alchemy Foodtech is a Singapore startup that develops functional ingredients to be incorporated into staple foods to reduce glucose release. With its patented Alchemy Fibre™ technology, it is able to provide a healthier version of the same product. Alchemy Foodtech has collaborated with traditional food players such as Swee Heng Bakery and Boon Tong Kee. For example, the startup collaborated with Swee Heng Bakery to produce sugar-free pandan and orange chiffon cakes. Such cross-collaborations allow traditional players to tap on expertise and innovativeness of startup to accelerate innovation across the food value chain.

Alchemy Foodtech also expanded beyond the business-to-business (B2B) model and has ventured into the business-to-consumer (B2C) market locally and overseas. To support its expansion, the startup invested in an automated production line housed at Innovate360 – a foodtech accelerator to expand production output. Alchemy Foodtech's products are currently available in more than 200 supermarkets locally and exported to the Philippines. The company is exploring new markets such as such as China, Korea, Japan, Thailand and Indonesia. Its current product range includes Alchemy Fibre all-purpose flour, Alchemy FibreGrain, Alchemy Fibre for Rice and Alchemy baking premixes.

**Prima Food**

Established in 1992, Prima Food manufactures ready-to-cook pastes and sauces under the Prima Taste brand. Prima Taste's mission is to preserve the heritage and tradition of Singapore food and make them available to the world. The company currently exports about 50% of its Prima Taste products to over 40 markets, including China, Hong Kong, Taiwan, Thailand, Japan, United States of America, Canada and Australia. It relies largely on local distributors to supply its pastes and products to B2C and B2B buyers, including HoReCa establishments.

Prima Taste is constantly seeking to grow its export markets and is doing so through strategic branding, consumer-centric innovation and adopting an omni-channel strategy. Prima Taste is growing its global reach through various local and international channels, including e-commerce platforms (e.g. Prima's own online store, Taobao.com, Amazon, Coupang), retail (e.g. Coles Australia, 99 Ranch USA, Emart South Korea) and HoReCa partners. In the area of product innovation, Prima Taste has recently developed its own range of Hokkien Mee dried noodles as overseas customers had given feedback that it is difficult to purchase fresh Hokkien Mee noodles to complement its Prawn Mee cooking paste. Prima Taste became the pioneer in developing shelf-stable Hokkien Mee dried noodles with longer shelf-life, making them suitable for overseas exports.

**OTS Holdings Pte Ltd**

Established in 1993, OTS Holdings Limited is one of the major ready-to-eat (RTE) and ready-to-cook meat manufacturers in Singapore. Its flagship brands include "Golden Bridge" and "Kelly's". OTS Holdings currently exports to more than 25 markets including Malaysia, Hong Kong, Myanmar, India and the EU. Exports make up close to 40% of its total sales revenue. The company recently entered the Philippines, with plans to expand to Japan and China.

OTS Holdings places a strong focus on innovation. It has an in-house R&D team and is constantly improving its existing products and creating innovative new products such as RTE plant-based local sauces like Rendang and Butter Chicken Curry to expand its market share.

To create healthier food and tap into the alternative protein market, the company collaborated with industry partners such as Beneo, Firmenich and Hela, and created ANEW - a 100% plant-based luncheon meat. Launched in June 2022, ANEW is currently sold in over 60 outlets across Singapore and on e-commerce platforms. The product has successfully entered Malaysia, with plans to export to the Philippines, Indonesia and Australia.

## **B. Elevate Singapore's attractiveness as regional hub for global establishments**

### Yeo Hiap Seng

Yeo Hiap Seng (Yeo's) is a Singapore-based regional F&B manufacturer with a wide range of portfolio including canned food and drinks. In 2021, Yeo's partnered with Sweden's Oatly to manufacture Oatly's proprietary oat milk for the Asia market. This S\$30 million tie-up marked the first time the Swedish company has produced Oatly outside of Europe and North America. This strategic partnership has enabled Yeo's to access another growth driver in the fast-growing plant-based alternative milk segment, complementing its leading position in the soymilk segment.

### Global Foodture Programme

In April 2022, Enterprise Singapore became partners of the Global Foodture Programme, an internationalisation programme set up by seven European Clusters<sup>9</sup> designed to support European agri-food companies to access Asia. Under the programme, a series of masterclasses and business matching sessions will be organised to encourage knowledge exchange and co-innovation collaborations between Asian and European food companies.

## **C. Build resilient and sustainable companies**

### Food Empire Holdings

Food Empire Holdings (Food Empire) is a Singapore owned, SGX Mainboard listed, global branding and manufacturing company in the food and beverage sector. Its products include instant beverages and snack foods under brands like MacCoffee, MacTea, MacCereal, CafePHO, Hillway and Kracks, which are sold in over 50 countries spanning Asia, Middle East, Eastern Europe and North America. This is supported through eight manufacturing facilities located across five countries.

In recent years, even as global headwinds led to supply chain challenges and operational disruptions, Food Empire had been able to weather the impact by undertaking strategic decisions on production, inventory management and pricing. At the same time, Food Empire was able to diversify geographically by expanding its footprint into new markets. Its strong business continuity capabilities and ability to adapt business model quickly in response to market dynamics and geopolitical events has helped the company strengthen its economic resilience and spurred continued growth.

### SinFooTech

Incorporated in 2018, SinFooTech is a spin-off from the National University of Singapore's (NUS) Department of Food Science and Technology (FST). SinFooTech epitomises a new breed of startups pioneering the use of food biotechnology for sustainable food production. The startup developed a proprietary fermentation technology that bio-transforms soy whey, a waste product of tofu manufacturing, into a first-of-its-kind alcoholic "soy wine" beverage. Named Sachi, the beverage is rich in isoflavones (a naturally occurring antioxidant found in soybeans) and is produced using a zero-waste method (i.e. 100% of soy whey is converted into the beverage).

---

<sup>9</sup> The seven European clusters include Flanders' FOOD, Food & Bio Cluster Denmark, FOOD+i, VITAGORA, Foodvalley NL, Packaging CLuster (Spain) and Innovation Technology Cluster Murska Sobota (Slovenia).

SinFooTech aims to connect with more F&B and hospitality players to grow the market presence of Sachi. It has plans to expand its range of innovative products by creating other alcoholic beverages (e.g. soy whiskey) made sustainably from food processing by-products.

#### **D. Step up jobs & skills transformation and create quality roles for locals**

*(Includes impact of automation and digitalisation on jobs)*

##### Tiong Lian Food Pte Ltd

Founded in 1974, Tiong Lian Food Pte Ltd has grown into a leading importer, processor and distributor of quality pork and other meat products. Tiong Lian specialises in chilled pork products such as pork belly, prime ribs, pork fillet, pork chop, minced pork, and front hock. It services a diverse customer base comprising food manufacturers, wholesalers, hotels restaurants, social clubs, retailers, food courts, and wet market stalls.

Since its move to a new facility at Pandan Loop in 2020, Tiong Lian has invested heavily in equipment and automation to boost worker productivity and facilitated job redesign. One such example is the implementation of the conveyor deboning line. This improved productivity by 50%, enabled better inventory control and increased output when deboning carcasses. Production staff had also upskilled and trained to work with the new equipment.

Tiong Lian also incorporated a skill-based allowance component in its pay structure to encourage and reward workers to hone their skills and develop new skillsets. The company has a strong focus in creating more value-added jobs and meaningful careers, which allows them to be in a better position to attract talent, especially younger workers.

##### Ha Li Fa Pte Ltd

Established in 1993, Ha Li Fa Pte Ltd, the company behind the brand “BoBo”, is one of the largest surimi manufacturers in Singapore. In January 2022, Ha Li Fa moved into its new factory with heavy investment in equipment and automation to optimise processes, boost worker productivity and facilitate job redesign. For example, it implemented a fully automated cooked production line, which helped Ha Li Fa increase its productivity by 82%. The production staff were also upskilled and had their jobs redesigned to take on higher value-add roles such as quality control, machine operation and maintenance.

Putting people first, Ha Li Fa constantly seeks out opportunities for its employees to develop new skills, especially in emerging areas such as data analytics and digital marketing. For instance, the company participated in the SkillsFuture Singapore Queen Bee programme, where it partnered Shopee to support two of its business development staff to develop data analytics skills to drive sales performance.

In addition, Ha Li Fa actively seeks out young talent through internship collaborations with Institutes of Higher Learning and mid-career individuals looking for a career switch to the food manufacturing sector. Through the years, Ha Li Fa has successfully hired motivated employees based on their aptitude and tapped on Workforce Singapore (WSG)’s Career Conversion Programme (CCP) to reskill them to take on new job roles in areas such as R&D, account management and production planning.

##### Everglades Pte Ltd

Micro-enterprises can also tap the Career Conversion Programme (CCP) to overcome manpower challenges. Established in 2003, Everglades Pte Ltd is a local manufacturer and supplier of gelato to more than 200 food establishments. The company currently employs 10

local staff. As borders reopen and tradeshow commence, Everglades is keen to step up its expansion efforts and is looking to grow its team.

Through the CCP for Food Manufacturing Professional/Associate, Everglades has hired three employees based on their aptitude and reskilled them to fill various roles in operations and manufacturing, since July 2022.