

# BETTER PLANET: CIRCULARITY AND ENVIRONMENTAL PROTECTION

PROTECTION

At F&N, we recognise the role of our business in protecting the environment. The transition to a circular economy offers opportunities to create business value as well as minimise environmental impacts. We promote circularity and environmental efficiency in our operations through our management of energy, water and waste. We promote a circular economy across our value chain through the critical topic of packaging. We recognise the interaction of the F&B sector with biodiversity and we are committed to sourcing ingredients with respect of impacts on ecosystem.

As part of our refreshed materiality assessment, we identified five main issues in relation to our environmental efforts:

## Operational Eco-Efficiency

- ▶ Energy and Climate Change
- ▶ Water Stewardship
- ▶ Waste Management

## Value Chain Impacts

- ▶ Packaging
- ▶ Biodiversity



## Targets for Better Planet

| Material Topic                   | Target                                                                                                                                                                                                                                                          |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Energy and Climate Change</b> | <ul style="list-style-type: none"> <li>▶ Reduce the Group's energy intensity ratio at our plants (from a 2020 baseline) by 8% by 2025</li> <li>▶ Reduce the Group's GHG emissions intensity ratio at our plants (from a 2020 baseline) by 8% by 2025</li> </ul> |
| <b>Water Stewardship</b>         | <ul style="list-style-type: none"> <li>▶ Reduce the Group water intensity ratio at our plants (from a 2020 baseline) by 8% by 2025</li> </ul>                                                                                                                   |
| <b>Waste Management</b>          | <ul style="list-style-type: none"> <li>▶ Reduce the solid waste sent to landfill (from a 2020 baseline) by 30% by 2025</li> </ul>                                                                                                                               |
| <b>Packaging</b>                 | <ul style="list-style-type: none"> <li>▶ 25% of beverage and dairy packaging to contain recycled materials by 2025</li> </ul>                                                                                                                                   |

## Contributing to SDGs



## Operational Eco-Efficiency

F&N recognises that our company creates environmental impacts through energy, water and resource consumption. To reduce our impacts on the environment, our employees at the plants investigate ways to improve our manufacturing processes and optimise eco-efficiency. Details on how we approach each environmental impact are elaborated in the following sections:

- ▶ Energy and Climate Change
- ▶ Water Stewardship
- ▶ Waste Management

### Environment, Safety and Health Policy



F&N implements environmentally sustainable business practices aligned with our core values and the circular economy principles. Our operations are guided by the ESH Policy. It serves as a framework for all F&N's decisions concerning the environment across our value chain – production operations, business facilities, products, distribution and logistics, and management of waste. We work with local communities to protect and preserve the environment and strive for zero waste and zero pollution.

## ENERGY AND CLIMATE CHANGE

GRI Index: GRI 302-1, GRI 302-3, GRI 305-1, GRI 305-2, GRI 305-4

SDGs:



Climate change is the defining global challenge of the 21st century. It presents various risks for F&N – price fluctuations over raw materials, and water scarcity issues – but also creates opportunities for F&N – cost savings, alignment with customer expectations, and contributions to sustainable development.

F&N recognises the need for a low carbon economy transition and is committed to reduce our energy and GHG emissions intensity at our plants as the two main priorities of our 2025 targets.

### APPROACH

F&N's approach is guided by the following Energy Management principles:



### Operations Exposure to Climate Change Risks

Potential climate change impacts, such as rising sea levels, extreme temperatures, and limited water availability, will negatively impact F&N's operations and supply chain. As such, F&N considers climate change risks in our ERM process. At F&NHB, physical climate change risks are monitored and managed under the responsibility of the F&NHB SRMC. To manage identified risks, they work closely with state authorities and local councils. Robust incident escalation procedures and response plans are also in place as part of our Business Continuity Management.

### 2025 TARGETS

- ▶ Reduce the Group's energy intensity ratio at our plants (from a 2020 baseline) by 8% by 2025
  - Our group energy ratio increased by 1%, due to lower production volume at our plants with COVID-19 pandemic.
- ▶ Reduce the Group's GHG emissions intensity ratio at our plants (from a 2020 baseline) by 8% by 2025
  - Our GHG emissions intensity ratio decreased by 1%, due to use of renewable energy at our plants

# Operational Eco-Efficiency

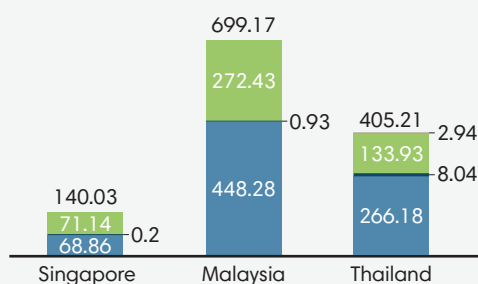
## PERFORMANCE

### Metrics

#### GRI 302-1 (2016)

Energy consumption within the organisation

Energy Consumption by F&N ('000,000 MJ)



- Steam / heating / cooling and other energy purchased
- Non-renewable electricity purchased
- Total renewable energy (wind, solar, biomass, hydroelectric, geothermal, etc.) purchased or generated
- Non-renewable fuels (nuclear fuels, coal, oil, natural gas, etc.) purchased and consumed

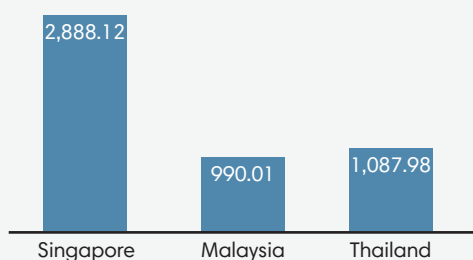
#### Notes:

- 1 There is no electricity, heating, cooling and steam sold
- 2 The data on natural gas and electricity consumption is collected through meter readings and converted to MJ through standard conversion values

#### GRI 302-3 (2016)

Energy intensity ratio

Energy Intensity Ratio (MJ/MT)



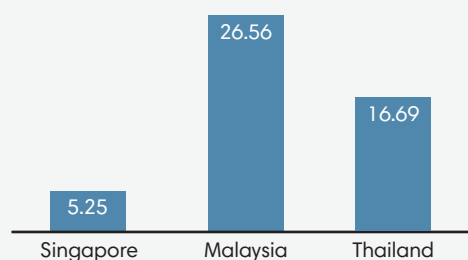
#### Notes:

- 1 Energy intensity ratio is calculated based on the total amount of energy consumed (in megajoule, MJ) per metric tonne of product (MT)
- 2 Energy intensity ratio is for energy consumed within F&N only
- 3 Natural Gas, Diesel, Fuel Oil, Gasoline, Liquefied Petroleum Gas, Biofuels, Solar and Electricity are included in the energy intensity ratio

#### GRI 305-1 (2016)

Direct (scope 1) GHG gas and CO<sub>2</sub> emissions (CO<sub>2</sub>e)

GHG Scope 1 Emissions ('000 MT CO<sub>2</sub>e)



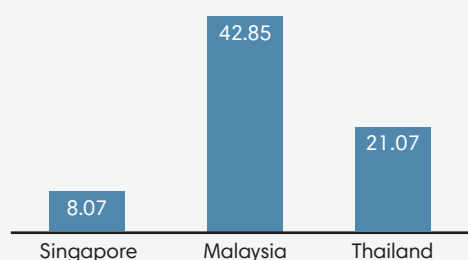
#### Notes:

- 1 CO<sub>2</sub>e emissions estimated based on the conversion factors from 2006 Intergovernmental Panel on Climate Change ("IPCC") Guidelines for National Greenhouse Gas Inventories
- 2 Only CO<sub>2</sub> is included in the calculation of the Direct (Scope 1) GHG emissions
- 3 There is no biogenic CO<sub>2</sub> emissions generated from the combustion of biomass
- 4 The base year for the calculations is 2020. It was chosen as the baseline year for the F&N 2025 targets in order to track the performance against the targets over the years
- 5 The Global Warming Potential ("GWP") value for a time horizon of 100 years based on the IPCC Fifth Assessment Report: Working Group I Report "Climate Change 2013: The Physical Science Basis" (chapter 8) is used in the calculation
- 6 Operational control method is used for the consolidation approach of emissions

#### GRI 305-2 (2016)

Energy Indirect (scope 2) and CO<sub>2</sub> emissions (CO<sub>2</sub>e)

GHG Scope 2 Emissions ('000 MT CO<sub>2</sub>e)



#### Notes:

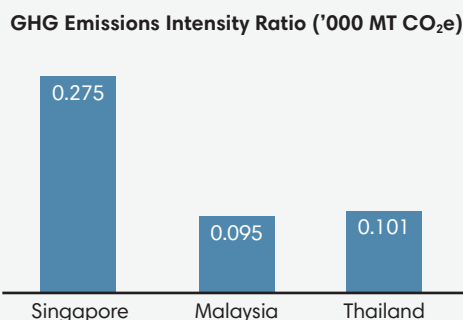
- 1 CO<sub>2</sub>e emissions estimated based on the conversion factor from IGES List of Grid Emission Factors v1.0.6 and using the location-based method
- 2 Only CO<sub>2</sub> is included in the calculation of the Energy indirect (Scope 2) GHG emissions
- 3 The base year for the calculations is 2020. It was chosen as the baseline year for the F&N 2025 targets in order to track the performance against the targets over the years
- 4 The GWP value for a time horizon of 100 years based on the IPCC Fifth Assessment Report: Working Group I Report "Climate Change 2013: The Physical Science Basis" (chapter 8) is used in the calculation
- 5 Operational control method is used for the consolidation approach of emissions

## PERFORMANCE

### Metrics

#### GRI 305-4 (2016)

GHG emissions intensity ratio at plants

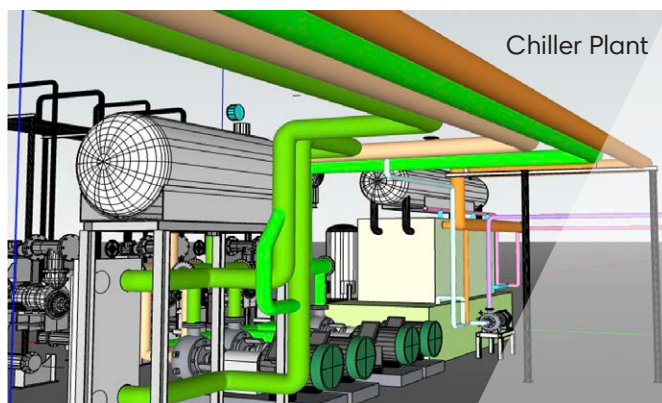


#### Notes:

- 1 GHG emissions intensity ratio is calculated based on the total amount of CO<sub>2</sub>e generated (in metric tonne, MT) per metric ton of product (MT)
- 2 Direct (scope 1) and energy indirect (scope 2) is included in the GHG emissions intensity ratio
- 3 Only CO<sub>2</sub> is included in the calculation of the GHG emissions intensity ratio

## INITIATIVES

Improving energy efficiency in our operations makes just as much business sense as it is to reduce our environmental impacts. Key energy saving initiatives to optimise plant processes include upgrading chillers and improving air flow systems across our plants. Some initiatives are highlighted in this report.



### Thailand: F&NDT – Implementation of Automatic Control Chiller



An automatic control chiller supplies ice and chilled water based on consumption demands. During off-peak periods, the chiller functions as an ice bank to generate and store chilled water in the water tanks; it then supplies water during peak periods. With this installation, electricity consumption has reduced up to 1,350,000 kWh creating savings of about THB 4.7 million per year (about SGD 192,000 per year).

### Malaysia: F&NHB – Installation of Intelligent Flow Air Controllers



Intelligent flow air controllers were installed in F&N Beverages Manufacturing Sdn Bhd's main plant's air compressor. With the flow air controller, fluctuation pressure during operations can be reduced from 0.5 bar to 0.14 bar. Energy cost has reduced by 15% (about 400,000 kWh) with about MYR 140,000 (about SGD 45,700) in savings. F&NHB will explore the installation of the intelligent flow controllers for other production lines.

### Malaysia: F&NCM – Centralised Compressed Air System



Combined two separate air systems into one centralised compressed air system. The initiative reduces the amount of electricity needed for operations, thus decreasing the energy usage by about 250,000 MJ (an equivalent of 41 MT CO<sub>2</sub>e reduction in GHG emissions) annually. It resulted in cost savings of approximately MYR 25,000 (about SGD 8,200) each year. For the next phase, F&NCM is exploring modifications to the cooling system such that it only runs when needed, contributing to even greater energy savings.

### Singapore: Times Printers – Energy Efficient Opportunities Assessment ("EEOA")



TP production facilities in Singapore and is currently being audited by an energy consultancy company, CBM Solutions Pte Ltd, with their inhouse certified EEOA auditors and engineers. The resulting EEOA Report, which is estimated to be ready by December 2021, will provide TP with the necessary data, information and recommendations regarding initiatives that can be explored in future to improve its energy efficiency.

## Renewable Energy Sourcing and Generation

Besides energy efficiency upgrades, F&N looks to increase renewable energy use.

### Thailand: F&NDT – Installation of Solar Panel Rooftop



At the F&NDT Rojana plant, a solar panel rooftop was installed in April 2020. It provided cost savings around THB 6 million (about SGD 270,000). The THB 30 million (SGD 1.35 million) solar photovoltaic ("PV") system with 1MWp generating capacity significantly reduces energy offtake from the grid by utilising renewable energy for its daily operations.

## Operational Eco-Efficiency

### Singapore: FNFS – Future Energy Improvement Initiatives



Singapore: FNFS targets to move to a new plant in 2022 with plans to enhance their environmental performance through more energy efficient equipment. Some of the installations planned for include a bio-digester, high-efficiency air-condition chiller, heat recovery from air compressors, water recovery systems, a 500,000 kWh rooftop solar PV system.

### Malaysia: F&NHB – Installation of Solar PV Systems



Malaysia: As part of the strategic direction to reduce fossil fuel consumption and carbon footprint, the Group explored a renewable energy programme at our F&NHB plants (Shah Alam, Pulau Indah and Bentong) by setting up 10MWp solar PV systems at the three plants. This initiative is estimated to replace at least 20% of its total electricity consumption in Malaysia.

### Route Planning

Optimal route planning can help reduce GHG emissions. In the last few years, we have continued to streamline our distribution networks.

Since 2014, F&NHB has made more than MYR 800 million (more than SGD 250 million) of capital investments on new lines and warehouses across production facilities in Malaysia and Thailand. By decentralising our logistics with manufacturing and warehouse operations located in closer proximity, transportation routes will become shorter and fuel consumption and GHG emissions will be reduced.

F&NHB also invested about MYR 180 million (about SGD 58 million) in an integrated warehouse at Shah Alam Plant in Malaysia and established a regional distribution centre (“RDC”) in Rojana in Thailand. Both are equipped with the Automated Storage Retrieval System (“ASRS”) and have commenced operations this financial year. The RDC in Thailand serves as the regional distribution hub for F&N’s products, and is estimated to have reduce material and transport costs by about THB 20 million (about SGD 800,000) in a year. The ASRS automates process of getting finished goods ready for delivery to markets or distributors’ warehouses. This system drives improvements through:



### Low Carbon Product

The Extra Non-dairy Half Creamer for Cooking and Baking (385g) is F&NHB’s first low-carbon product certified by Thailand Greenhouse Gas Management Organisation (“TGO”). The product’s carbon footprint of 295 kg CO<sub>2</sub> successfully meets the requirements of the Carbon Footprint Label Scheme.

F&NHB is working towards having more products certified by TGO under the Carbon Footprint Label Scheme.

## WATER STEWARDSHIP

GRI Index: GRI 303-3, GRI 303-4, GRI 303-5

SDGs:



Water is an important resource for F&N because it is used extensively in our products and operational processes. The success to our business depends on a reliable supply of water and effective water management. We are committed to responsible water stewardship by managing our water use to safeguard the availability of clean water for the local communities, in the markets we operate.

While none of our sites are in high water-stress areas (according to World Resources Institute Aqueduct), many regions in Thailand and Malaysia have faced floods and water shortages. The effects of climate change are expected to intensify water stress in the future. Water security issues will become increasingly important for F&N.

### APPROACH

Guided by the F&N ESH Policy and the principles of circular economy, F&N has organised initiatives to increase water security and reduce our water consumption. Water-related risks and opportunities are identified and addressed by collaborating with relevant stakeholders to create shared value projects.

To reduce risks towards our water supply, we utilised a range of internal water assessments and have deployed action policies in all our facilities.

- ▶ Water Stewardship and associated risks are regularly monitored on F&N's ERM system.
- ▶ The sustainability team utilises tools such as the WRI Aqueduct and World Wildlife Fund Water Risk Filter.
- ▶ F&N has an established system within all operations for systematic daily and monthly tracking and monitoring of water consumption and effluent quality.

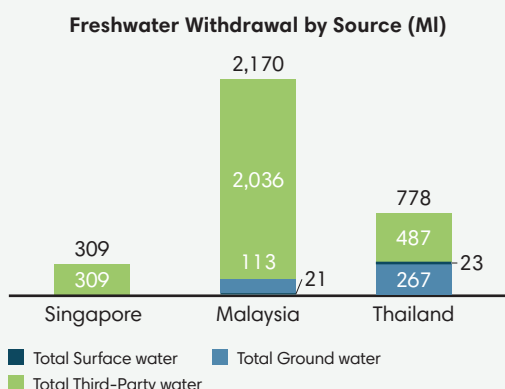
### 2025 TARGET

- ▶ Reduce the Group's water intensity ratio at our plants by 8% from a 2020 baseline by 2025
  - Our group water intensity ratio increased by 1% because of lower production volume at our plants due to the COVID-19 pandemic.

## PERFORMANCE

### GRI 303-3 (2018)

Water withdrawal

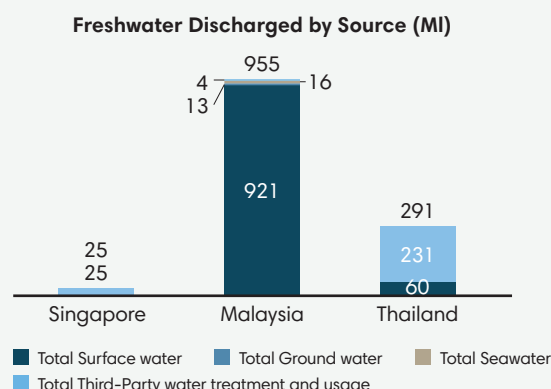


#### Notes:

- 1 Water withdrawal is not from areas with high water stress
- 2 All our withdrawn water is freshwater (< 1,000 mg/l Total Dissolved Solids)

### GRI 303-4 (2018)

Water discharge

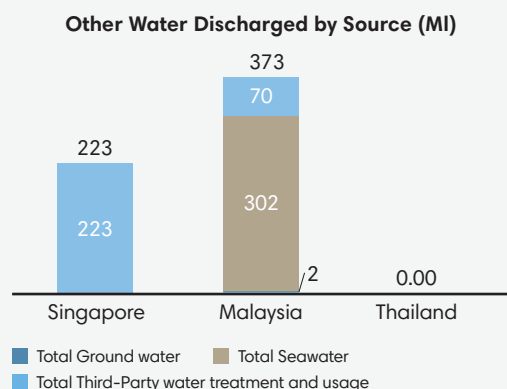


## Operational Eco-Efficiency

### PERFORMANCE

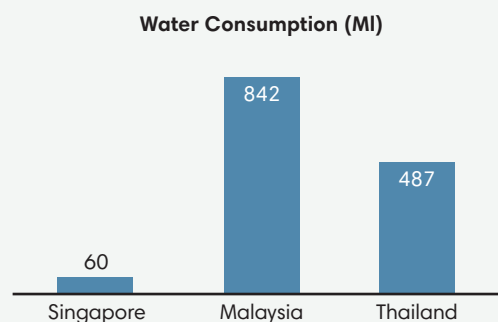
#### GRI 303-4 (2018)

Water discharge



#### GRI 303-5 (2018)

Water consumption



### INITIATIVES

#### Water Stewardship in Our Operations



F&N implemented various water saving initiatives this year to further progress toward our target of reducing water intensity by 8% by 2025. F&N seeks to improve our water efficiency with our plant engineers looking into closing the loop for our water systems – through treating wastewater from our plants and using the recycled water for general cleaning and cooling purposes.

We also share best practices with suppliers upstream in the value chain. Beyond that, F&N engaged dairy farmers to enhance their water security. This has enabled F&N to improve supply chain resilience through water stewardship. More details can be found in the 'Supply Chain Stewardship' section of the Report.

#### Water-Efficiency and Zero-Discharge in Our Operations.



A range of initiatives have been implemented at our plants to increase water savings through optimising plant processes. Some initiatives include:

- ▶ Installation of rotary spray ball in product tanks to reduce cleaning time
- ▶ Recycle used water in homogeniser's cooling system
- ▶ Use water saving taps, nozzles and self-closing valves to minimise wasted water
- ▶ Clean-In-Place ("CIP") cycle improvements
- ▶ Replacing cube sugar with liquid sugar
- ▶ Zero-discharge initiatives based on circular economy principles

In particular, we would like to highlight the efforts at FNFS.

Recognising that soya process is one of the more water intensive processes at FNFS plant, we evaluated our soya activities and implemented changes to improve water efficiency in 2020. Monthly average water usage reduced by about 42% after the implemented changes. The total average yearly water savings was approximately 13,300 m<sup>3</sup>, with cost savings of around SGD 36,000.

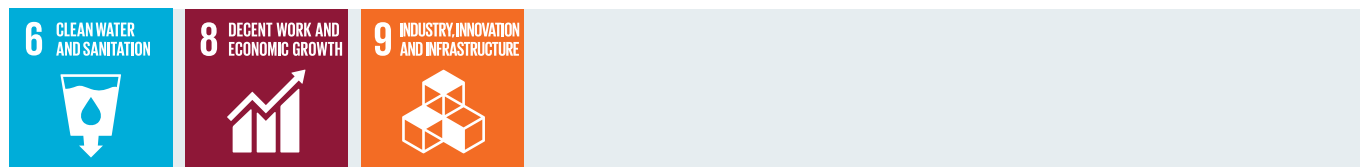
With success of the soya line, F&N worked on the Hipex Production line this year – the second most water intensive process at the F&NFS plant. Changes implemented included swapping out the open-end hose for the spray gun hose with a lower flow rate and controlling CIP process by using pH readings. Monthly average water usage had a 14% reduction, with the total average yearly water savings estimated to be about 4,000 m<sup>3</sup>. The cost savings are approximately SGD 11,000.

As mentioned in 'Energy and Climate Change' section of the Report, FNFS is intending to move to a new plant in 2022 with plans for more efficient processes and equipment installed. Specifically, an improved water system that helps recover water through the use of Reverse Osmosis. The used water is then channelled to general cleaning and cooling of towers. There are also plans for CIP programmes to recover chemicals and water.

## WASTE MANAGEMENT

GRI Index: GRI 306-1, GRI 306-2, GRI 306-3, GRI 306-4, GRI 306-5, GRI 306-6

SDGs:

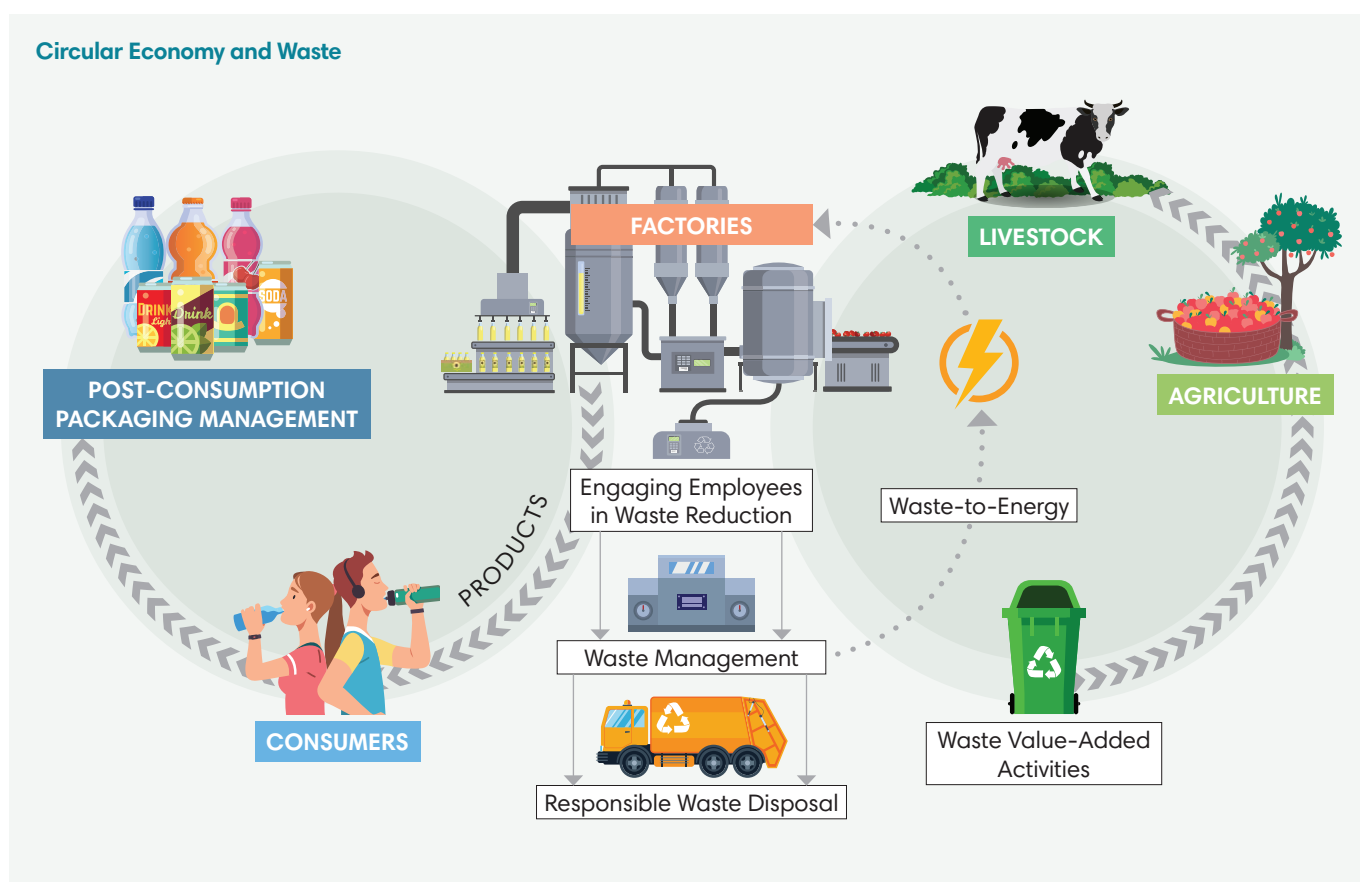


Waste is generated at F&N plants as well as downstream of the value chain, post-consumer use. Circular economy views waste as a resource that could generate value by being used as an input for another process. Effectively managing our waste enhances F&N's ability to achieve resource efficiency. We also look to manage waste post-consumer use through packaging, which is further elaborated in the 'Packaging' section of the Report.

### APPROACH

F&N aspires to achieve zero landfill and zero discharge. Our manufacturing teams seek to improve efficiency in our operations by applying innovation and discovering new opportunities to close the loop in the material cycle. We actively monitor our waste composition in the manufacturing process including liquid (effluent) and solid wastes, with the aim of increasing recycling and reducing waste generation. We extend our commitments beyond our operational borders and engaged our stakeholders to identify circular opportunities in their operations, to assist them in reducing costs and using resources efficiently.

Under our ESH Policy, all employees are encouraged to be involved through awareness raising on responsible consumption and understanding environmental issues from our activities.



### 2025 TARGET

- ▶ Reduce the solid waste sent to landfill (from a 2020 baseline) by 30% by 2025
  - The total solid waste sent to landfill in FY2021 increased by 3%

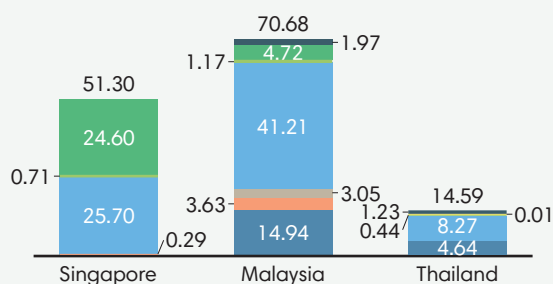
## Operational Eco-Efficiency

### PERFORMANCE

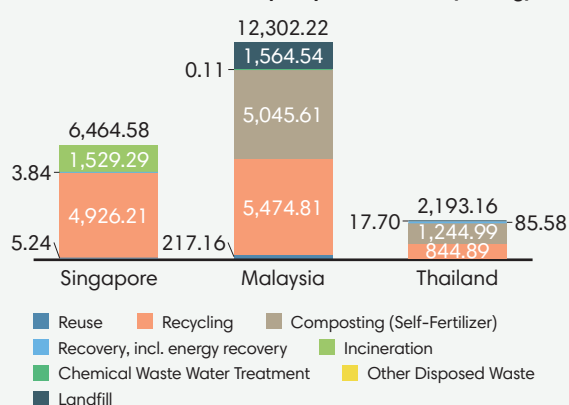
#### GRI 306-2 (2016)

Waste by type and disposal methods

**Hazardous Waste by Disposal Method ('000kg)**



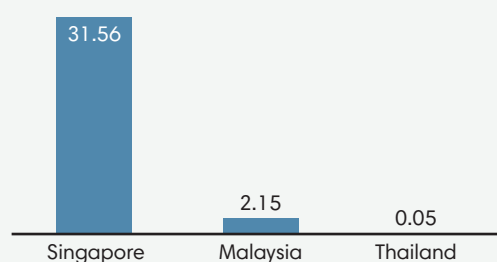
**Non-hazardous Waste by Disposal Method ('000kg)**



### Metrics

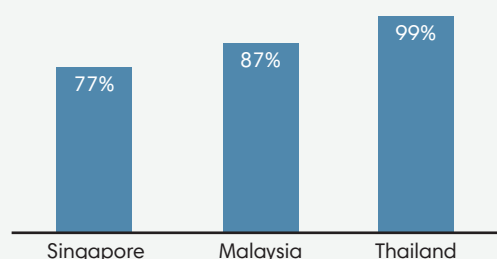
#### Solid waste intensity

**Solid Waste Intensity Ratio (kg/MT)**



#### % of solid waste recycled, reused or recovered

**Solid Waste Recycled, Reused or Recovered**



### INITIATIVES

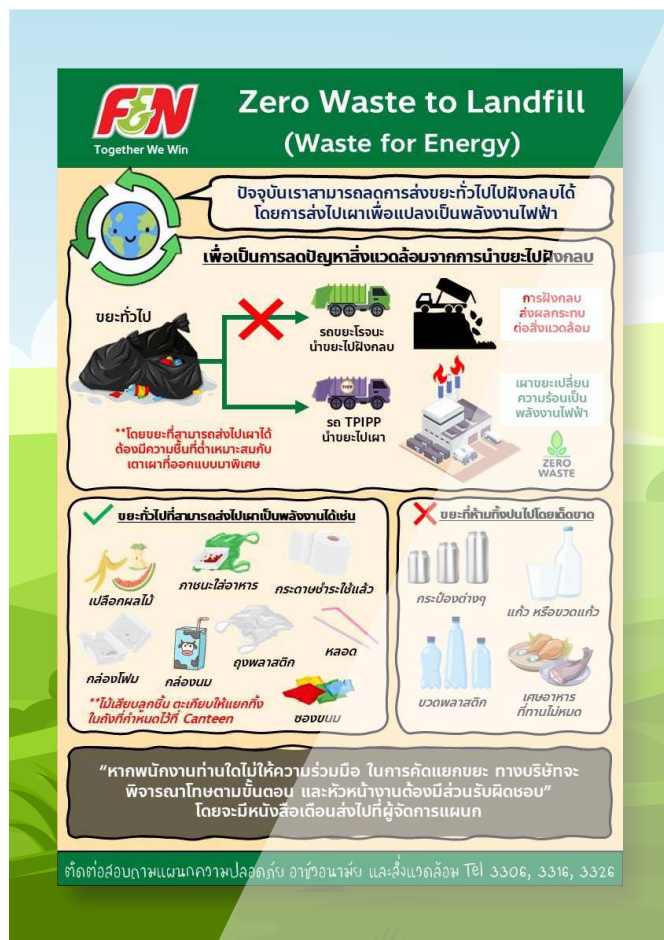
#### Plant Management – Road to Zero Waste to Landfill



Since May 2021, F&NDT has joined the ranks of our factories that have achieved zero waste sent to a landfill (“**zero-landfill**”). Of our 13 factories, 5<sup>5</sup> have zero-landfill. All waste products at F&NDT are sent to a waste-to-energy plant to be converted into a fuel source.

F&NDT's zero-landfill achievement is made possible through effective awareness raising programmes on waste segregation and reduction for our employees. At F&N, we have ongoing campaigns at plants to cultivate awareness among employees about waste management with the goal of increasing recycling rate.

Our dairy plants in Thailand and Malaysia continue to be a great source for local farmers to acquire organic fertilizer made from 100% industrial sludge from our operations. This year we have generated over 1.200 m<sup>3</sup> of industrial sludge which has benefited local farmers.



## Food Loss & Waste in the Value Chain



Food loss and food waste have become a global concern and an issue for sustainable development goals. An estimated 1/3 of all food produced globally is lost or goes to waste. Food loss and waste not only contribute to food shortage, water stress, biodiversity loss, and increases GHG.

As a F&B manufacturer, F&N aspires to optimise our position to minimise food wastage in our entire value chain. We are committed to reducing global food loss/waste by:

- ▶ Reducing food loss throughout our value chain, from sourcing, manufacturing and logistics
- ▶ Reducing our production waste to landfill by 30% by 2025
- ▶ Collaborating with our business partners to reduce food waste

At F&NHB, a framework for managing food loss and waste, guided by the Food and Drink Material Hierarchy from the Food and Agriculture Organization of the United Nations, has been developed. They collaborate with upstream and downstream partners to look for innovative alternatives to reduce food loss or redirect food loss with focus on prevention, optimisation, recycling and recovery initiatives to minimise food waste along our value chain.

|                                        |                                                                                                                                                                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Raw Materials Upstream                 | <ul style="list-style-type: none"> <li>▶ Work closely with our suppliers to ensure our raw materials are of set standards and quality.</li> <li>▶ Track, measure and monitor any losses of our raw materials on monthly basis to reduce food loss.</li> </ul> |
| Production Processes Within Our Plants | <ul style="list-style-type: none"> <li>▶ Track, measure and monitor our manufacturing processes.</li> <li>▶ Improve our food loss management by identifying key categories and waste streams.</li> </ul>                                                      |
| Managing Food Surplus Downstream       | <ul style="list-style-type: none"> <li>▶ Regularly track, measure and monitor any food surpluses in retail.</li> <li>▶ Channel our surplus food to organisations and communities</li> </ul>                                                                   |

## Managing Food Surplus Downstream



### Optimisation: Convert Food Waste Downstream to Animal Feed

We are currently investigating the potential ways of recycling food waste downstream of our value chain. An experimental study is conducted with an external vendor that collects market returned products, okara waste, and juices, to turn it into biomaterials for animal feed (fishes) using the larva of black soldier flies.

### Optimisation: Redistribute Food Waste to Communities in Need

Since 2019, F&NHB established a partnership with Yayasan Food Bank Malaysia to support the Food Bank Siswa programme with surplus food for various communities in need.

## Value Chain Impacts

Looking at our products' life cycle beyond our operational boundaries and considering the environmental impacts of our products, F&N considers packaging waste and biodiversity as a highly important material environmental topics to focus on in our value chain. We look into ways to improve packaging and inputs used to manufacture our products through innovation and procurement. This year, we made new commitments to protect biodiversity and natural ecosystems. More information can be found in the following sections:

- ▶ Packaging
- ▶ Biodiversity

### PACKAGING

GRI Index: GRI 301-1, GRI 301-2

SDG:



The increase in awareness of environmental impacts of single-use plastics have resulted in consumers and stakeholders actively demanding for companies to take action and invest in sustainable solutions. Added pressure from various stakeholders, including national governments, in our markets have led to the introduction of environmental policies designed to encourage companies to rethink their production methods. Such government initiatives like – Thailand's 'Roadmap on plastic waste management', Malaysia's 'Roadmap towards Zero Single-Use Plastics' and Singapore's 'Zero Waste Masterplan' will impact the F&B industry.

As a F&B company, F&N views packaging as one of the critical aspects where we could leave a positive impact on society and the environment, by seeking sustainable packaging solutions to encourage recyclability and increase the circularity of materials, to reduce the resource intensity in our packaging.

### APPROACH

F&N focuses on designing our packaging with the environment in mind and looks into investing in new innovations, integrating circular economy concepts, and working closely with our stakeholders to innovate packaging solutions.

F&N's packaging approach is focused on:

- ▶ Reducing the amount of materials used in our packaging
- ▶ Increasing the use of recycled materials, e.g. replacing virgin aluminium and tin cans with recycled materials
- ▶ Switching to certified sustainable packaging materials, e.g. FSC certified
- ▶ Designing packaging to be recyclable

F&N actively works across the supply chain to find solutions to manage post-consumer packaging. We have partnered with other organisations to close the loop and we are seeking to work with new suppliers that meet our requirements for sustainable packaging materials.

### 2025 TARGET

- ▶ 25% of beverage and dairy packaging to contain recycled materials by 2025
  - The average recycled content in our packaging in FY2021 is 22%.

### PERFORMANCE

|                                                                       |                                              |
|-----------------------------------------------------------------------|----------------------------------------------|
| <b>GRI 301-1 (2016)</b><br>Materials used by weight or volume         | ▶ Over 3.4 million MT of materials used      |
| <b>GRI 301-2 (2016)</b><br>Recycled input materials used <sup>^</sup> | ▶ About 20% of recycled input materials used |

**Note:**

- 1 Materials are sourced from external suppliers
- 2 Data are sourced from direct measurements
- <sup>^</sup> Data for packaging materials only



## INITIATIVES

### Alternative Packaging for F&N ICE MOUNTAIN Drinking Water



The F&N ICE MOUNTAIN Drinking Water is now available in bio-based packaging, featuring a recyclable paper carton packaging and a bottle cap made from sugar cane. This year, F&N ICE MOUNTAIN Drinking Water was also launched in a new packaging format – aluminium cans, which are deemed more valuable in the recycling market.

### Founding Member of the MAREA



In January 2021, F&NHB and nine other members formed MAREA – an alliance in collaboration with the Malaysian government to enable a voluntary, industry-led Extended Producer Responsibility group. It brings like-minded companies together to focus on boosting the value chain and improving the collection rates and recycling of post-consumer packaging.



### 'Recycle N Save' Initiative



F&N spearheaded a joint initiative with the NEA of Singapore to introduce 50 reverse vending machines across Singapore since 2019. The initiative was to provide an easily available avenue for consumers to deposit selected used plastic bottles and aluminium cans to encourage a habit of recycling. This supports the national vision of the Sustainable Singapore Blueprint's goal to increase the national recycling rate to 70% by 2030. As of September 2021, more than 3.3 million cans and more than 4.8 million bottles have been collected and passed on to recycling facilities.

### Reuse of Packaging Material



F&NNT had implemented a project to reduce the use of single-use plastic bags and one-time paper cores by reusing them. By reusing the paper cores of the supplier's film rolls and the lidded plastic bags, F&NNT had successfully reduced the amount of plastic bags and paper cores used in its operations by over 5,500kg and 10,700kg, respectively. This translated to over THB 980,000 (over SGD 40,000) cost savings each year. It also has the added benefit of reducing over 3 MT CO<sub>2</sub>e of GHG emissions indirectly.

# Value Chain Impacts

## BIODIVERSITY

GRI Index: GRI 304-1

SDG:



Our future strongly depends on a rich biodiversity and healthy ecosystems. In recent decades, the world is experiencing biodiversity loss and ecosystem degradation at an unprecedented pace. F&N is dependent on plant-based ingredients and materials such as palm oil, sugar and paper, and the natural environment may in turn be impacted by our business – especially in the upstream of our supply chain.

We recognise the importance of sustainable sourcing, and our role in ensuring healthy natural ecosystems together with our suppliers. It is necessary to be aware of our biodiversity-related risks to properly manage our operations in areas where biodiversity is rich. There is a need to scale up our efforts beyond sustainable sourcing and we have taken the steps to protect biodiversity and natural ecosystems in areas where we operate.

### APPROACH

This year, F&N considers biodiversity as a material topic for the first time. Our subsidiary, F&NHB, is taking the lead in this area. F&NHB had discussions with internal and external stakeholders to develop a strategy and direction for this material topic. They have developed a biodiversity statement which serves as a foundation for biodiversity management at F&NHB. This statement is applicable to all current and future operational sites at F&NHB:

We aim to protect biodiversity and ecosystems through the following commitments:

**1** Avoid deforestation in our supply chain.

**2** Avoid operating and developing in close proximity to nationally, or internationally recognised areas of high biodiversity value, including World Heritage areas, International Union for Conservation of Nature (IUCN) Category I-IV protected areas, RAMSAR Sites and key biodiversity areas.

**3** In any circumstance where our production sites or a proposed project is located within, or depend upon, areas of high biodiversity value, we will apply the following mitigation hierarchy:

- Avoidance – Avoid operating and developing in areas of high biodiversity value.
- Minimisation – Implement measures/ initiatives to monitor and minimise impacts on biodiversity from our operations.
- Restoring – Seek to restore/rehabilitate areas where impacts cannot be prevented.
- Offset – Consider biodiversity compensation/ offsets measures, where there is residual impact.

**4** In managing potential biodiversity risk, we will engage necessary stakeholders, including local authorities and the communities nearby, and ensure appropriate mitigation strategy is developed to minimise impacts to as low as reasonably possible. We are committed to collaborating with external partners, such as biodiversity experts, to support our biodiversity assessment and management process.



F&NHB also encourages their suppliers and business partners to commit to protecting the biodiversity and ecosystems in their operations through the Sustainable Agriculture Guideline; where they engage and work with suppliers to build an environmentally and socially responsible supply chain. More information can be found in the 'Supply Chain Stewardship' section of this report.

## INITIATIVES

F&N sources for sustainable palm oil in a bid to contribute to the conservation of the ecosystem. As an ordinary member of RSPO, we abide by the RSPO Principles and Criteria 2018 and are committed to sourcing for traceable palm oil that is free from deforestation and conversion through suppliers with a no deforestation, no conversion policy.

We engage our palm oil suppliers to ensure the palm oil sourced from them is RSPO certified, sustainable and traceable. Our current palm oil suppliers have *No Deforestation, No Peat, No Exploitation Policies* which they disclose on their websites.

→ More details on F&N's sustainable sourcing of key raw materials can be found in the 'Supply Chain Stewardship' section of the Report

## PERFORMANCE

### GRI 304-1 (2016)

Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

- ▶ None of our operational sites are in or adjacent to protected areas and areas of high biodiversity value outside protected areas.

