

MANAGING IMPACTS AND CONDUCTING BUSINESS IN A RESPONSIBLE MANNER

ECO-EFFICIENCY

We described many of the ways in which we deliver economic and social value in the earlier sections of this report. This section of the report sets out the main ways in which F&N ensure sustainable value creation by minimising environmental costs associated with our operations. We talk about our responsible supply chain and the safety & wellbeing of our employees and consumers, but we begin with eco-efficiency. (Eco) efficiency refers to the act of maximising benefits and minimising (ecological) costs. As part of our materiality assessment, we have identified four main issues in relation to our eco-efficiency efforts:



1. Water Stewardship



2. Effluents and Waste



3. Packaging



4. Energy and Climate Change

We implement environmentally sustainable business practices in alignment with F&N's core values, and all employees are at all times guided by our Environmental Policy.



We implement environmentally sustainable business practices in alignment with F&N's core values.

Our Environmental Policy

All our operations are guided by the following principles:

- Provide senior management support and resources to drive our environmental agenda.
- Comply with applicable environmental legislation and regulation and other requirements that we subscribe to.
- Continually enhance our environmental performance and standards.
- Use natural resources wisely and adopt best practices in our daily operations.
- Continuously improve our processes to reduce water & energy consumption and minimise waste.
- Prevent air, water and other pollution, and dispose of waste safely and responsibly.

Our employees, business partners and stakeholder groups are all aware of our Environmental Policy and have given their support for our goals. To ensure that our policies are valid and up to date, they are reviewed regularly.

In the following pages we explain our targets, management approach and performance for each of our eco-efficiency areas: Water Stewardship; Effluents and Waste; Packaging; and Energy and Climate Change. We show that eco-efficiency is not just about reducing the environmental impacts of our operations, it also often makes good business sense for F&N.

Material issues covered


- 1. **M11 Water Stewardship**
GRI 303-1, 303-3 Water
- 2. **M12 Effluents and Waste**
GRI 306-1 Effluents and Waste
- 3. **M15 Packaging**
- 4. **M13 Energy and Climate Change**
GRI 302-1, 302-3 Energy
GRI 305-1, 305-2, 305-4 Emissions

SDGs mapped to



ECO-EFFICIENCY

WATER STEWARDSHIP



TARGET:
To reduce the
water intensity ratio
by 5% from 2017
by 2020.

Many countries face water stress in recent years, and the effects of climate change are likely to exacerbate such problems in the future. All life is dependent on safe and accessible water to survive and F&N has a duty to manage our water use responsibly.

Our Approach

Within the guidance of our Environmental Policy, we are committed to responsible water stewardship. Our integrated approach includes: efficiency measures; the safe return of wastewater from our operations; and mitigating risk in partnership with local communities. It also includes responsible sourcing of raw materials, which is described in a later chapter.

Water is a fundamental element of our products, and our business is dependent on a reliable water supply. A lack of effective water management can therefore have serious financial implications, especially in areas with high water stress. We have

a range of water assessment and action policies that are applied across our facilities. This includes: daily monitoring of consumption; the recovery of effluent water using ultrafiltration; and the collection and use of rainwater.

A localised approach to water management is essential. We look beyond our own operations and act collectively with other stakeholders in each of the regions in which we operate. We seize every opportunity and carry out various initiatives to reduce water consumption so as to meet our 2020 water intensity target.

Can Rinser Water Recovery Shah Alam Site	F&NHB has identified that water consumption can be reduced during the can warmer procedure in the production phase and this can be achieved through recovering water usage from the can rinser and twister phase. Previously, water from the can rinser and can twister phase are drained out after it has been used in this process. A water recovery system has since been installed and implemented to reuse water from the can rinser and twister phase so that it can be reused in the can warming phase, hence reducing water consumption and costs significantly.	Water Reduction: 35,458.56 m³/year Cost Savings: about S\$26,900/year
Condensate Recovery Project Shah Alam Site	Steam loss during the production phase is an area where we can reduce water consumption, most notably in the pasteurisation phase through steam trap replacement and appropriate piping system. Steam header automatic valves have also been installed at various points to reduce steam loss. This initiative has contributed significantly to water consumption reduction targets and cost savings.	Water Reduction: 14,755 m³/year Cost Savings: about S\$11,500/year
Rain Harvesting System Malaysia	F&NHB will soon be implementing a rainwater harvesting system to extract rain water that can be used to reinforce the process cooling tower and evaporative condenser (EVC). This will allow F&NHB to significantly reduce municipal water consumption.	F&NHB has just started on this initiative. Results will be shared in the next Sustainability Report.

Rainwater and Cooling Tower water discharge
TP Singapore

Water discharged from cooling towers and rainwater drainage has been utilised for toilet flushing at one of our operational sites using a water collection point which was installed to reduce water consumption.

Water Reduction:
1,460 m³/year

Cost Savings:
about S\$3,000/year



Water Efficiency Project for Chiller System Operations
TP Singapore

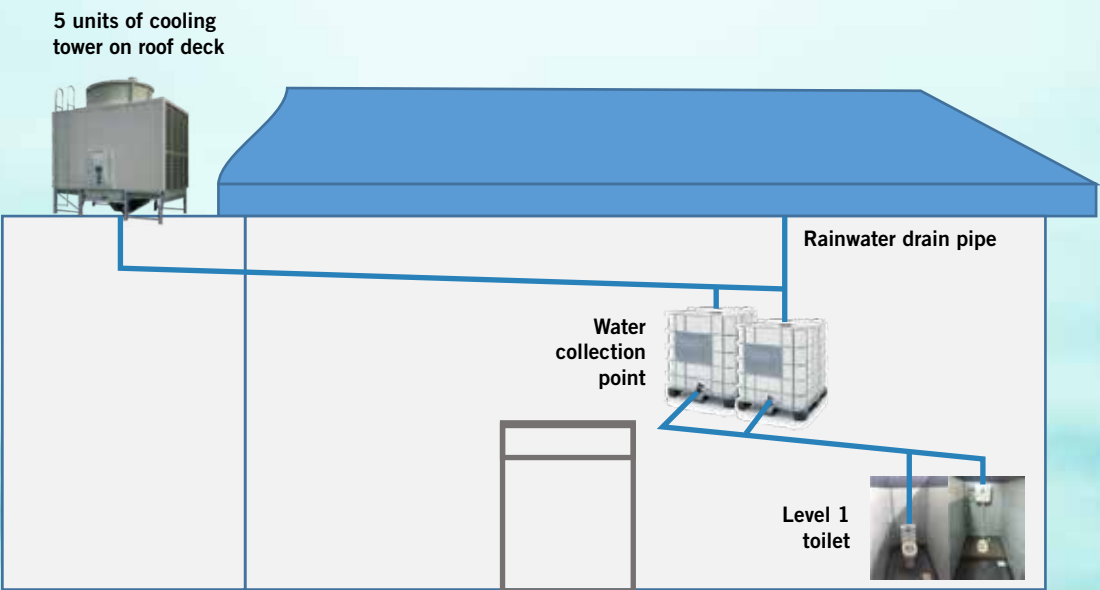
Cooling Tower pipes and pumps have been completely replaced due to corrosion and significant leaks. The newly installed pipes pumps are more resistant to corrosion and meters have been installed to monitor leaks.

Water Reduction:
1,825 m³/year

Cost Savings:
about S\$4,500/year



Flow diagram of Rainwater and Cooling Tower water discharge process



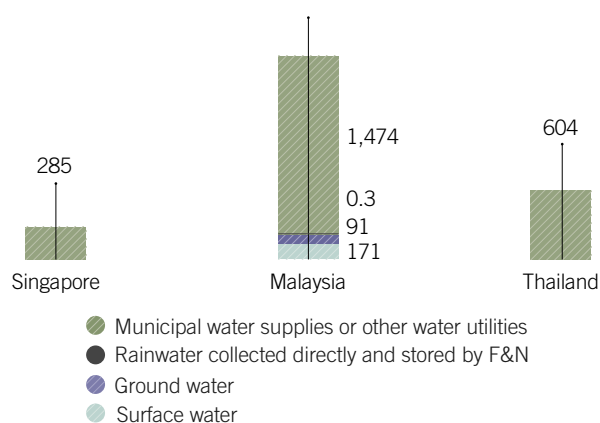
ECO-EFFICIENCY

FY2018 Performance Highlights

Over the past year, our water intensity ratio xx due to our capital investments at F&NDT (one-off water use for new machine installations) and in Malaysia (including a new cold aseptic line). In Thailand, we have also been experimenting with a new cleaning-in-place process for our *TEAPOT* Squeeze tube, which has temporarily increased water intensity. Nevertheless, we are still committed to achieve our 2020 water consumption reduction targets.

GRI 303-1 Water withdrawal by source

WATER WITHDRAWAL BY SOURCE ('000m³)



Note:

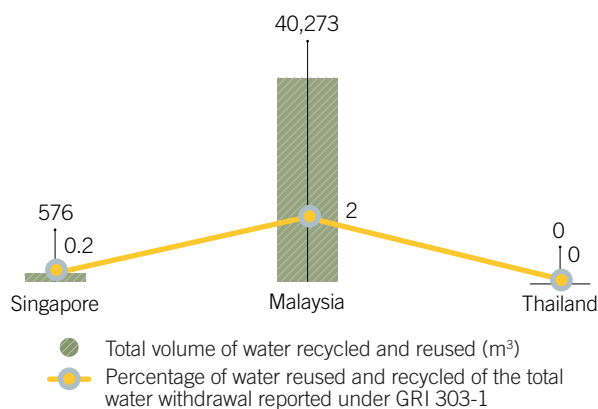
- 1 Water withdrawal (Surface water, Ground water and Municipal water) is measured through the use of a meter



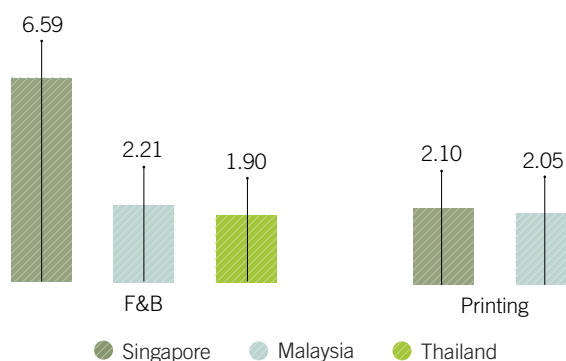
We are committed to achieve our 2020 water consumption reduction targets.

GRI 303-3 Water recycled and reused

WATER RECYCLED AND REUSED



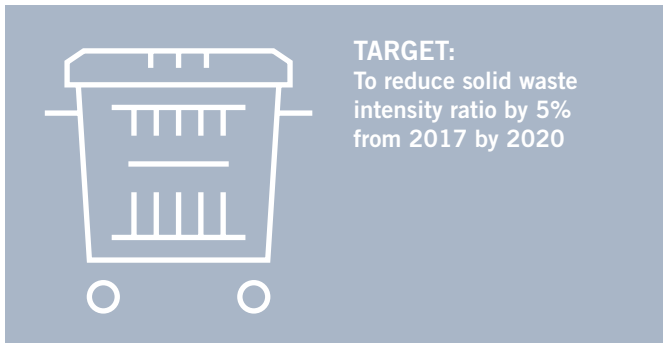
WATER INTENSITY RATIO (m³/MT)



Note:

- 1 Water intensity ratio is calculated based on the total amount of water withdrawal (in cubic meter, m³) per metric tonne of product (MT)

EFFLUENTS AND WASTE



The Food & Beverage manufacturing process involves the generation of liquid wastes (effluents) and solid waste, but there are also numerous ways to avoid and recycle waste. We continuously strive to reduce solid waste and wastewater from operations, and this means complying with and going beyond relevant regulations.

Our Approach

Under the guidance of our Environment Policy and the 5Rs philosophy, we are committed to reduce, reuse, recycle, rethink and reinvent. The concept of a 'circular economy' is certainly a reinvention of the traditional economic system, and F&N is exploring opportunities to regenerate materials and energy as part of a closed loop system.

We are committed to meeting our waste reduction targets by 2020 and the company has been implementing best practice at all of our operating sites. This includes:

- improving production processes to reduce waste production;
- separating recyclable waste to add value such as packaging;
- separating recyclable waste to general waste before being sent to landfills; and
- providing general environmental awareness through communication platforms to raise awareness of employees.

Indeed, information and advice about these practices are cascaded to all employees who are encouraged to contribute to waste reduction targets. Nevertheless, our packaging recycling commitments do not compromise the safety of our products as Consumer Health and Safety is our top priority.

Our operations at F&NDT and Malaysia are leading the way and are committed to achieving zero effluents and solid waste. One way we do this is by converting sludge from production into organic fertiliser, which is then distributed to local farmers.



Wastewater from our industrial effluent treatment plant in Malaysia is treated and reused (for cleaning, toilet flushing, utilities and other functional purposes).



Rejected water from our Thai water treatment plant and boiler is transferred to a pond for watering of grass and plants.



Okara waste from soy extraction at our beverages production are converted into animal feed.



We continuously strive to reduce solid waste and wastewater from operations.

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F&NHB Go Green++

F&NHB launched Green Carnivals in July 2018 and toured a number of our plants in Malaysia during July and August. The activities for the carnival were designed to be a fun way to improve behaviour, including a workshop about upcycling (creative reuse) of waste items. It also included display booths about:

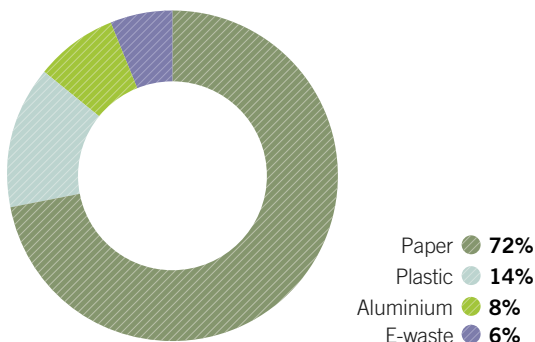
- Recycling carton boxes (run by Tetra Pak Malaysia);
- Recycling industrial waste into useful materials, for example turning sludge into fertiliser;
- Reusing waste fabrics to make clothing such as towels and scarfs; and
- The company's sustainability commitments and initiatives.

More than 75,000 kilograms of recyclables were collected (an average of 39 kilograms per employee) throughout the 6-month program. We have also seen a significant increase in employees' knowledge on 5R philosophy and proper recycling.



The Green Carnival is part of the F&NHB Go Green++ Program that aims to generate greater awareness of applying the 5Rs philosophy (Reduce, Reuse, Recycle, Rethink and Reinvent).

TOTAL COLLECTION OF RECYCLABLES FROM F&NHB GO GREEN++



More than 75,000 kilograms of recyclables were collected (an average of 39 kilograms per employee) throughout the 6-month program.

Waste to Wealth Campaign

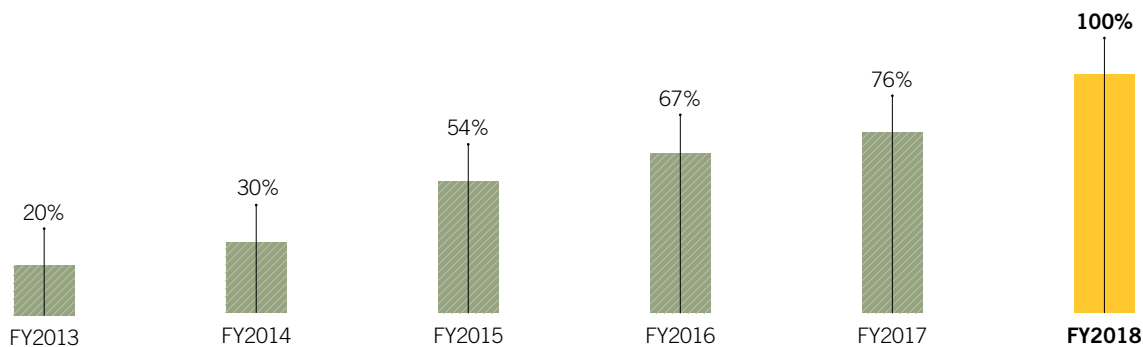
The F&NDT Pulau Indah Sustainability Team has launched the ‘Waste to Wealth Campaign 2018’ which focuses on the importance of recycling waste at the workplace. This campaign emphasises that contributions from all employees can play a vital role in the overall waste reduction for F&N and help to meet the 2020 targets.

This campaign was initiated with a mini exhibition set up to display how waste generated from the production phase can be recycled and generated into new products. The display included organic fertilisers (dairy sludge), carton boxes that were recycled and reused for packaging purposes, and metal plates made from recycled F&N metal cans. These innovative solutions were available for employees to observe and build understanding.



All operating sites have ensured that recycling bins, compost bins and general waste bins have been distributed and are accessible to all employees, including clear illustrations on how to categorise and segregate each waste type. As a result of this campaign, our plant in Pulau Indah have achieved 100% recycling rate of its solid waste this year, effectively become the first manufacturing facility within F&N Group to achieve zero waste (non-hazardous waste).

PERCENTAGE OF SOLID WASTE RECYCLED AT PULAU INDAH PLANT

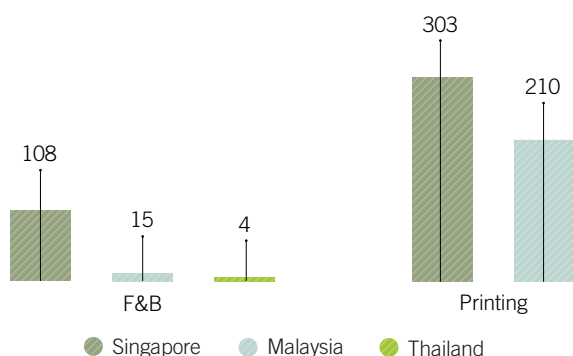


ECO-EFFICIENCY

FY2018 Performance Highlights

We have a target to reduce solid waste intensity ratio by 5% from 2017 to 2020. We will also work towards progressively increasing the proportion of solid waste recycled.

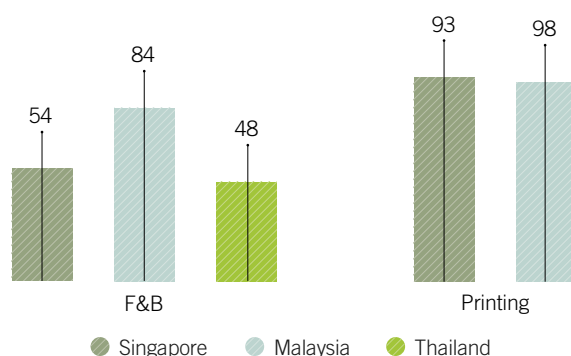
SOLID WASTE INTENSITY RATIO (kg OF WASTE GENERATED/MT OF PRODUCT)



Notes:

- 1 Solid waste intensity ratio is calculated based on the total amount of waste generated (in kilogram, kg) per metric tonne of product (MT)

SOLID WASTE RECYCLED (%)

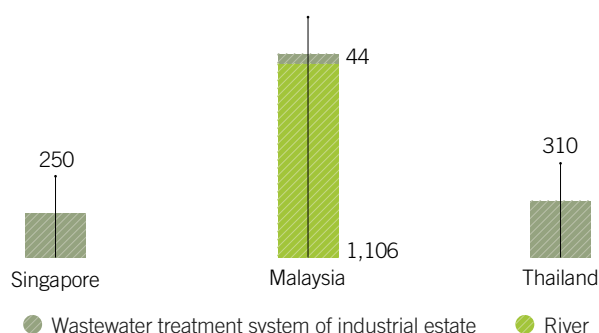


Notes:

- 1 Solid waste recycled is the percentage of waste generated that was sent for recycling

GRI 306-1 Water discharge by quality and destination

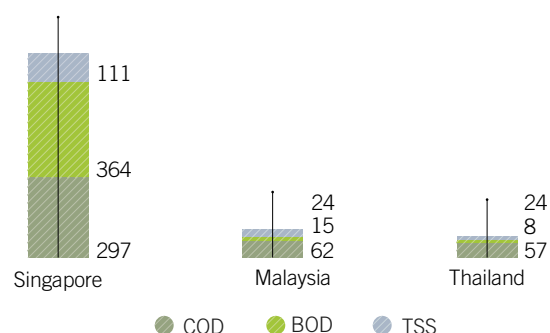
WATER DISCHARGED BY DESTINATION ('000m³)



Notes:

- 1 The data for Malaysia excludes our two water plants in Matang and Bentong as they do not have Waste Water Treatment Plant and they are unable to measure the water discharged.
- 2 The total volume of planned and unplanned water discharges are not reused by another organisation.

AVERAGE WATER DISCHARGED BY QUALITY (mg/L)



Notes:

- 1 The data for Malaysia excludes our two water plants in Matang and Bentong as they do not have Waste Water Treatment Plant and they are unable to measure the water discharged.
- 2 The data for Singapore on Chemical Oxygen Demand ("COD") excludes our Dairies & Beverages plant as only Biochemical Oxygen Demand ("BOD") is measured to align with the computation of trade effluent tariff by Singapore's Public Utilities Board ("PUB").
- 3 COD is the measure of the amount of oxygen required to oxidise soluble and particulate organic matter in water. It provides an index to assess the effect discharged water would have on the receiving environment. Higher COD levels mean a greater amount of oxidisable organic matter which will reduce dissolved oxygen ("DO") levels. Low DO levels are harmful to higher aquatic life forms.
- 4 BOD is the amount of DO bacteria will consume to break down organic material present in a given water sample at certain temperature over a specific time period. As with the COD, the higher the BOD, the less able the water body is to support healthy aquatic life.
- 5 Total Suspended Solids ("TSS") is the dry-weight of particles trapped by a filter. It is a water quality parameter used to assess the quality of wastewater after treatment in a wastewater treatment plant.

PACKAGING

As a major food & beverage manufacturer, we recognise our responsibility to reduce the environmental impact of packaging.

Our Approach

We adopt a two-pronged approach to reduce the environmental impacts of our packaging:



In the 'Innovation' section of this report, we outlined that one of our priorities for innovation is to improve the environmental performance of our packaging.

Our packaging materials are sourced based on the ability to support our product specifications. We regularly evaluate the potential for new packaging materials and processes. For example, the new aseptic cold-fill line at Shah Alam in Malaysia reduces the PET resin packaging material for our products (including *100PLUS ACTIVE* and *OYOSHI*). Because containers are thinner and lighter, PET resin use has been reduced by up to 40%. In addition, the products have a longer shelf life, leading to less waste.



We regularly evaluate the potential for new packaging materials and processes.

ECO-EFFICIENCY



Other initiatives in Malaysia include reducing the weight of aluminium cans and PET bottles for our beverages. Our beverage plants in Malaysia have reduced the weight of PET bottles (500ml, 600ml and 1.5L) and water cap, and this has helped to save material usage by about 70 MT this year.

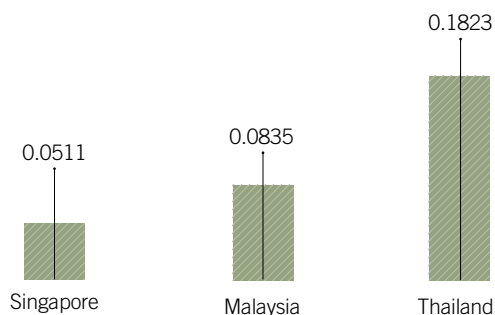
In Singapore, there is the initiative to replace the packing of *F&N MAGNOLIA* 250ml bottles from corrugated cardboard tray to corrugated plastic tray. Currently, the yearly usage for corrugated cardboard trays on 250ml *F&N MAGNOLIA* bottles are estimated to be about 7,300 pieces (equal to around 1,800kg or 1.8 tons of cardboard). This is an equivalent of more than 30 trees being sacrificed every year. Switching to corrugated plastic tray helps F&N to play our part in contributing towards saving the forest and preserving our nature for future generations. Corrugated plastic trays are also recyclable and reusable so as to minimise wastage.



FY2018 Performance Highlights

The emergence of plastic waste as a significant environmental issue means that we are reassessing our approach.

PACKAGING INTENSITY RATIO (MT OF PACKAGING MATERIAL/MT OF PRODUCT)



Notes:

- 1 Packaging intensity ratio is calculated based on the total amount of packaging material used (in metric tonne, MT) per metric tonne of product (MT)
- 2 Thailand produces more single serve packaging, which has a higher ratio of packaging used per tonne of product, as compared to Singapore and Malaysia.

ENERGY AND CLIMATE CHANGE



TARGET:
To reduce energy intensity ratio by 5% from 2017 by 2020

TARGET:
To reduce greenhouse gas intensity ratio by 5% from 2017 by 2020





Climate change is one of the global challenges of the 21st century. We are committed to reducing our energy consumption and GHG emissions intensity, as one of the main priorities for our 2020 Vision. We also have a responsibility to help minimise carbon footprints across our value chain, ranging from manufacturing, packaging, storage and logistics, to end use and disposal.

Our Approach

Singapore has pledged to reduce the Emissions Intensity (“EI”) by 36%, from 2005 levels by 2030, and to reach peak greenhouse gas emissions by 2030. Malaysia’s government has targeted a 45% reduction in GHG intensity by 2030 from a 2005 baseline and Thailand has a reduction target of 30% by 2036 from a 2010 baseline.

F&N takes its role in these efforts very seriously, and we have an initial target: between 2017 and 2020, we aim to reduce energy and GHG intensity by 5%. Based on the science and peers’ best practices, F&N will reassess and set longer-term targets, beyond 2020, in due course.

Our Energy and Climate Change related activities can be broken down into four priority areas. The first three relate to minimising our own impacts, and the final relates to how we are adapting to climate change risks:

-  **1. Energy efficiency in our operations**
-  **2. Renewable energy sourcing and generation**
-  **3. Reducing carbon in our value chain**
-  **4. Operations’ exposure to climate change risk**



We aim to reduce energy and GHG intensity ratio by 5%, from 2017 to 2020.



ECO-EFFICIENCY

1. Energy efficiency in our operations

Improving energy efficiency in our operations makes business sense just as much as it helps to reduce our environmental impacts. We have a range of initiatives including: technical solutions for our buildings and equipment (for example timers, LED lighting); process solutions to eradicate wasted energy (for example heat recovery from boilers); and behavioural solutions to reinforce a culture of good practice throughout our workforce (for example daily monitoring of energy consumption):

UHT Tubular Heat Exchanger Water Recovery Project Shah Alam

This project aims to reduce both energy (natural gas) and water consumption. We installed a condensate tank connected to tubular heat exchanger tanks in which water would ordinarily be drained after usage. However, with the condensate tank installed, used water is redirected towards the boiler water tank for other purposes, reducing natural gas and water usage.

Energy Saving:
4,048 mmbtu/year

Cost Savings:
about S\$35,900/year

**Energy and Water
Efficiency for Chiller
System Operations
TP Singapore**

Cooling Tower pipes, pumps and motors have been completely replaced with more energy efficient technology (e.g. IE3 motors and new main header pipes) to reduce energy usage and long-term maintenance costs.

Energy Saving:
82,109 kWh /year

Cost Savings:
about S\$9,900/year

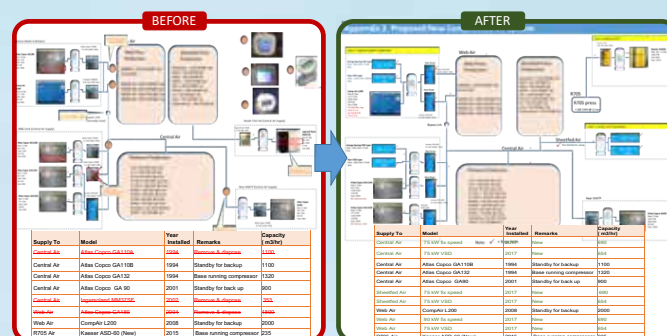


Replacement of Inefficient Air Compressor

We have made major adjustments towards the efficiency and energy cost reduction for air compressor system operations at our TP site by installing modern air compressor systems that are more energy efficient.

Energy Saving:
495,123 kWh /year

Cost Savings:
about S\$69,300/year



2. Renewable energy sourcing and generation

Energy efficiency can make a significant contribution, but we recognise that in order to decouple our activities from GHG emissions, we must transition from hydrocarbon-based energy to renewable energy. To support this, we are looking into the viability of the notion of sourcing a portion of our electricity from renewable sources. Furthermore, we are also exploring options to generate our own renewable energy at our sites. For example, we are in the planning phase to install solar panels, where applicable, on our plants' rooftops.

Solar Energy Proposal Malaysia	We propose to install a solar PV system at our Pulau Indah site which will provide an alternative source of energy for our operations. The site's roof area of 25,000m2 will be used to provide a capacity of 3,000kWh generating system which will enable F&NHB to significantly reduce energy consumption from the grid and utilise renewable energy for its operations.	Plant Capacity: 3MWp (3000 kWh) Cost Savings: about S\$500,000/year
Solar Energy Proposal TP Singapore	In parallel with the development of solar PV system installation in Pulau Indah site, TP Singapore is also currently looking to install solar PV on the rooftop of the sheetfed production area, which has the potential to reduce heat load on the sheetfed production floor and reduce electricity consumption.	Plant Capacity: 3MWp (3,000 kWh) Cost Savings: S\$6,000/year

3. Reducing carbon in our value chain

As we make improvements to our own operations through energy efficiency and renewable energy use, the natural next step is to share best practice and encourage improvement along our full value chain. We are still at the beginning of these efforts but understand that it is essential to support our business partners to reduce their own GHG emission impacts. Further details of our approach to reducing emissions related to transportation are detailed in a later chapter.

4. Operations' exposure to climate change risk

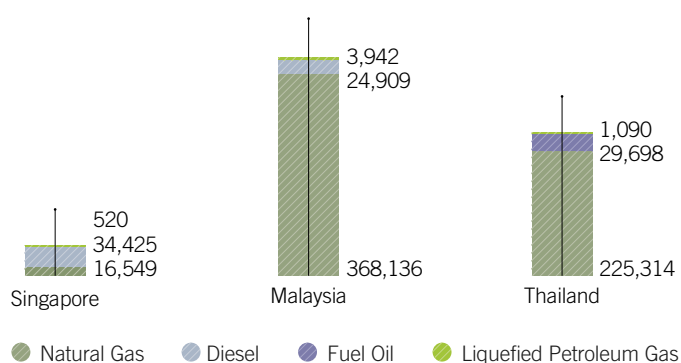
F&N's operations and supply chain face increasing impacts from climate change. This includes impacts from rising sea levels, extreme temperatures, farming shortages and water availability. We must be resilient to climate change risks. We therefore heed the calls of the respective authorities and adhere to the regulations to reduce our environmental footprint in order to actively work towards reducing climate change and thus also mitigating our risk. At F&NHB, climate change risks are also monitored and managed as part of their Enterprise Risk Management process. Robust incident escalation procedures and response plans are part of their BCM.

ECO-EFFICIENCY

FY2018 Performance Highlights

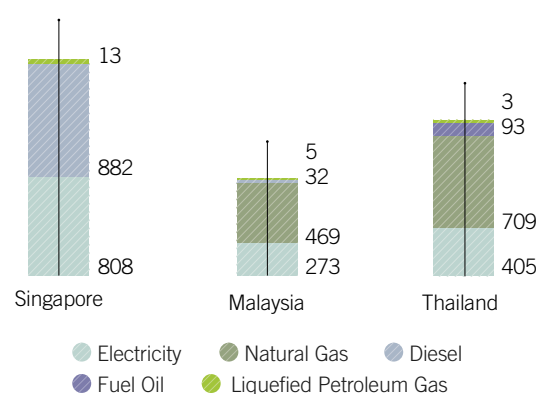
GRI 302-1 Energy consumption within the organisation

TOTAL FUEL USE FROM NON-RENEWABLE SOURCES ('000 MJ)

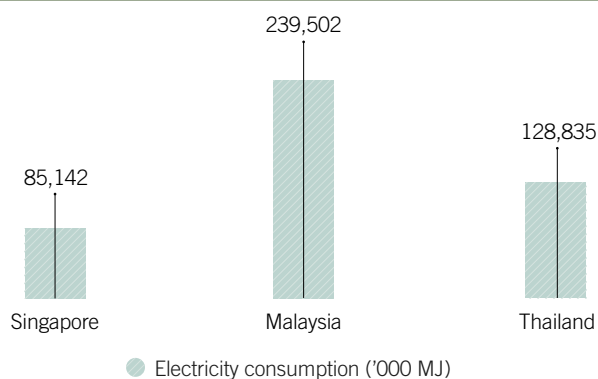


GRI 302-3 Energy Intensity

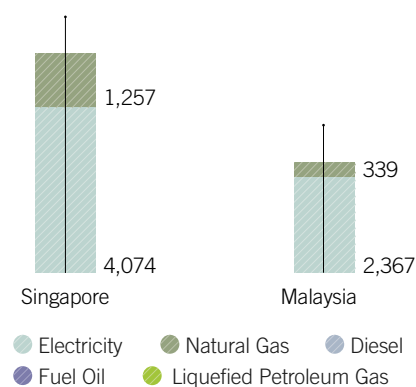
ENERGY INTENSITY RATIO (MJ/MT OF PRODUCT) – F&B



ELECTRICITY, HEATING AND STEAM PURCHASED FOR CONSUMPTION



ENERGY INTENSITY RATIO (MJ/MT OF PRODUCT) – PRINTING



Notes:

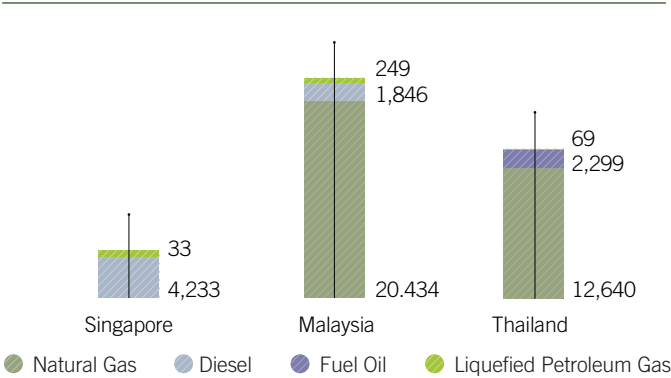
- 1 There is no fuel consumption within F&N from renewable sources
- 2 There is no heating, cooling and steam purchased for consumption
- 3 There is no electricity, heating, cooling and steam sold
- 4 The data on natural gas and electricity consumption is collected through meter readings and converted to MJ through standard conversion values

Notes:

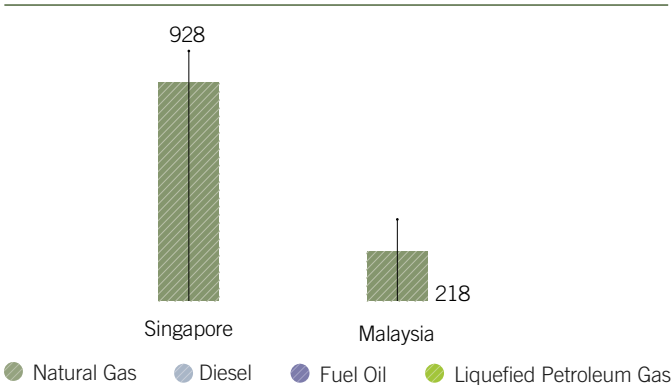
- 1 Energy intensity ratio is calculated based on the total amount of energy consumed (in megajoule, MJ) per metric tonne of product (MT)
- 2 Energy intensity ratio is for energy consumed within F&N only
- 3 Natural Gas, Diesel, Fuel Oil, Liquefied Petroleum Gas and Electricity are included in the energy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

GRI 305 -1 Direct (Scope 1) GHG emissions

DIRECT GHG EMISSIONS (MT CO_{2e}) - F&B



DIRECT GHG EMISSIONS (MT CO_{2e}) - PRINTING

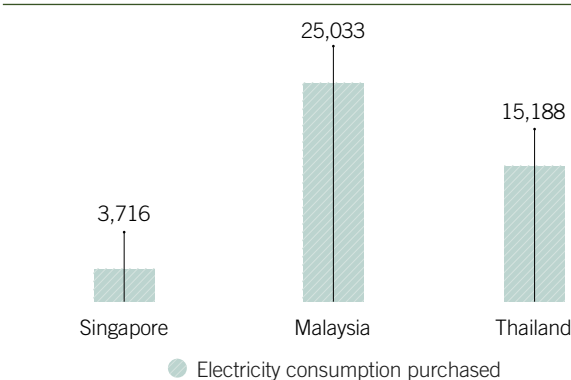


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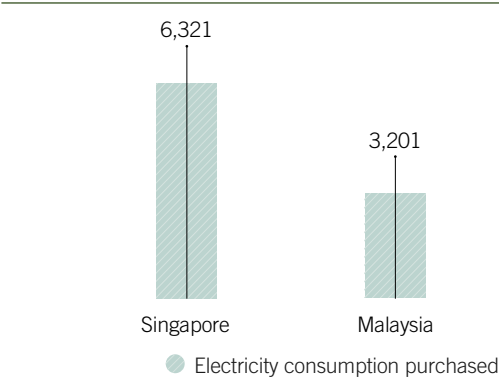
- 1 CO_{2e} emissions estimated based on the conversion factor from Greenhouse Gas ("GHG") Protocol - Emission Factors from Cross-Sector Tools (March 2017)
- 2 Only CO₂ is included in the calculation of the Direct (Scope 1) GHG emissions
- 3 There is no biogenic CO₂ emissions generated from the combustion of biomass
- 4 The base year for the calculations is 2017. It was chosen as that was the first year F&N adopted the GRI sustainability reporting framework
- 5 The Global Warming Potential ("GWP") value for a time horizon of 100 years based on the Intergovernmental Panel on Climate Change ("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 Energy indirect (Scope 2) GHG emissions

INDIRECT GHG EMISSIONS (MT CO_{2e}) - F&B



INDIRECT GHG EMISSIONS (MT CO_{2e}) - PRINTING

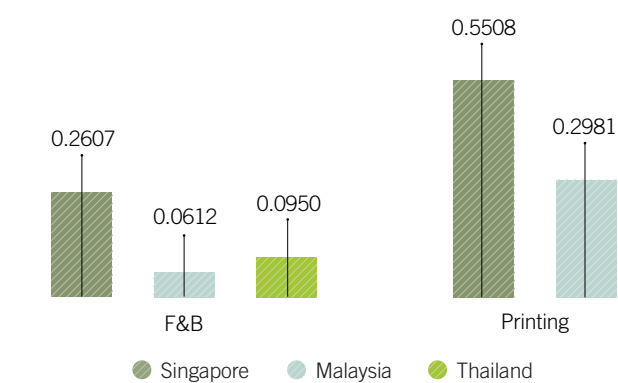


Notes:

- 1 CO_{2e} emissions estimated based on the conversion factor from Energy Market Authority of Singapore and using the location-based method
- 2 Only CO₂ is included in the calculation of the Energy indirect (Scope 2) GHG emissions
- 3 The base year for the calculations is 2017. It was chosen as that was the first year F&N adopted the GRI sustainability reporting framework
- 4 The Global Warming Potential ("GWP") value for a time horizon of 100 years based on the Intergovernmental Panel on Climate Change ("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

GRI 305-4 GHG emissions intensity

GREENHOUSE GAS (GHG) EMISSIONS INTENSITY RATIO (MT CO_{2e} GENERATED/MT OF PRODUCT)



Notes:

- 1 GHG emissions intensity ratio is calculated based on the total amount of CO_{2e} 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 CO₂ is included in the calculation of the GHG emissions intensity ratio

RESPONSIBLE SUPPLY CHAIN

F&N works with our business partners to deliver mutually sustainable solutions that create lasting value. We also lead by encouraging others to improve in order to achieve best environmental and social practices throughout our supply chain.

The following chapter outlines some of the ways we work with and influence other companies. We are committed to Sustainable Sourcing, and the next chapter explains our process for this while also providing additional insight into our Route Planning efforts, which we examine as one of the several ways in which we minimise negative environmental impacts.



Material issues covered

1. **M03 Sustainable Sourcing**
GRI 204-1 Procurement Practices
2. **M12 Route Planning (Transportation)**

SDGs mapped to



SUSTAINABLE SOURCING



TARGET:
To purchase 100%
of RSPO credits for
palm oil usage by
2020

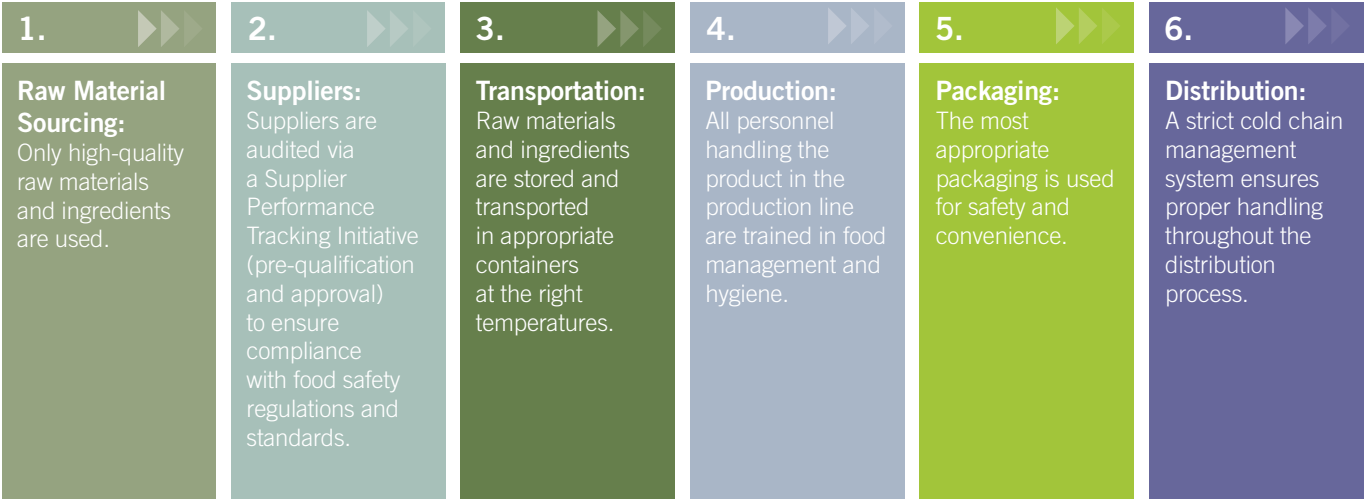
Raw materials are needed to produce products that our customers enjoy. We rely on farmers to supply sugar and dairy, suppliers to supply packaging materials, as well as dozens of other ingredients for our products.

Our Approach

Great care and collaboration is required to source the highest-quality ingredients, as well as other goods and services used during our manufacturing processes. Our procurement policies in Singapore, Malaysia and Thailand guide us in selecting the best quality goods and services that do not compromise sustainability principles. These policies also help us establish and maintain trust with our suppliers by ensuring fair play.

Our Procurement Policy covers standard principles of ethical business practice. While we have a business imperative to obtain goods and services at the best price in a timely manner, this is done only through means that adhere with guidelines and principles of fair play and transparency.

Supply Chain Diagram



RESPONSIBLE SUPPLY CHAIN



For three successive years, F&N Dairies Thailand's Agricultural and Manufacturing team has been helping farmers in the Dan-Khun-Thot Milk Cooperative to plant Napier grass, which improves the quality of milk by enhancing its fat, solids, and protein content. We have supported the farms through donating technologies in 2015 and providing training in 2016-17. Through this partnership, farmers have been able to increase the selling price of their milk.

Commercial Risk Management in Sourcing

Heightened costs and decreased availability of raw materials pose commercial risks. We undertake risk assessments on our suppliers' pricing and capacity to deliver goods and services. For key risks, we have established Business Continuity Plans to proactively ensure product supply.

We conduct annual supplier audits to ensure compliance with food safety regulations and standards. This includes auditing of suppliers' compliance to our stringent food safety criteria, required certifications, specifications and ingredient standards, as part of F&N's Procurement Policy. Non-compliant or underperforming suppliers must demonstrate they are committed to taking the necessary corrective actions within a predefined period, or risk having their contracts terminated.

We assess a range of quality assurance and food security criteria to safeguard the health of consumers and the safety of workers in our supply chain. Such criteria include the implementation and monitoring of good manufacturing processes, use of protective clothing, food safety management system, and chemical management.

Enhancing Supplier Productivity

We recognise that the various business partnerships we engage with are all opportunities to enhance our sustainability impacts. Our approach to leverage our influence in these partnerships is twofold.

1. First, we ensure that suppliers who have had incidents of non-compliance are encouraged to take corrective actions and are appropriately communicated to about possible avenues to improve their sustainability performance; and
2. Second, we take initiatives to further enhance supplier productivity for those who have already reached minimum standards.

As dairy purchases make up a significant portion of our procurement spending, we have prioritised our dairy suppliers for our supplier productivity enhancement program. We have been building capacity for local milk farmers in Dan-Khun-Thot Milk Cooperative in Thailand and are in the process of expanding this program to Malaysia.

With the success of this collaboration in Thailand, we have now initiated plans to develop a similar program in Malaysia. In July 2018, F&NHB signed a Memorandum of Understanding with Koperasi Pegawai-Pegawai MARDI Berhad to apply F&N's business expertise and strength in manufacturing technology with KoMARDI's production potential to together produce sustainable milk. F&NHB will exclusively purchase KoMARDI's total supply of fresh milk produced.

FY2018 Performance Highlights

Eco-credentials

We source raw materials that are certified with eco-credentials by, for example, the Forest Stewardship Council and Roundtable on Sustainable Palm Oil (“**RSPO**”), to ensure that they are produced in an environmentally, economically, and socially responsible manner. All paper products used in the tetra packaging of our chilled beverages carry the certification.

As one of Southeast Asia’s leading fast-moving consumer packaged goods companies and one of the largest users of palm oil in the region, we understand that our actions and business practices pertaining to the sourcing of sustainable palm oil play a significant part in safeguarding a sustainable environment for the well-being of society.

We therefore wish to reiterate our commitment to support the use of Certified Sustainable Palm Oil (“**CSPO**”) in products and have embarked on this journey by becoming an ordinary member of the RSPO on 14th August 2017. We aim to purchase RSPO credits for 100% of our palm oil usage by 2020. This year we have reached our interim target and purchased a total of 8,600 credits, representing 30% of our palm oil usage.

Palm oil cultivation is a major cause of deforestation in some regions. There have also been instances of malpractice ranging from forcible displacement of people from their land, to violation of safety and human rights for people working on palm oil plantations. F&N is working with partners to help ensure sustainable environmental and social practices in relation to our palm oil products.

The need for *sustainable* palm oil



Fulfills increasing global food demand



Supports affordable food prices



Supports poverty reduction



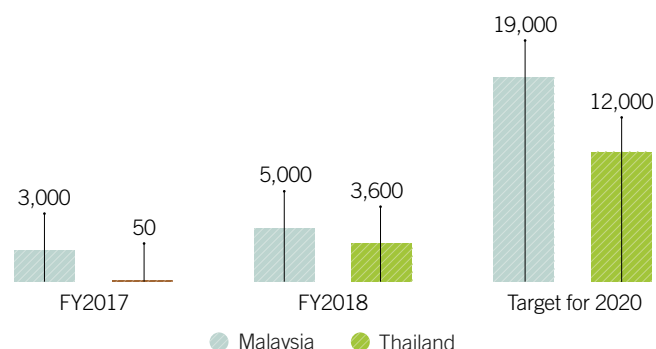
Safeguards social interests, communities and workers



Protects the environment and wildlife

Each RSPO credit represents that one tonne of CSPO, produced by a RSPO-certified company or independent producer, has entered the global palm oil supply chain. F&N purchases RSPO Credits to support the production of CSPO.

RSPO CREDITS

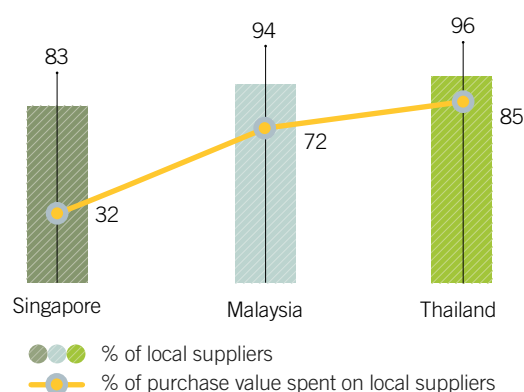


Local Suppliers

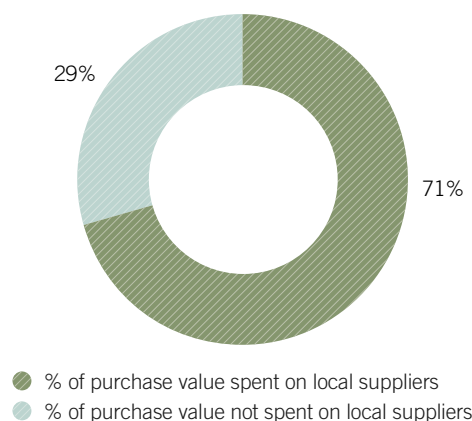
F&N engage with local suppliers where possible to support the local economy and minimise environmental impacts from transportation. More than 92% of our suppliers are local.

GRI 204-1 Proportion of spending on local suppliers

PROPORTION OF SPENDING ON LOCAL SUPPLIERS



GROUP PURCHASE VALUE ON SUPPLIERS



Note:

1 Local suppliers refer to suppliers who conduct their businesses within the respective countries where F&N's operations (as covered in this report) are based, namely Singapore, Malaysia and Thailand.

RESPONSIBLE SUPPLY CHAIN

Route Planning

Optimal route planning can help us reduce costs and is also more environmentally friendly, a classic 'win-win' scenario. We have therefore made major efforts to streamline our distribution networks over the past few years.



The environmental benefits of our more efficient logistics operations include the reduction of noise, congestion and GHG emissions.

Our Approach

We have made significant progress this year by switching from single-deck to double-decker trucks. During the year, our Malaysian operations also made a switch to increase the product load per truck deck, from 22 pallets to 26 pallets. We are now able to move more goods per trip and reduce the number of trips while at the same time achieve savings in logistics costs and improve stock movement efficiency. To date, the cost savings achieved were about S\$140,000 and total loads reduction of 700 loads.

The environmental benefits of our more efficient logistics operations include the

reduction of noise, congestion and GHG emissions.

We have also implemented a Vehicle Management System in Malaysia to improve the efficiency and safety of our fleet management. This allows for monitoring of the daily truck usage which will help us calculate the GHG emissions reduction in the future.

F&NHB has made more than S\$160 million of capital investments, since 2014, on new lines and warehouses, which mean that our manufacturing and warehouse operations are closer together, resulting in shorter routes to market.



SAFETY AND WELL-BEING

F&N’s positive impacts are built on the foundations of good business practices – eco-efficiency, a responsible supply chain and safety and well-being of our employees and consumers.

We have a moral duty to maintain the safety of our employees and consumers. This final section of our report illustrates that F&N carries this responsibility fully and above all else. Sustainable value creation is only possible where we do everything within our power to protect employees and potential customers. This section also has many positive examples showing how we enhance the well-being of our employees and customers.

The first chapter in this section outlines our approach to Occupational Health & Safety (“OHS”), including the systems and teams involved. It will explain how best practice

in OHS is cascaded to all of our employees, and how we have set ourselves challenging targets.

Consumer Health & Safety is in focus for the next chapter. F&N’s approach here is embodied by our brand promise: “Pure Enjoyment, Pure Goodness.” We will show how we use a range of tools to ensure the safety and nutrition of our products.

The final chapter in this section is about labelling and communication: how do we make sure consumers are aware of the contents and nutritional qualities of our products?



Material issues covered

- 1. **M06 Occupational Health and Safety**
GRI 403-2 Occupational Health and Safety
- 2. **M07 Consumer Health and Safety**
GRI 416-1, 416-2 Customer Health and Safety
- 3. **M09 Product and Service Labelling**
GRI 417-1, 417-2 Marketing and Labelling

SDGs mapped to

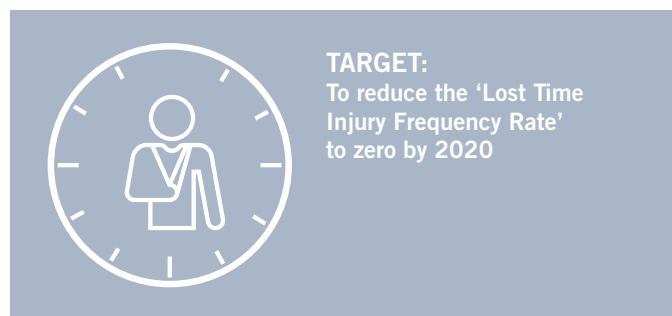


We have responsibility toward our consumers in three main areas:

- Health and Nutrition
- Product Quality and Product Safety
- Clear Consumer Communication

SAFETY AND WELL-BEING

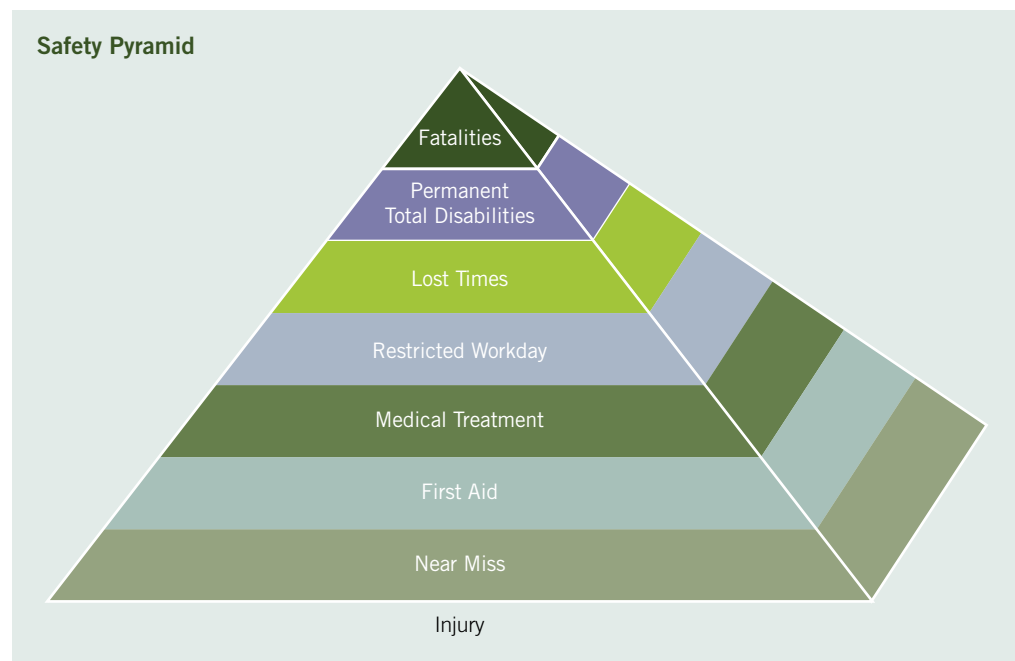
OCCUPATIONAL HEALTH AND SAFETY



From sourcing to production to delivery, we do everything we can to try to ensure that our business has no negative impacts on the health and safety of our employees and contractors. Beyond compliance with national regulations, we advance our health and safety performance throughout the value chain by aligning ourselves with international standards and best practices.

Our Approach

We cultivate a proactive 'safety first' culture for employees, so they are aware of their responsibilities for both themselves and their colleagues. This includes a positive approach, and we encourage a healthy lifestyle for our employees through a nutritious diet, physical activity and stress reduction measures.



Safety Culture

F&N has established safety, health, and environment (“**SHE**”) systems and monitoring processes across our operations. The safety practices in all of our major plants (F&NCM is working towards getting the ISO 45001 certification) have been certified with international standards including ISO 14001 and OHSAS 18001, meaning employees are provided with the basic necessities to conduct their work without risking their safety. All employees receive adequate training, information and instruction, as well as proper safety gear wherever appropriate.

On the ground, we have Company Emergency Response Teams, who are trained to mobilise and ensure the safety of our employees. Safety Committees overlook our safety systems and programs to ensure their effectiveness. Each Business Unit has their own Safety Committee to monitor and ensure safety protocols are adhered to. These Safety Committees meet every month to discuss accidents and near-misses, and determine appropriate actions to reduce risks. They are also conduct audits on the SHE systems, develop annual safety plans, and initiate programmes to awareness of health and safety issues among employees.

Here, we focus on ensuring an environment conducive to employee wellbeing and incentivise healthy habits. Our work environment is enhanced with ergonomic facilities to prevent office-related injuries and includes shower facilities to help employees integrate physical activity into their daily work life. Employees have free access to company-organised events such as badminton tournaments and yoga classes.

Air quality, brightness, temperature and noise levels are monitored in all of our facilities, and we offer tests for employees. For instance, in April 2018, we provided audiometric tests for all at-risk workers, with follow-up doctor consultations where impairments were identified. We also provide an annual health screening for all employees.

Safety training conducted covers a range of topics including:



Fire Prevention and Safety



Chemical and Gas Handling Management



First Aid Training and CPR



Forklift Driver Certification



Scheduled Waste



Confined Space



Electrical Safety

Singapore

Each year, we conduct a safety roadshow to foster awareness amongst our employees on safety topics. Topics presented during FY2018 include SGSecure, driving safety, traffic management, occupational health, healthy eating and fire safety.

During the past year, we have incorporated SGSecure into our OHS management system to align with the Singapore government's initiative to sensitise, train and mobilise our employees to prevent and deal with a terror attack. This entails registering an SGSecure Rep with the Ministry of Manpower, reviewing our Standard Operating Procedures and conducting risk assessments to identify terror risks. We provided SGSecure training to our employees to increase awareness on how to manage our safety and security risks.

Additionally, in order to provide the employees with easy access to information on rules and regulations pertaining to security, safety, environment and health within FNFS, there was a compilation and printing of a guidebook on rules, regulations and good practices pertaining to security, safety, environment and health. All FNFS employees were issued a copy.



SAFETY AND WELL-BEING



SHE Drama activity

Malaysia and Thailand

In both Malaysia and Thailand, we organised regular activities to engage our employees on safety topics. Some of these activities included a SHE Drama activity, an internal ISO 45001 audit and training, and some guest lectures from the Ministry of Health and the Department of Environmental Quality Promotion. In Thailand, there is also a monthly newsletter sent to employees about health & safety issues.



Guest Lectures from the Ministry of Health and Department of Environment

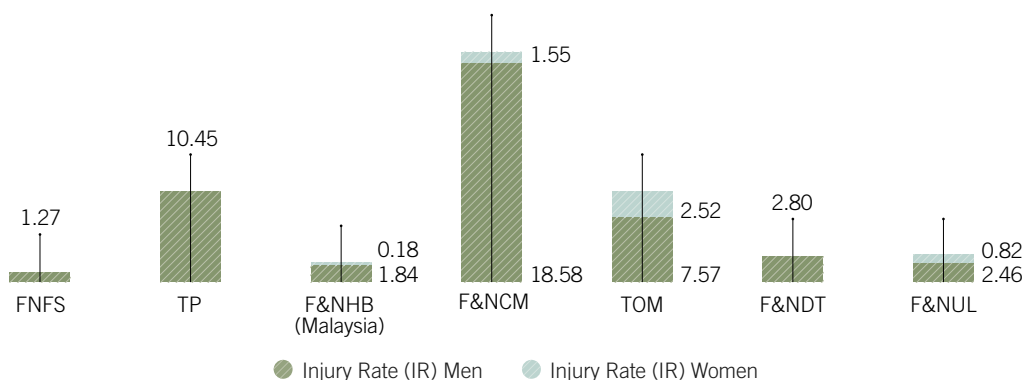


ISO 45001 – Awareness/Internal Audit

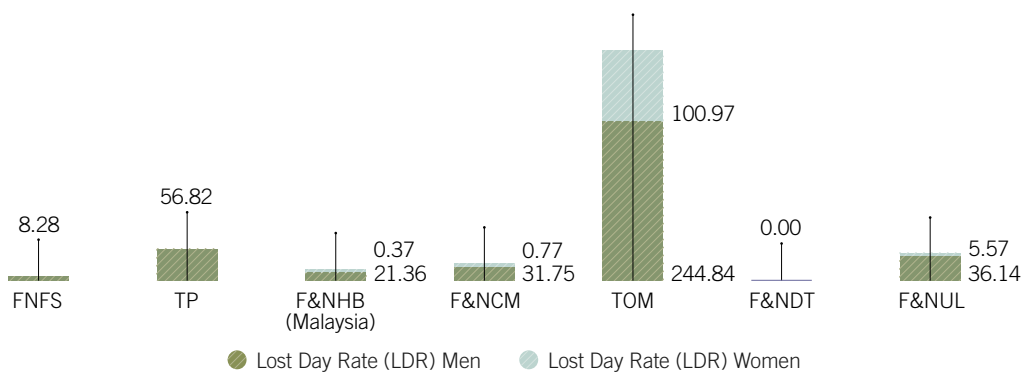
FY2018 Performance Highlights

GRI 403-2 Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.

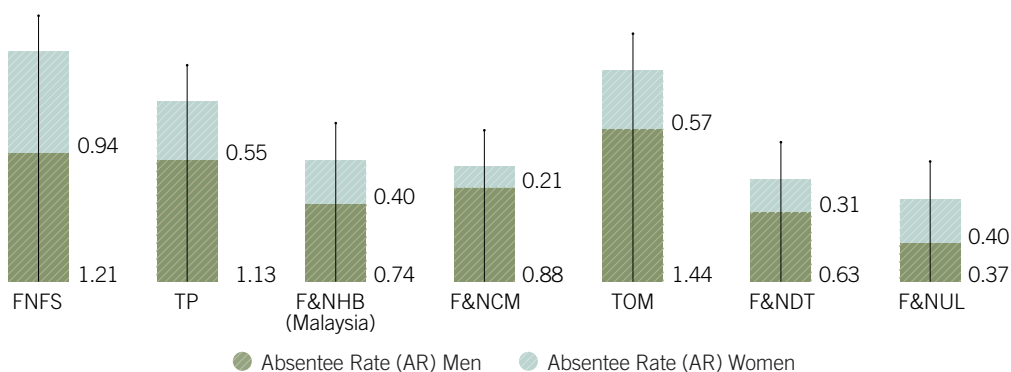
INJURY RATE ("IR")



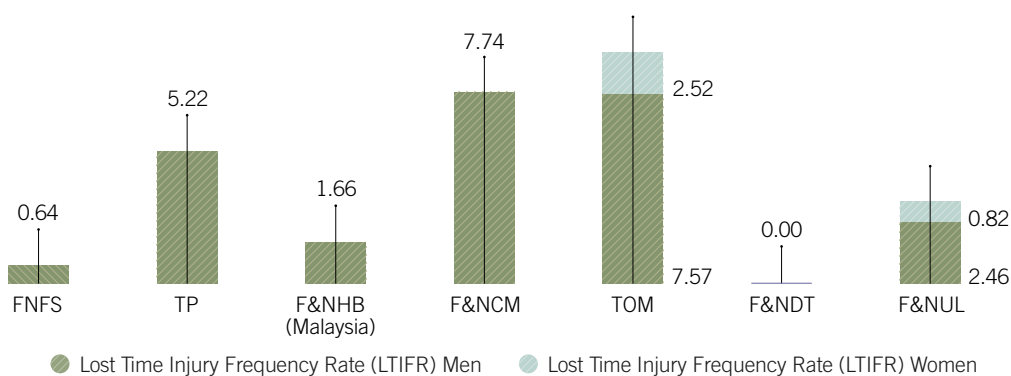
LOST DAY RATE ("LDR")



ABSENTEE RATE ("AR")



LOST TIME INJURY FREQUENCY RATE ("LTIFR")



Notes:

- 1 Injury Rate is calculated by number of workplace accident reported / number of man-hours worked * 1,000,000
- 2 First aid cases are not counted inside the injury rate
- 3 Occupational Disease Rate is calculated by number of occupational disease reported / number of man-hours worked * 1,000,000
- 4 Lost Day Rate is calculated by number of man-day lost to workplace accidents / number of man-hours worked * 1,000,000
- 5 Lost days refers to scheduled work days. The lost day count starts the day after the accident.
- 6 Absenteeism Rate is calculated by the number of absentee days / number of man-days worked * 100
- 7 Lost Time Injury Frequency Rate is calculated by number of workplace accidents required to be reported to the respective authorities / number of man-hours worked * 1,000,000
- 8 Independent contractors are not required to submit their data to us. However, we only engage contractors who comply with the respective national legislation on safety. For example, in Singapore, they comply with the WSH Act and provide us with their Risk Assessment
- 9 Singapore, Malaysia and Thailand are members of the International Labour Organization ("ILO") and have ratified the C187 - Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) in 2012 (for Singapore and Malaysia) and 2016 (for Thailand)
- 10 Types of injury, breakdown by region and gender, have not been disclosed as we need to standardise the types of injury across the Group to be able to disclose the figures accurately the following year.
- 11 FNFS has an Occupational Disease Rate ("ODR") of 0.64 while the other BUs maintained 0 ODR.

SAFETY AND WELL-BEING

CONSUMER HEALTH AND SAFETY



TARGET:
We will offer at least one healthier choice option in all our product categories by 2020.

Product safety and quality are of paramount importance to F&N and we live by our brand promise: “Pure Enjoyment, Pure Goodness”. It is our duty to produce, market and sell our brands responsibly and enable consumers to make informed purchasing choices. We consistently maintain the highest standards so that customers have full confidence when purchasing our products.

Our Approach

Safety

Consumer Health and Safety is our main priority. Our 135 years of success are based on mutual trust with our customers and we are committed to enhancing their future wellbeing. This requires a holistic approach to safety across the life cycle of our products. In previous chapters, we have already described how Consumer Health & Safety is a key component of our R&D innovations. We have also described how our food safety assurance cycle requires suppliers’ pre-qualification and approval.

In our own operations, we adhere to all health and safety regulations applicable to the Food and Beverage industry in the markets where we operate. The most internationally recognised food safety standard is FSSC 22000, and most of our sites are certified to this standard. This demonstrates our commitment to meet and exceed our customers’ expectations. FSSC 22000 certification also raises food safety awareness across the company, for example through regular meetings and reporting. Our Risk Committee regularly reviews our key risks in relation customer health and safety, and we manage these and maintain the highest standards.



We are committed to product quality and food safety and have obtained local and international certifications such as:

- 1. FNFS**
 - a. ISO 22000:2005 - Food Safety Management System
 - b. License to operate food establishment
 - c. Halal Certification
- 2. F&NHB (F&NBM, F&NDM and F&NDT)**
 - a. ISO 22000 - Food Safety Management System
 - b. FSSC 22000 - Food Safety System Certification
 - c. Halal Certification
 - d. Food Safety According to Hazard Analysis and Critical Control Point (HACCP) System (MS 1480:2007)
 - e. Good Manufacturing Practice (GMP)
- 3. F&NUL**
 - a. ISO 22000 - Food Safety Management System
 - b. FSSC 22000 - Food Safety System Certification
 - c. Halal Certification
- 4. F&NCM**
 - a. FSSC 22000 - Food Safety System Certification
 - b. Halal Certification



Consumer Health and Safety is our main priority.

Halal Assurance

All our products are halal certified by the Department of Islamic Development Malaysia, and other relevant authorised certification bodies. A Halal Committee has been set up in each of our manufacturing plants and is responsible for halal compliance in our supply chain, from materials selection and purchasing, to the storage, warehousing, and transportation of our products. Key responsible employees have also attended a series of professional training sessions related to halal internal audit and assurance. We also prohibit non-halal food and drinks within factory premises including the office and canteen in Malaysia.

Our adherence to the highest health & safety standards extends beyond manufacturing and production. In the next chapter we will outline our responsible approach to product labelling.

Nutrition

F&N has a Nutrition Charter which outlines our principles and commitment to health and nutrition. We rely on the charter to guide all aspects of our product development, marketing and initiatives to advocate healthy lifestyles. We live by our “Pure Enjoyment. Pure Goodness” philosophy, and this means that we provide a wide choice of nutritious products in an assortment of delicious

flavours. Our philosophy means innovating constantly to satisfy changing consumer preferences. For example, none of our products sold in Thailand contain Partially Hydrogenated Oils (‘trans fatty acids’).

We put much emphasis on developing healthier products, such as by adding vitamins and minerals to boost products’ nutritional value. As detailed in the next chapter, many of our products in Singapore and Malaysia and Thailand carry the ‘Healthier Choice’ Symbol and Logo respectively.



A Halal Committee has been set up in each of our manufacturing plants.

F&N MAGNOLIA Gingko Plus UHT milk

The first in the market to include ginkgo in milk, offers the additional benefit of improving cognitive function and enhancing memory with the addition of ginkgo extract and vitamin B12.

BEAR Brand Gold Goji Berry

Rich in vitamin A for better eyesight.

BEAR Brand Sterilised Milk High Folate

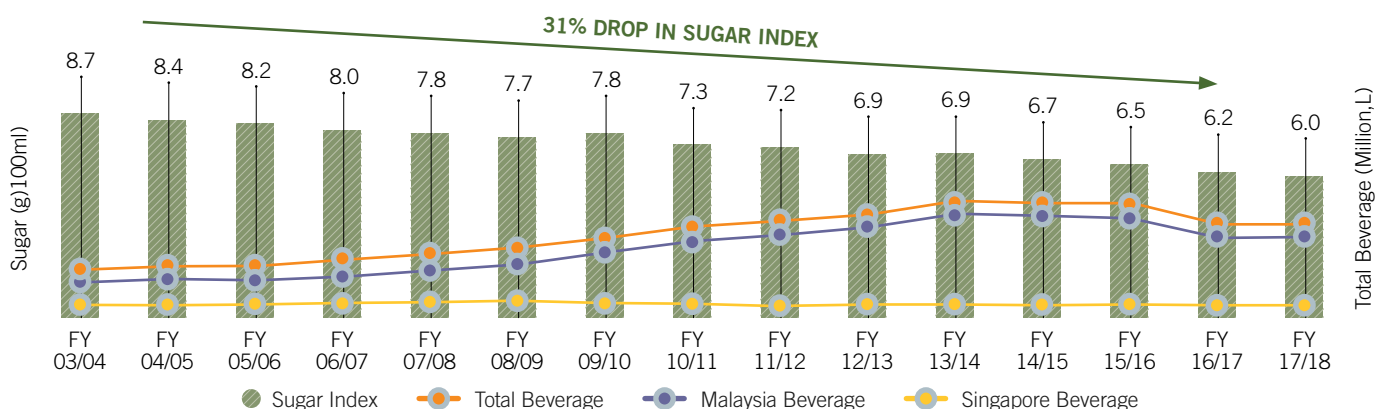
High folate and iron content, which enhances blood circulation.



SAFETY AND WELL-BEING

Consumers are becoming more informed of the possible health effects associated with excessive sugar consumption, and in response we are decreasing our sugar index (the amount of sugar contained per milliliters of all our beverages, including water).

SUGAR INDEX: TOTAL BEVERAGE



F&N supports the Singaporean Government's Sugar Reduction Commitment which aims to reduce sugar content in food and drinks, particularly sugar-sweetened beverages.

F&N is contributing to the Sugar Reduction Commitment by:

- Ensuring that all F&N drinks sold in Singapore do not exceed 12% sugar content
- Continuing to lower sugar contents across all other products and to promote and innovate low sugar contents drinks for consumers



Our unwavering commitment to product health and safety is exemplified by our *F&N ICE MOUNTAIN Drinking Water*.

This product undergoes a world class purification process which consists of a three-tier filtration, followed by ultraviolet treatment, reverse osmosis and finally an ultra-shield process.

To preserve the water purity, each bottle and cap goes through five decontamination steps to produce the ultimate clean drinking water.

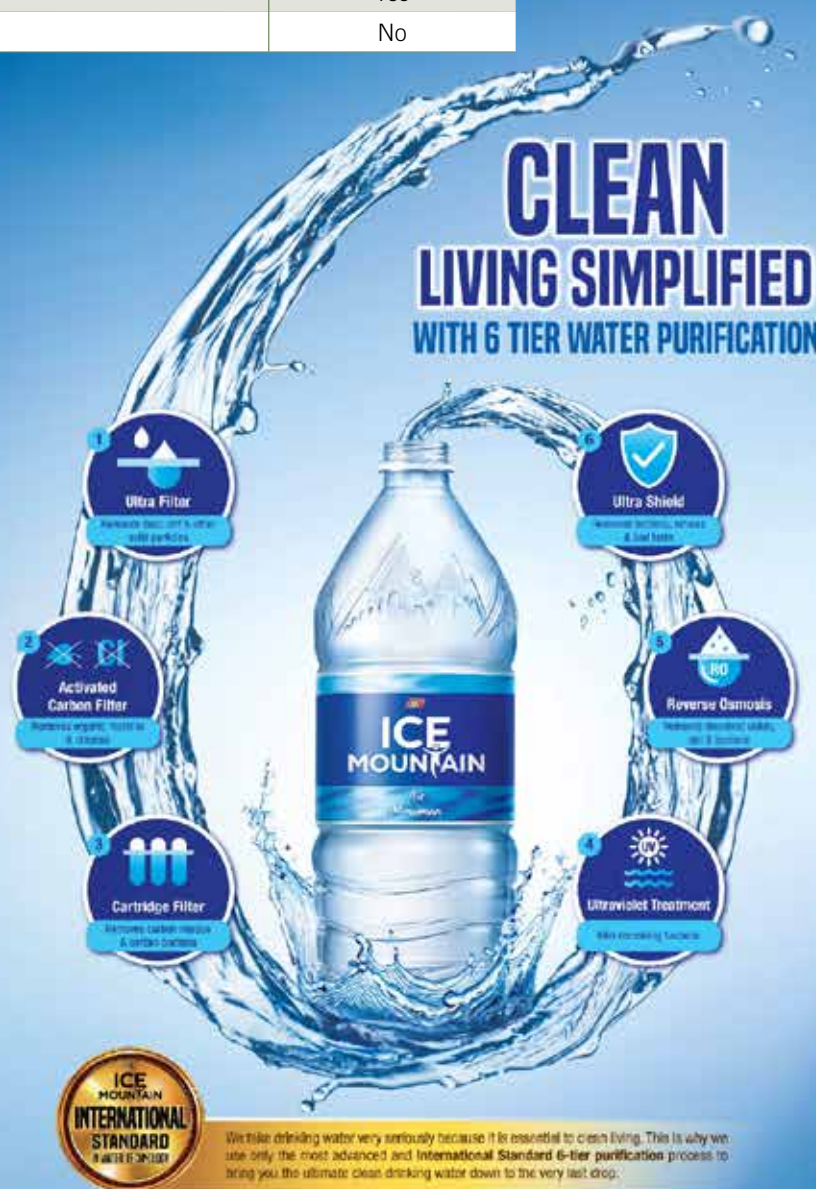
We look for opportunities to create value with other partners. For example, *BEAR Brand* collaborated with Thai Red Cross Society during blood donation drives in early 2018. The objective of this initiative was to spread awareness about the nutritional importance of folate, especially to women. Folate is not only important for pregnant women, it also helps in red blood cell formation. During this exercise, a total of 55,000 servings of *BEAR Brand Sterilised Milk High Folate* were handed out.

FY2018 Performance Highlights

In FY2018, F&N maintained our health and safety standards, and to the best of our knowledge there were no significant incidents of non-compliance with regulations resulting in a fine, penalty or warning.

We are making good progress towards having at least one healthier choice in each product category by 2020; there are currently healthier options in 14 out of 15 product categories.

Product Category	Healthier Choice Option?
Milk	Yes
Drinking/Eating Yogurt	Yes
Fruit Juice	Yes
Soya	Yes
Asian Soft Drinks (Chilled/Pasteurised)	Yes
Isotonic	Yes
Water	Yes
Carbonated Soft Drinks	Yes
Tea	Yes
UHT & Sterilised Milk	Yes
UHT Soya	Yes
Juice	Yes
Asian Soft Drinks (Ambient)	Yes
Frozen	Yes
Energy	No



SAFETY AND WELL-BEING

PRODUCT AND SERVICE LABELLING

Our packaging and labelling is the primary method through which we communicate information to consumers about our products' quality, nutrition, safety and disposal. It is therefore essential that our labelling is comprehensive and clear, allowing our busy customers to make fully informed purchasing decisions.

Our Approach

Our labelling adheres to the Singapore Food Regulations as well as to the guidelines set down by Agri-Food & Veterinary Authority in Singapore, the Food Act in Malaysia and requirements of the Food and Drug Administration in Thailand. But we go beyond mandatory requirements, and for all products we provide information on: ingredients;




- sourcing;
- energy per serving size;
- recommended daily allowances of the different nutritional components;
- expiry dates; and
- nutrition tips.

All information disclosed on our labels is subject to a review process involving a range of internal experts including our R&D and Scientific & Regulatory Affairs teams, plus dietician advice. Labels are then sent to government authorities for verification and endorsement.

In order to make it as easy as possible for consumers to understand fundamental information (Calories and contribution to recommended daily Calorie intake), we include 'front of pack labelling' for an increasing range of our products in Malaysia. This includes our *100PLUS* range and *F&N NUTRISOY*.



In Malaysia, many of our products, including the entire *100PLUS* product line, have been endorsed with the Healthier Choice Logo introduced by the Ministry of Health. In Thailand, three products lines have received the Ministry of Public Health's Healthier Choice Logo. In Singapore, 59% of all F&N products have been awarded with the HCS which is awarded by the Health Promotion Board:

<p>Some products with Singapore's 'Healthier Choice Symbol'</p>  <ul style="list-style-type: none"> • <i>100PLUS</i> • <i>100PLUS ACTIVE</i> • <i>F&N MAGNOLIA</i> Gotcha • <i>CARNATION</i> Low Fat High Calcium Evaporated Milk 	<p>Some products with Malaysia's 'Healthier Choice Logo'</p>  <ul style="list-style-type: none"> • <i>100PLUS</i> • <i>100PLUS ACTIVE</i> • <i>FARMHOUSE</i> Fresh • <i>F&N MAGNOLIA</i> Lo-Fat Hi-Cal Milk 	<p>Some products with Thailand's 'Healthier Choice Logo'</p>  <ul style="list-style-type: none"> • <i>F&N MAGNOLIA</i> Pasteurized Milk Full Fat and Low Fat • <i>F&N MAGNOLIA</i> Plus Ginkgo Plain Flavour • <i>BEAR Brand</i> Sterilized Milk Non-Fat • <i>BEAR Brand</i> Sterilized Milk Regular • <i>BEAR Brand</i> Sterilized Milk Low-Fat • <i>BEAR Brand</i> Sterilized Milk High Folate
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We take care to ensure that our marketing and advertising activities do not make any ethical breaches. We adhere to the Malaysian Code of Advertising Practice in Malaysia and the Consumer Protection Act of B.E. 2522 (1979) in Thailand. In Malaysia, we are a signatory to the 'Responsible Advertising to Children' initiative and have pledged to severely restrict marketing to children under 12 years of age. For example, we will only advertise children's products that meet specific nutritional criteria based on

accepted scientific evidence and national and international dietary guidelines.

FY2018 Performance Highlights

Throughout all of our product information, labelling and marketing communications efforts in FY2018, we had no serious events: to the best of our knowledge, there were no incidents of non-compliance with regulations or voluntary codes resulting in a fine, penalty or warning.

All of our product categories comply with product labelling requirements as below:

- The sourcing of components of the product or service;
- Content, particularly with regard to substances that might produce an environmental or social impact;
- Safe use of the product or service;
- Disposal of the product and environmental/social impacts; and
- Others (Halal logo, Certification on HACCP, Nutritional information).
- License to operate food establishment