SWIRE BEVERAGES

2017 Sustainable Development Report

CONTENTS

MESSAGE FROM OUR MANAGING DIRECTOR

Why has Swire Beverages decided to start reporting on its sustainable development performance?

2017 was a transformational year for Swire Beverages. We completed planned acquisitions in Mainland China and the U.S. which have expanded the scale of our business from around HK$25 billion to approximately HK$40 billion in annual revenues, cementing our position as one of the largest global bottling groups in The Coca-Cola System. A major restructuring programme is also underway in Taiwan which will substantially improve the profitability of our business in that market.

The most exciting aspect of these dramatic changes is not the results we have achieved, impressive though these are. Rather, it is the solid platforms we have established in all markets (Hong Kong, Mainland China, Taiwan, and the U.S.) from which we will launch a new wave of growth. Refranchising in both the U.S. and Mainland China has not only created much larger franchise territories for Swire Beverages, but has done so within an optimised Coca-Cola System which is ideally positioned for the future.

The Swire Group has been in business for over two hundred years, and we have been part of the global Coca-Cola System for over fifty years. We remain firmly focused on the long-term sustainability of our business and the communities we serve. We are truly committed to sustainable development. We do not pay lip service. We state the facts. We must build a sustainable business which supports sustainable communities living in a sustainable environment.

Reporting on our sustainable development is consistent with that approach. This is our first formal sustainability performance report. We will continue to improve on this annual report, taking into account feedback from all our stakeholders.

What are Swire Beverages' achievements and progress?

We focus on what matters most and where we have the biggest impact. We identify a small number of core priorities we measure and monitor our progress and we partner with stakeholders where doing so may improve our performance.

Patrick Healy,
Managing Director of Swire Beverages

Highlights include:

- Through continuous improvements in water efficiency across our production environments, we have improved our Water Use Ratio[1] from 1.81 in 2010 to 1.77 in 2017.
- As part of The Coca-Cola System, we support water replenishment projects in water-stressed areas of Mainland China and the U.S. In partnership with nonprofits, governments and other key stakeholders, The Coca-Cola System replenished 22.93 billion litres of water in Greater China, and 31.18 billion litres of water in the U.S. by the end of 2017. In all our markets, therefore, The Coca-Cola System remained *"water positive"* in 2017 (see page 23).
- We initiated a three-year research programme in partnership with Tsinghua University to explore innovative solutions to improve our energy efficiency and reduce our greenhouse gas emissions. The programme will begin with on-site monitoring and analysis, leading to the adoption of energy-saving standards and operational guidelines across all facilities.
- Single-use plastics are a global environmental concern. Too much plastic ends up in our oceans and in landfills. We joined the New Plastics Economy, a global initiative of the Ellen MacArthur Foundation, to tackle the growing environmental problems caused by plastic waste. We are collaborating with a range of stakeholders to identify opportunities to reduce plastic entering our natural environment.
- In line with The Coca-Cola Company's global commitment[2], we continued to diversify our portfolio to include more low-sugar and sugar-free beverage options to cater to changing consumer preferences.

What are the challenges ahead for Swire Beverages?

We are firmly focused on the following four priorities, which represent what we believe are the most significant challenges for us in the foreseeable future:

1. Primary packaging: the circular economy
We must transition to 100% recyclable packaging for all our products. We must also increase recycled content in the packaging we use. We will collaborate with multiple stakeholders to develop effective, efficient sorting, collection and recycling infrastructures to maximise the percentage of packaging which is recycled across all our markets.

2. Water
We will continue to improve our Water Use Ratio. We will continue to invest with our partners in water replenishment projects in all our markets. We are proud to say we are "water positive" in both the U.S. and Greater China. We will continue to invest to ensure we stay that way.

3. Greenhouse gas emissions
We will accurately measure our carbon footprint. We will work with partners to identify opportunities to reduce our carbon intensity and minimise our carbon footprint.

4. Gender equality
We will achieve gender equality in all our workplaces by providing equal opportunities to male and female staff. We will launch a Swire Beverages Gender Equality Steering Committee in 2018 to develop strategies and define performance indicators to promote gender equality across the organisation.

This report demonstrates our progress towards a more sustainable future. This is a condition of our social license to operate and our long-term profitability.

[1] Water Use Ratio is the amount of water used to produce one litre of beverage

[2] https://www.coca-colacompany.com/content/dam/journey/us/en/private/fileassets/pdf/2017/2016-sustainability-update/2016-Sustainability-Report-The-Coca-Cola-Company.pdf & https://www.coca-colacompany.com/content/dam/journey/us/en/private/fileassets/pdf/2017/TCCC_2016_Replenish_Quantification_Report_2017_April_with_Appendices.pdf

OUR BUSINESS

Swire Beverages has exclusive rights to manufacture, market and distribute products of The Coca-Cola Company (TCCC) in Hong Kong, Taiwan, eastern and southern Mainland China, and the western U.S. Across these four markets, the scope of our business covers manufacturing, packaging, distribution and refrigeration of 60 beverage brands.

Swire Beverages is wholly owned by Swire Pacific Limited (Swire Pacific), a public company listed on the Stock Exchange of Hong Kong. Swire Pacific acquired its first Coca-Cola franchised bottling plant in 1965.

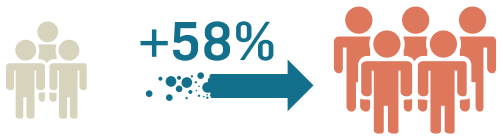
In 2017, Swire Beverages completed the acquisition and realignment of new Coca-Cola franchise territories in Mainland China and the U.S. which significantly increased our footprint in these markets and will nearly double the size of our business. By the end of 2018, it is expected that our revenues will have grown from HK$24 billion to HK$40 billion, and our products are expected to serve 708 million consumers. We will become the fifth largest bottler by sales volume in the global Coca-Cola System[3] .

Throughout this report, bottling plants owned and operated by Swire Beverages prior to the 2017 acquisition are referred to as "legacy" plants or operations. Newly acquired plants are referred to as "new territories". Co-packers are third party contract manufacturers who produce and supply beverages under contract to Swire Beverages according to our standards and specifications. As part of the realignment in Mainland China, Swire Beverages ceased to operate in Shaanxi Province from July 2017 and therefore Shaanix data has been excluded from legacy plant data in this report.

[3] Under The Coca-Cola System, TCCC sells concentrates to bottling partners who manufacture and distribute the finished beverages to customers and vending partners. TCCC owns the brands and is responsible for consumer brand marketing initiatives.

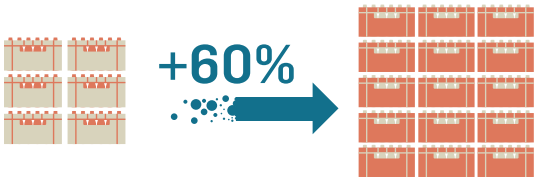
Before and After Realignment: Expected Business Growth by the end of 2018

Consumers Served



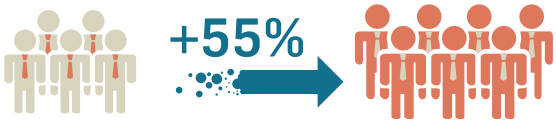
449 million → 708 million

Unit Cases



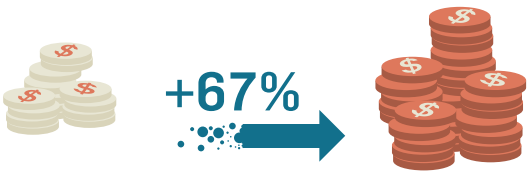
1 billion → 1.6 billion

Employees



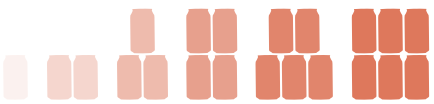
20,000 → 31,000

Revenues



HK$24 billion → HK$40 billion

Producing an additional 14.4 billion servings of beverages by the end of 2018



Note: 1 unit case = 24 x 8 oz servings or 5.678 litres
600 million unit cases at 24 eight ounce servings equals 14.4 billion servings

Operating Locations in Greater China

Mainland China

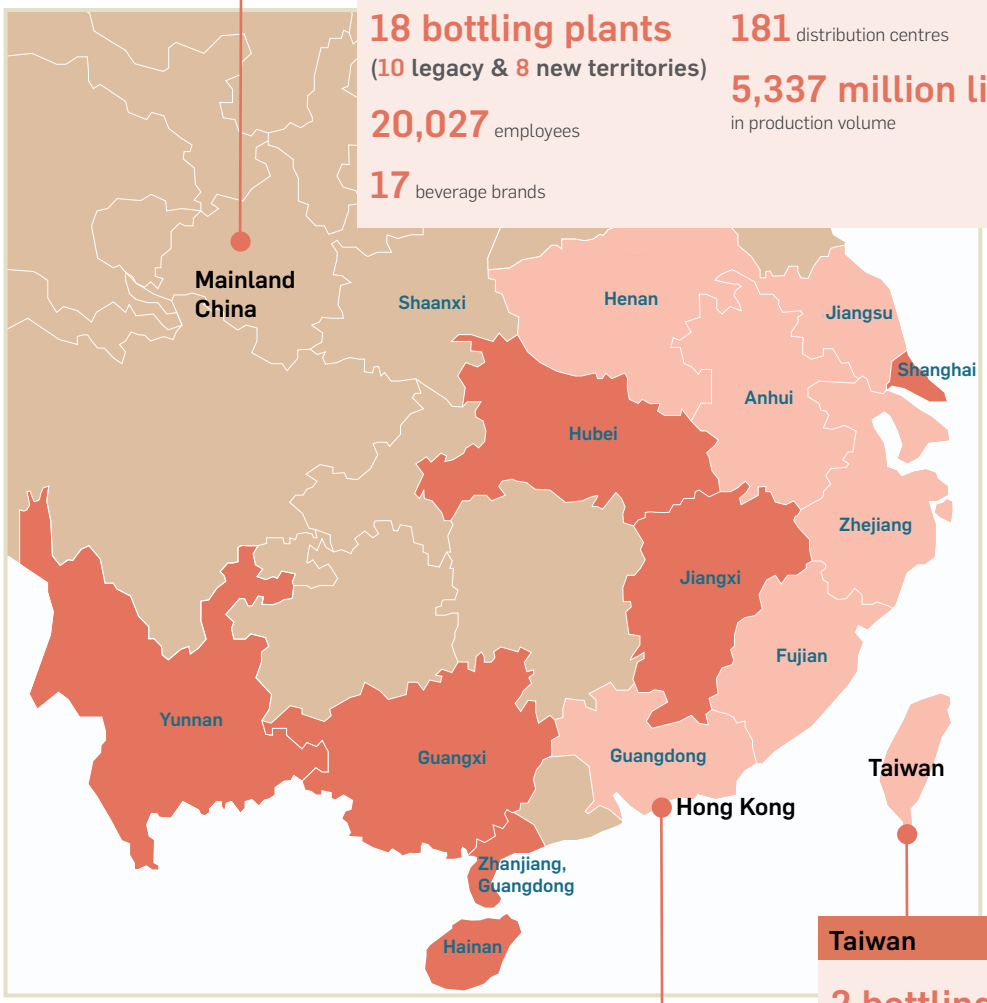
18 bottling plants
(10 legacy & 8 new territories)

20,027 employees

17 beverage brands

181 distribution centres

5,337 million litres
in production volume



Hong Kong - Headquarters

1 bottling plant
(legacy)

1,449 employees

20 beverage brands

316.4 million litres
in production volume

Taiwan

2 bottling plants
(legacy)

918 employees

16 beverage brands

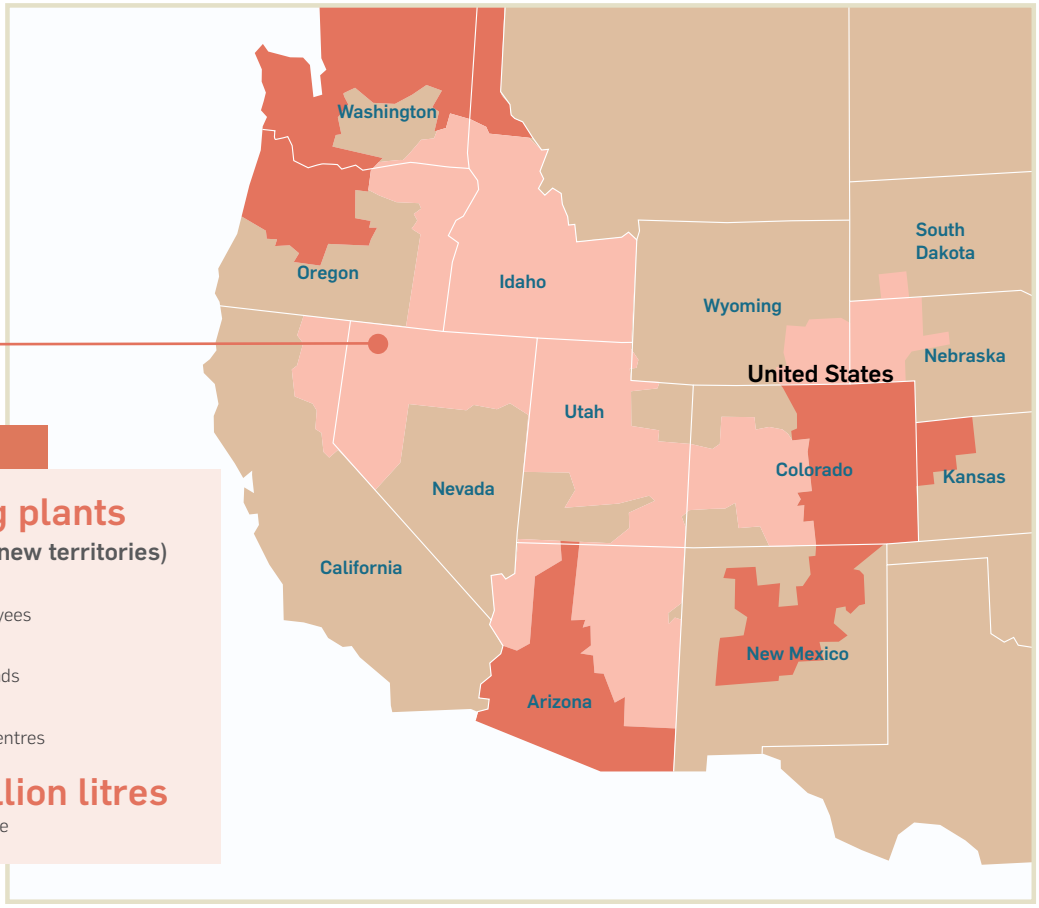
1 distribution centre

146.4 million litres
in production volume

Mainland China	Before acquisition	After acquisition
Number of bottling plants	8	18
Number of co-packers	5	12
Number of CCBMH bottling plants	6	6
Number of distribution centres	134	181
Number of provinces and municipalities served	6	12

Note: CCBMH stands for Coca-Cola Bottlers Manufacturing Holdings Limited, which is 41% owned by Swire Beverages

Operating Locations in the U.S.



U.S.

6 bottling plants
(2 legacy & 4 new territories)

6,674 Employees

31 beverage brands

48 distribution centres

1,485 million litres
in production volume

Legacy Territories

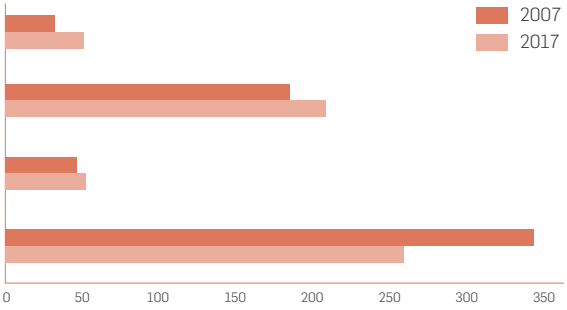
New Territories

U.S.	Before acquisition	After acquisition
Number of bottling plants	2	6
Number of distribution centres	26	48
Number of states served	11	13

Per Capita Consumption in Our Franchise Territories

	Franchise population (millions) (end 2017)	GDP per capita (US$)	Sales volume (million unit cases)	
			2017	2007
Mainland China	664.1	9,915	1,112	500
Hong Kong	7.4	45,050	65	55
Taiwan	23.6	25,119	53	46
U.S.	28.7	46,223	282	86

Per capita consumption of Coca-Cola Beverages (8oz servings)



Note: (1) A unit case comprises 24 8oz servings.
(2) Mainland China and the U.S. per capita consumption in 2017 includes annualised consumption figures for the new territories acquired during the year.

APPROACH TO SUSTAINABLE DEVELOPMENT

Swire Beverages is committed to continual improvement and acting responsibly to support a better future for our employees, customers, the natural environment and the communities in which we operate and live.

Our approach to sustainable development aligns with the values and commitments set out by our parent company, Swire Pacific. We aim to create long term value for our shareholders. Achieving this depends on the sustainable development of our businesses and the communities in which we operate.

To achieve sustainable development, we aim to:

- Minimise our impact on the environment
- Cause zero harm
- Excel as corporate citizens

Embedding SwireTHRIVE

SwireTHRIVE[4] is the new group-wide environmental sustainability strategy launched by Swire Pacific in 2016. It was created by the Swire Group Sustainability Committee (SGSC), comprising the Sustainable Development Office and representatives from all major operating companies in John Swire & Sons[5] and Swire Pacific[6] .

With the understanding that when the environment in which we operate thrives, so do we, six target areas for improvement have been identified. They are: Carbon, Waste, Water, Sustainable Materials, Biodiversity and Climate Resilience.

In the future, we will develop a more detailed plan which incorporates the six priority areas as part of our sustainability strategy. These goals are due for delivery by 2030, with initial emphasis on 2020 milestones.

The Coca-Cola Company's Approach

As a member of The Coca-Cola System, we embed the same sustainability values and performance metrics as TCCC into our operations. In line with TCCC's approach, we offer a diverse portfolio of beverages based on the taste preferences of our local consumers. We also align our environmental and social focus areas with those of TCCC.

Reporting and Disclosure

We track key environmental and social performance indicators to report to Swire Pacific and TCCC. Swire Beverages, has historically reported as part of Swire Pacific's annual sustainable development reports. With the change in the scale of our business this year, and in response to the mainstreaming of non-financial reporting among leading businesses, we have decided to start producing our own external report on an annual basis. This report adopts the latest Sustainability Reporting Standards issued by the Global Reporting Initiative (GRI), and endeavours to provide a balanced and honest account of our approach and performance.

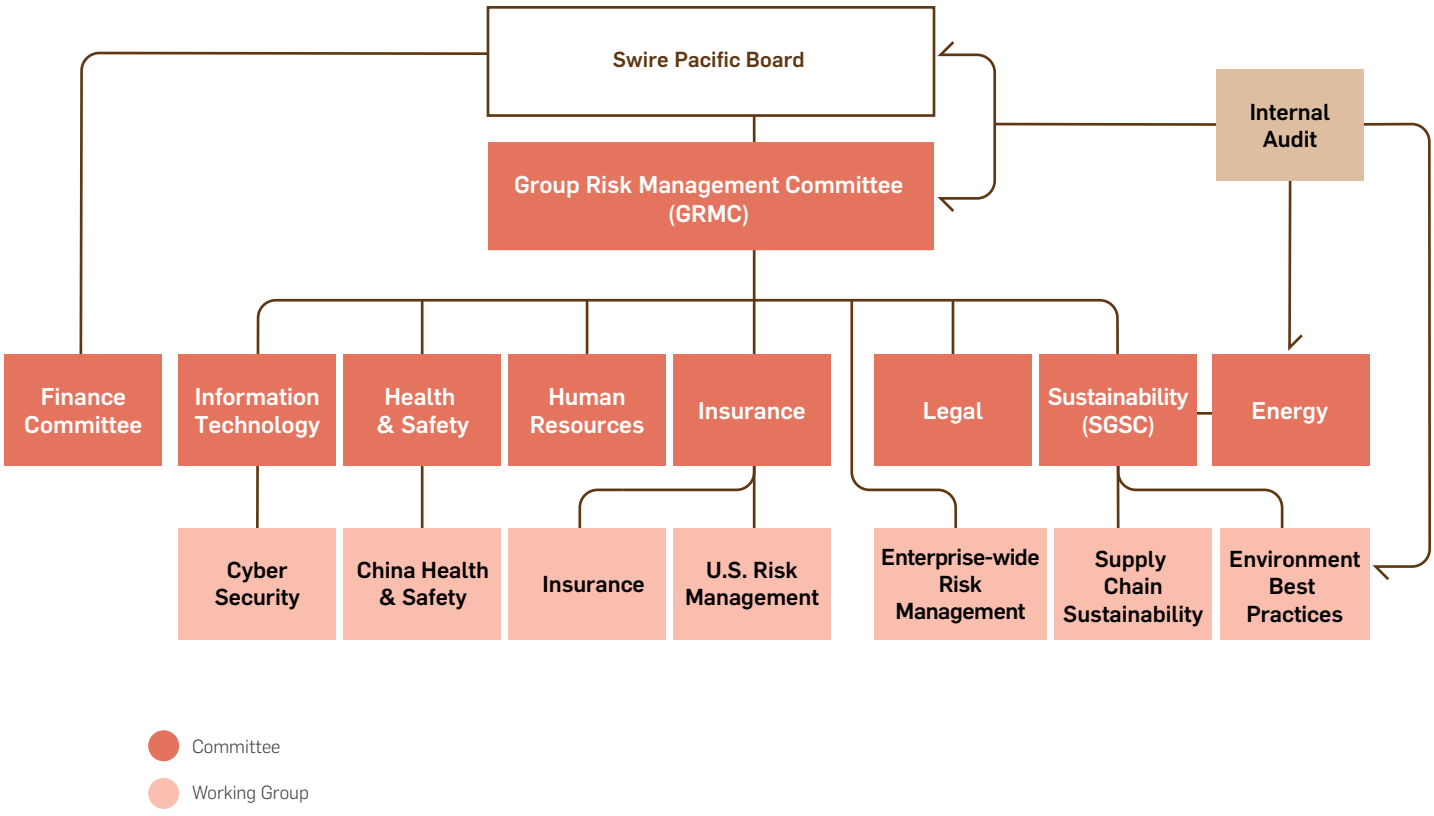
This year, the scope of the data in this report covers primarily our legacy operations (excluding the bottling plant in Shaanxi, China, which is no longer operated by Swire Beverages as of July 2017). We have tried to present multi-year historic data, where available, to allow readers to determine year-on-year progress. To provide clarity for the reader, we have explained the scope and boundary for most of the quantitative data in the chapters in which it is presented.

4 http://www.swirepacific.com/en/sd/environment.php_
5 http://www.swire.com/en/global/home.php_
6 http://www.swirepacific.com/en/global/home.php_

Corporate Governance

The Swire Pacific Board (the Board), led by its Chairman, is ultimately accountable for matters relating to sustainable development. Information on pertinent issues such as climate change and the performance of Swire Group companies is reported to the Board through the Group Risk Management Committee (GRMC), chaired by Swire Pacific's Finance Director. The GRMC is advised by the SGSC and by working groups, such as the Environmental Best Practice Working Group.

The Board and management of each division are also responsible for identifying and analysing the economic and sustainability risks underlying the achievement of business objectives, and for determining how such risks should be managed and mitigated. Swire Beverages is an operating company of Swire Pacific, and therefore is represented in all the below committees and working groups.



Swire Pacific's Internal Audit Department audits operating companies under the Swire Group, including Swire Beverages. It provides assurance that the risk management and internal control systems are properly implemented and operating effectively, and that the associated risks are being properly identified, monitored and managed.

Swire Pacific complies with the Corporate Governance Code in Appendix 14 to The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. For more details, please refer to the Corporate Governance section of the Swire Pacific 2017 Annual Report.

Risk Management

We use a comprehensive Enterprise Risk Management (ERM) system to identify, aggregate, monitor and manage risks. Our ERM policy guides the implementation and execution of the ERM system. The objective of the policy is to ensure that robust and effective risk management systems are in place to enable management to identify, prioritise and mitigate the full range of risks to which our operating companies are exposed.

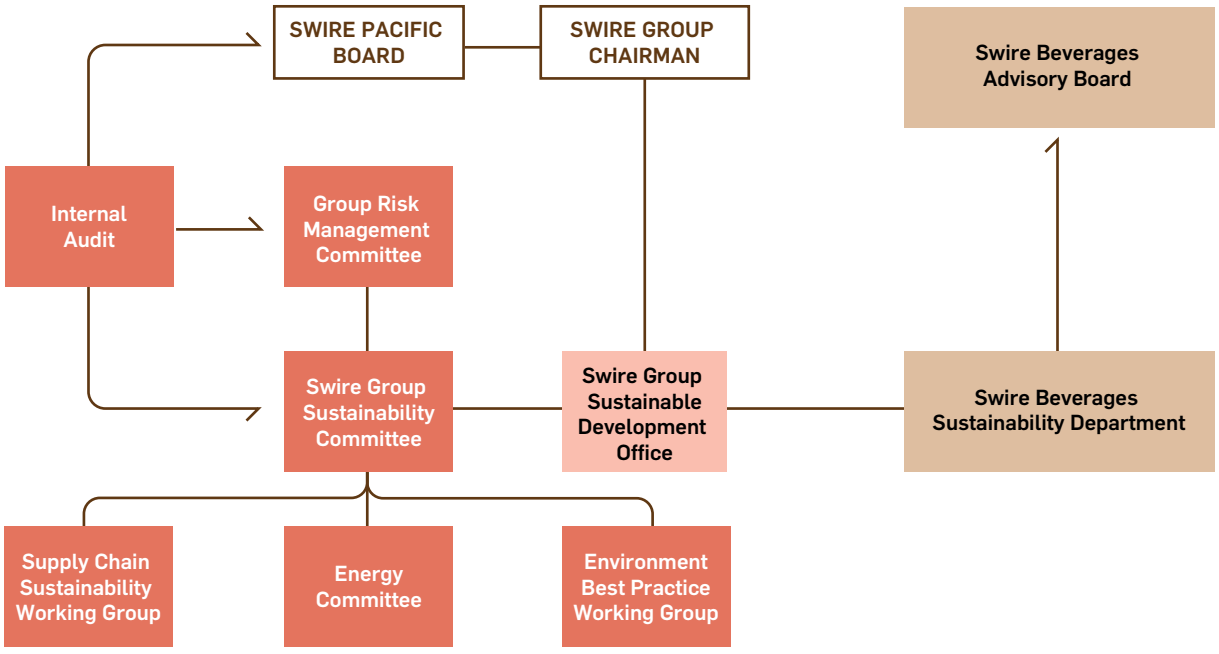
Under the ERM policy, we are required to implement the ERM process by, at a minimum, annually assessing, prioritising, mitigating and/or managing the existing and emerging risks we face. We are required to submit corporate risk registers to Swire Pacific annually. To ensure consistency in our approach, these registers are prepared using the Group's standard methodology, format and risk ranking criteria.

Code of Conduct

The Swire Beverages Corporate Code of Conduct outlines our commitment to conducting business with integrity and fairness. All staff are expected to maintain the highest standard of professionalism, provide high quality products and services, maintain business ethics and corporate social responsibility, and abide by relevant legal obligations.

Management and Governance of Sustainable Development

Functional meetings are held on a bi-monthly basis between the Managing Director, Executive Director of Supply Chain, and the Global Safety and Sustainability Lead to discuss the sustainability performance and progress of each market. Performance is tracked through our internal Quarterly Group Sustainability Report, which presents our environmental and social performance using key performance indicators, especially water and energy efficiency. In addition, we track and report key environmental metrics quarterly, and submit them to Swire Pacific in our Quarterly Environmental Reports.



Engaging Stakeholders

We welcome and encourage our stakeholders to share their views and concerns with us. We engage with stakeholders regularly through meetings, newsletters, community events and social media to better understand their expectations and to respond to their needs.

Stakeholders are those who influence or are influenced by us, as well as those with a vested interest in our business.

Shareholders

Suppliers, Co-packers

Business partners

Employees

Customers, Consumers

Regulator/government

Non-profit organisations

Academics

Local community

Stakeholder inclusiveness is a fundamental principle of the GRI Standards. In 2017, we undertook a stakeholder engagement exercise to prioritise material topics to cover in this report. Material topics are those that are considered highly important by our stakeholders and/or reflect the most significant impacts our business has on the environment and society.

We engaged an independent consultant to facilitate the following four-step process to identify our material topics.

Identify relevant topics: We compiled a list of 21 topics that are relevant to our business. The list was developed through internal discussion, as well as a review of the sustainable development reports of Swire Pacific, TCCC and several other bottling partners across The Coca-Cola System, and consideration of global and regional priorities and megatrends.

Online survey: We identified key internal and external stakeholders across our four markets to participate in an online survey, where respondents were asked to indicate the relative importance of each topic by assigning a score between zero (0) and five (5), where 5 was most important. Stakeholders were selected based on their expertise, relationship with Swire Beverages, and willingness to participate in the exercise. We received a total of 169 complete responses.

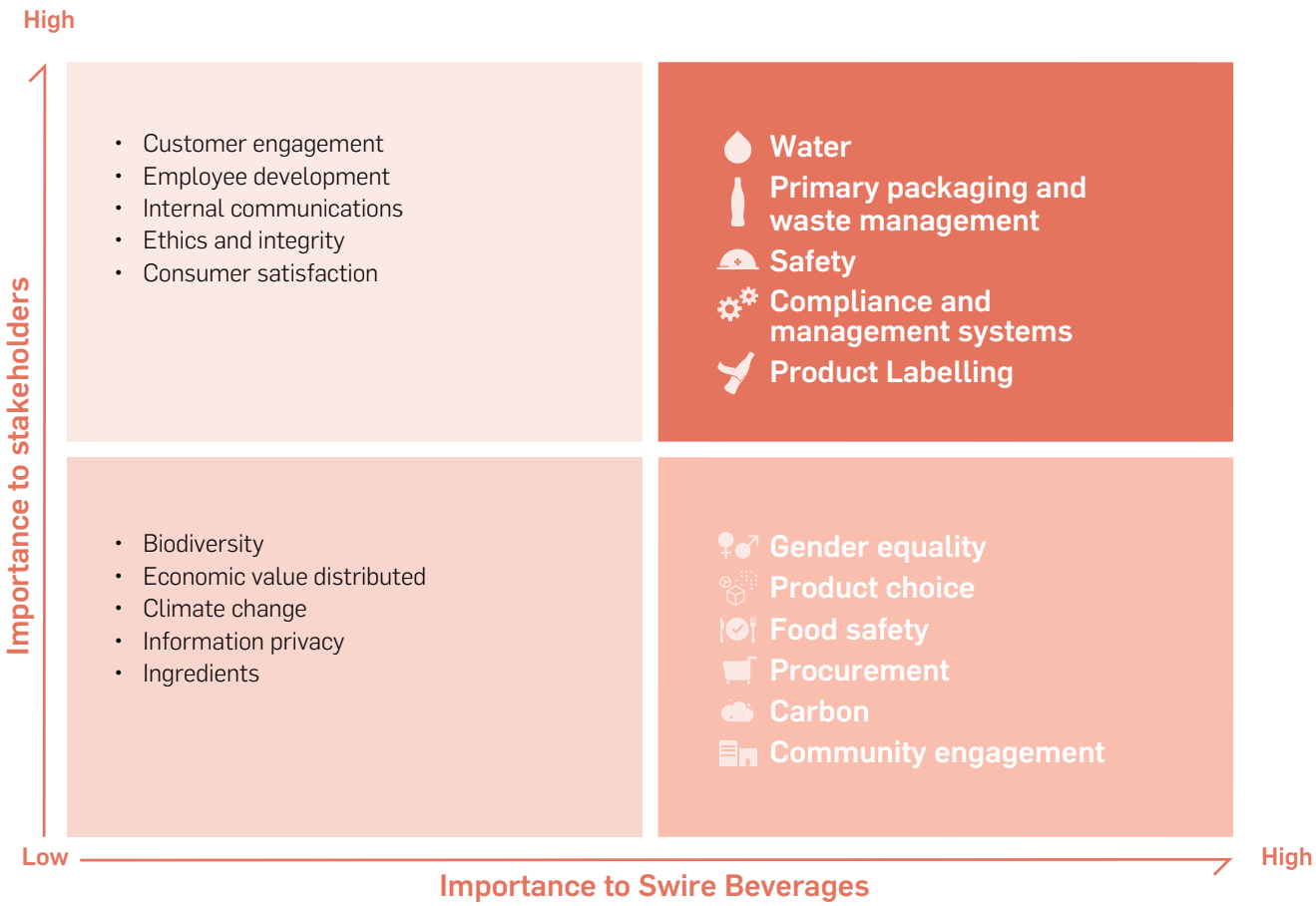
Internal materiality workshop: Following the survey, we conducted an internal workshop with Swire Beverages employees across key functions including finance, human resources, sales and marketing, and others to discuss the survey results and the importance of the 21 topics from the perspective of the business. A shortlist of 11 material topics was compiled.

Senior management validation: the final list of material topics covered in this report has been validated by the Swire Beverages senior management team, including the Managing Director.

Material Topics

This report covers the 11 most important topics for our business and stakeholders in five categories: Environment, Product Responsibility, Workplace, Compliance and Management Systems and Community Engagement. Environmental topics, especially water and packaging, reflect areas where our business has a significant impact and where our stakeholders expect us to be managing those impacts and disclosing our performance. Other issues such as safety, compliance and food safety can affect our ability to be in business. We have decided to focus our sustainable development report on topics located in the two quadrants on the right hand side of the materiality matrix. Other topics such as ethics and integrity, consumer engagement and employee development, though important, are not the focus of this report. Information on our policies and approach to managing these issues is communicated through other channels.

Materiality Matrix



ENVIRONMENT

With the world's natural resources becoming increasingly scarce and the consequences of climate change intensifying in recent years, we need to not only be responsible for addressing our environmental footprint, but also investigate opportunities to create positive impacts along our value chain.

As a business partner of TCCC and an operating division under Swire Pacific, our approach and environmental management systems align with the environmental commitments of both companies. We adopt the SwireTHRIVE strategy and aim to mitigate operational risks and build long-term resilience by driving higher standards, greater efficiency, and increased innovation in key areas.

Water use, energy consumption, and primary packaging and waste management, are our key environmental concerns today.

Data Capture

With the realignment of territories over 2017 in Mainland China and the U.S. mentioned in *Our Business*, we do not have a full year's worth of data for these new territories and bottling plants. Their performance information is presented separately in the *New Territories* section, at the end of this report. In each section of this report, further clarification on the data scope has been given under Scope, as it may differ. For clarity, Shaanxi Province, a legacy territory which was part of Swire Beverages until mid-2017, has been excluded.

WATER STEWARDSHIP

Water is one of the world's most precious and vital resources. Our communities and ecosystems require water, and our business depends on a reliable supply of clean water. It is the main ingredient in our products and used extensively in our manufacturing process.

Globally, a growing population, changing climate patterns and increasing water pollution, are all putting ever-increasing demands on our sources of drinking water. According to the United Nations, two-thirds of the world's population are expected to face water shortages by 2025[7]. As a significant consumer of water, we have a responsibility to ensure the communities in which we operate continue to have access to safe, clean and affordable water. By investing in water efficiency and encouraging best practice in water use, we also have an opportunity to reduce costs and reinforce our reputation as a responsible company.

Water stress is often experienced locally. Therefore, managing water resources demands a customised approach at a local watershed level. Understanding local policies on water creates opportunities to engage with local stakeholders and demonstrates our intention to collaborate to achieve a common goal. Our approach to sustainable water use has been integrated into our Source Vulnerability Assessment and Source Water Protection Plans.

[7] http://www.un.org/waterforlifedecade/scarcity.shtml

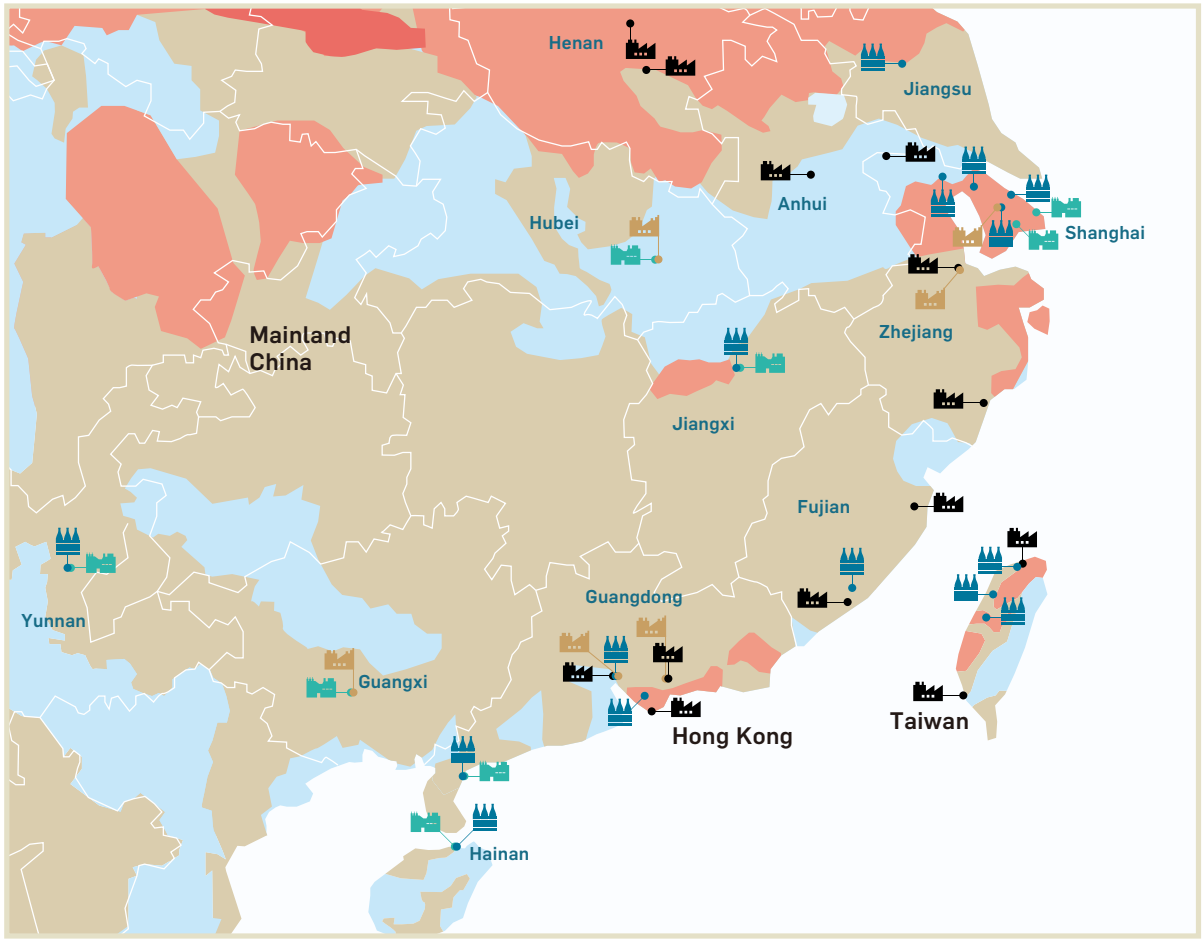
Understanding Our Water Risks

Water availability or scarcity is highly dependent on local climate conditions. Our operations in the U.S. and Mainland China experience different risks. In our U.S. operations, mostly located in more arid areas, water scarcity is a result of limited rainfall and depletion of groundwater sources. For our Mainland China operation, however, it is water quality issues resulting from high population density and contamination from industry that are the dominant risks.

Agriculture and manufacturing are the major water consumers in Mainland China. With the presence of manufacturing industries, water pollution is the biggest threat to water security in southern and eastern Mainland China where we operate. Hong Kong sources most of its water from the Dongjiang River[8] in Guangdong Province[9], and is dependent on the availability of water from Mainland China. Northern Taiwan experienced a drought in 2015, and is considered to be of medium-to-high overall water risk.

The majority of our operations in Mainland China are considered to experience medium overall water risk with some pockets in high risk areas. In northern China, outside of our operating region, high overall water risk could potentially impact our business if water stress continues to worsen.

Overall Water Risk Map for Greater China



[8] http://civic-exchange.org/wp-content/uploads/2017/05/Water-Report-English-final.pdf

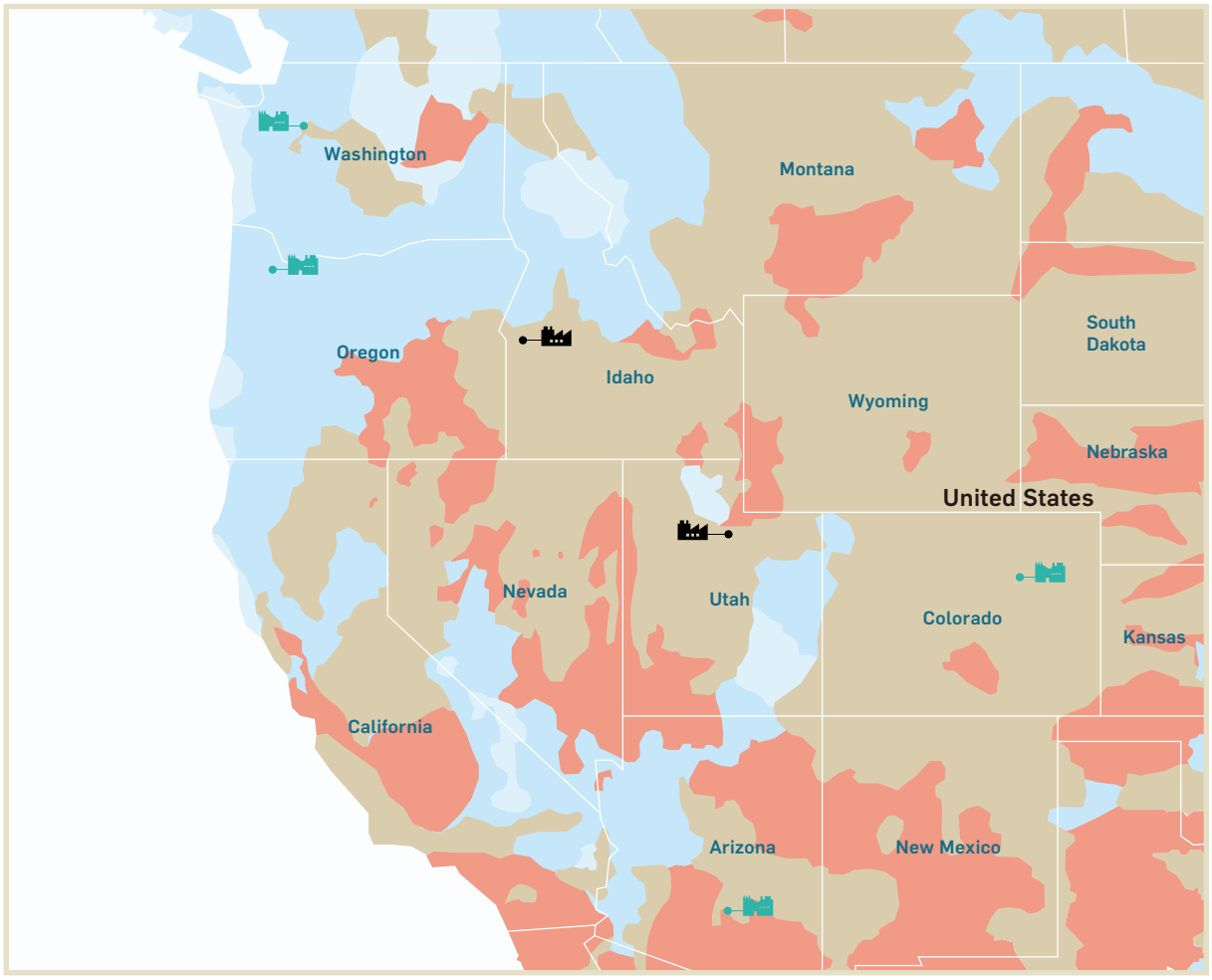
[9] Guangdong Yue Gang Water Supply Company Limited has exclusive rights to supply Hong Kong's freshwater

The western U.S. is known for its vulnerability to droughts and has historically experienced lengthy periods of drought that can last up to 10 years or more. Although the situation in 2017 improved relative to the preceding five years (since 2011) due to higher recorded rainfall, the long term water security of this region is still at risk with contributing factors such as population growth and unpredictable levels of precipitation.

As a result, groundwater has also been identified as an important source of freshwater in this region, but demand for water is slowly depleting groundwater aquifers.

The Overall Water Risk maps presented in this report take into account the physical quantity risk[10], regulatory and reputational risk[11] categories assessed by the World Resources Institute[12] .

Overall Water Risk Map for the U.S.

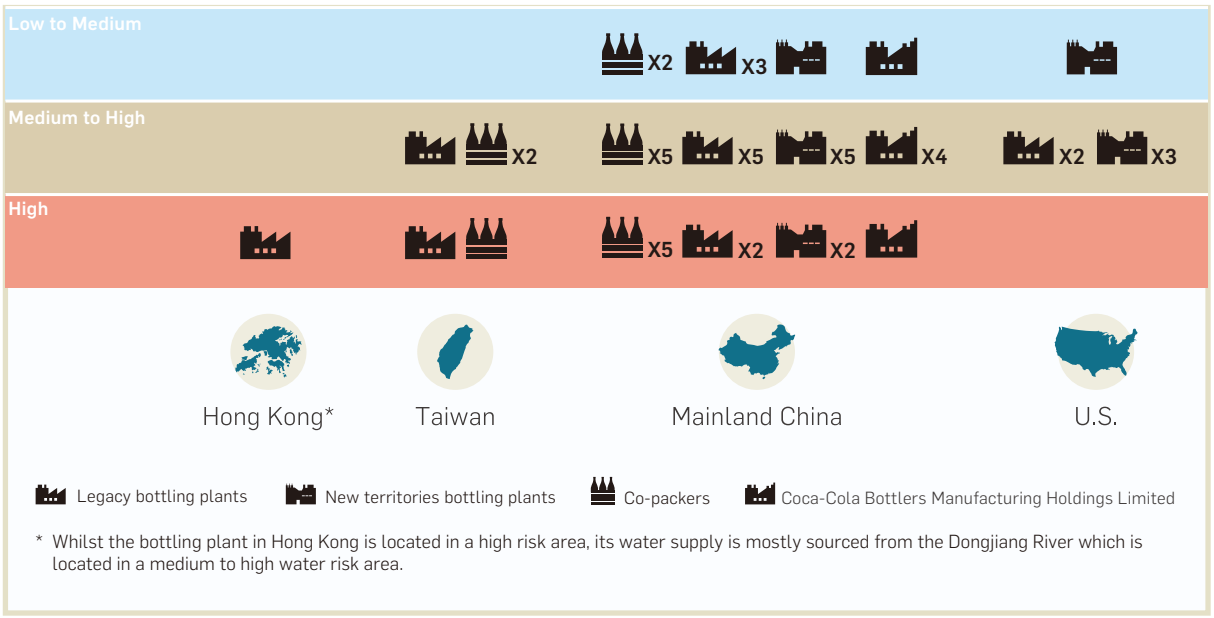


[10] Physical quantity risk includes baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage, and groundwater stress.

[11] Regulatory and reputational risk includes media coverage, access to water and threatened amphibians.

[12] AQUEDUCT Water Risk Atlas: http://www.wri.org/our-work/project/aqueduct

Level of Overall Water Risk



Note: Co-packers are third-party contract bottlers who produce beverages ordered by us.

Our Approach to Water Management

Our goal is to return to communities and nature the same amount of water that we take out for our beverages (sales volume), and to improve the communities and environments which house our bottling plants. Our approach focuses on three guiding principles: **Reduce** by incremental water efficiency gains, **Recycle** by reusing water where we can in the manufacturing process, and having wastewater treatment facilities at all our bottling plants, and **Replenish** water via community and watershed management projects with TCCC.

- Working with external partners, we are committed to supporting programmes to ensure healthy watersheds and sustainable water for communities with a goal to balance the water used in our finished beverages.

- We are committed to achieving world class water use performance in each of our bottling locations.
- We are committed to wastewater treatment standards which require returning all water that is used in our bottling processes to the environment at a level that supports healthy aquatic life.

Bottling plant location

Choosing the right location for our bottling plants is a critical first step in our water stewardship responsibility. Before deciding on a location, we conduct hydrogeological assessments to better understand water quality and availability risks. Source Vulnerability Assessments are conducted by independent experts to determine the potential risks regarding water quality and availability to our bottling operations, the local community, as well as the ecosystem. The findings are then integrated into our Source Water Protection Plans at each facility. These plans are reviewed and updated every five years, or as necessary, to ensure their validity.

Benefits of Conducting Source Vulnerability Assessments

User

Helps to ensure sufficient present and future water supply

Gains understanding of source water quality

Protects company reputation

Ecosystem

Helps to ensure sufficient water supply for nearby freshwater habitats and their associated organisms

Prevents deterioration of water quality in water features within the basin

Community

Demonstrates respect for water rights of other stakeholders

Fosters good relationships with surrounding communities and government with a common goal for water stewardship

Scope

We use water in our finished beverages and in our manufacturing processes. We track comprehensive water metrics for facilities we own and operate. Across our four markets, we sometimes use co-packers, which are third party contract manufacturers. Co-packers must adhere to our strict quality standards.

In Mainland China, we use two types of co-packers. Coca-Cola Bottlers Manufacturing Holdings Limited (CCBMH)[13], which operate six self-owned bottling plants as well as a number of production lines in our bottling plants and third party bottlers, and traditional third party co-packers.

In the U.S., we are a member of the National Product Supply Group (NPSG)[14]. The purpose of this group is to optimise collaboration among all bottlers within the Coca-Cola System in the U.S.

The water stewardship performance data presented in this report is limited to the bottling plants owned and operated by Swire Beverages in 2017, excluding of Shaanxi and also all co-packers, CCBMH included.

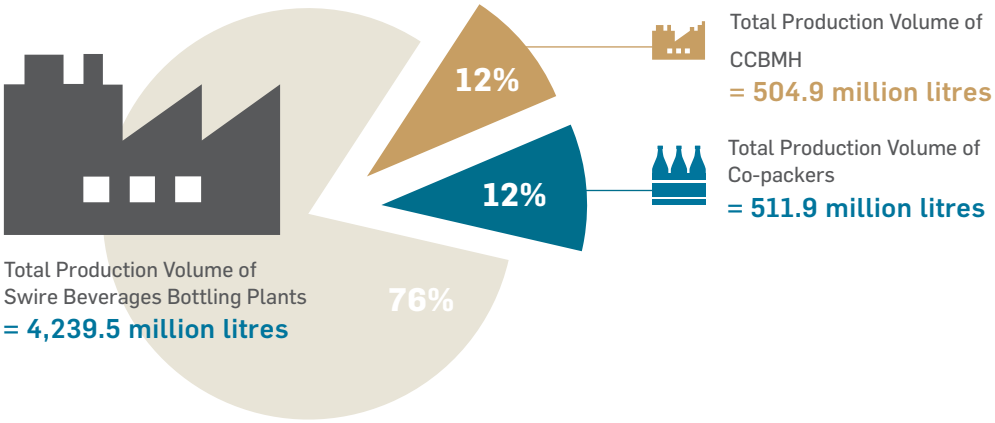
In addition to our own bottling facilities, in 2017 we also sourced beverages from nine co-packers, six CCBMH co-packers, as well as being part of the NPSG system. In total this equated to 1,016.8 million litres of beverage product for us in 2017, which accounted for 24% of our in-house production volume.

Proportion of Production Volume by Co-packers

Market	No. of Co-packers	No. of CCBMH	Swire Beverages Production Volume (million litres)	Co-packer Production Volume (million litres)	CCBMH Production Volume (million litres)	Co-packer Proportion % (including CCBMH)
Hong Kong	0	0	316.4	23.1	4.26	8.6%
Mainland China	6	6	3,376.4	330	500.6	24.6%
Taiwan	3	0	146.4	64.2	0	43.9%
U.S.	0	0	400.3	94.6	0	23.6%
TOTAL	**9**	**6**	**4,239.5**	**511.9**	**504.9**	**24%**

[13] Swire Beverages own 41% of CCBMH

[14] https://www.coca-colacompany.com/press-center/press-releases/the-coca-cola-company-signs-letters-of-intent-to-implement-national-product-supply-system-in-the-united-states



Water use

Our facilities use water in a variety of production processes including washing equipment, heating and cooling, water treatment and other processes. The key factors affecting how much water is used during the manufacturing process include the number of product types produced, the number of changeovers on the production line, the amount of water reused on-site, leakage rates, and the use of hot fill and or aseptic lines. For our legacy operations, the majority of our water supply comes from municipal water with a small portion from recycled water, which we treat and reuse on-site.

Water Supply by Volume and Type (in million litres)

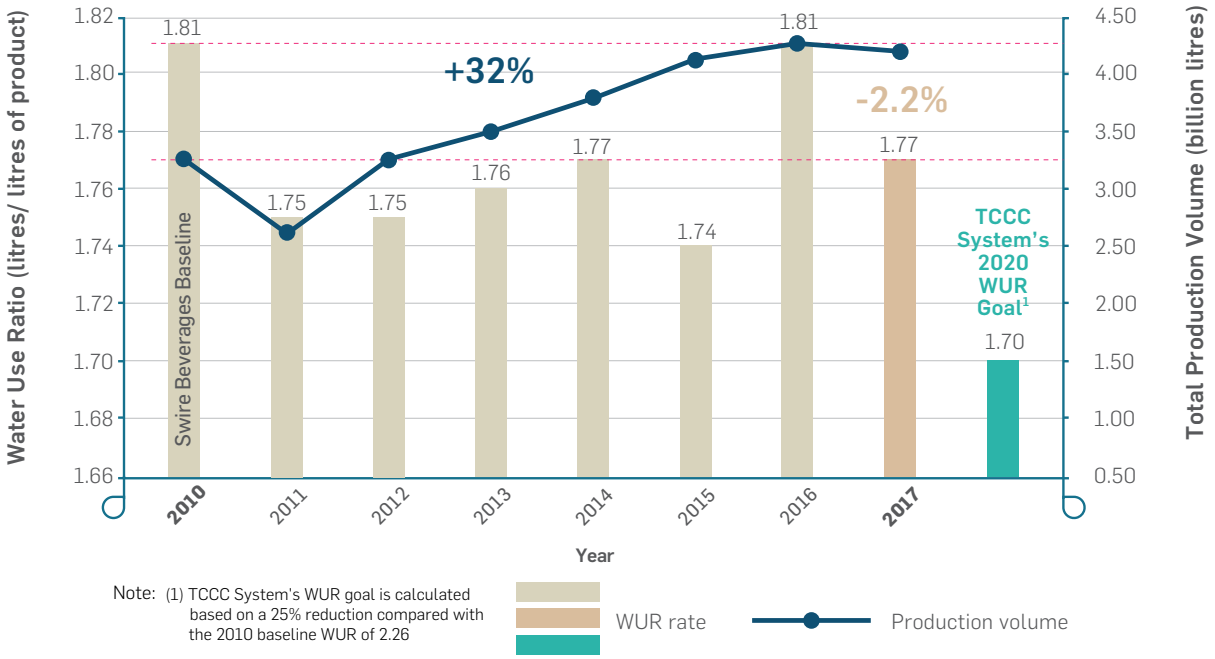
Markets / Water supply type	Hong Kong	Mainland China[1]	Taiwan	U.S.[1]	Total
Municipal Water	770	5,647	373.3	702.6	**7,493**
Groundwater	-	-[2]	-	-	**0**

Note: (1) Does not include recently acquired plants
(2) Groundwater is used at our recently acquired bottling plant in Hainan

We track our water efficiency by calculating our water use ratio (WUR), which is the amount of water we need to produce one litre of our beverages. The relatively high WUR in 2016 can be explained by the introduction of the Fuzhou, Hefei and Wenzhou bottling plants to our business. New beverage production lines at these plants required higher water use for cleaning and product trials. Additionally, the increased frequency of changes in product line due to the increased product mix also contributed to the increased WUR in 2016. To mitigate this, we carried out water practice and performance assessments to identify water efficiency opportunities throughout the manufacturing and cleaning process. With established focus groups, we reviewed and improved the accuracy of water meters and optimised meter efficiency. The Coca-Cola System's goal is to improve WUR by 25% by 2020 through operational improvements, from a 2010 baseline WUR of 2.26. Swire Beverages in 2017 had an overall WUR of 1.77, which is 0.07 from the System's desired 2020 goal[15]. Since 2010, we have successfully reduced our WUR by 2.2%, while increasing our production volume by 32%.

[15] http://www.coca-colacompany.com/stories/2016-water-stewardship

Water Use Ratio and Production Volume



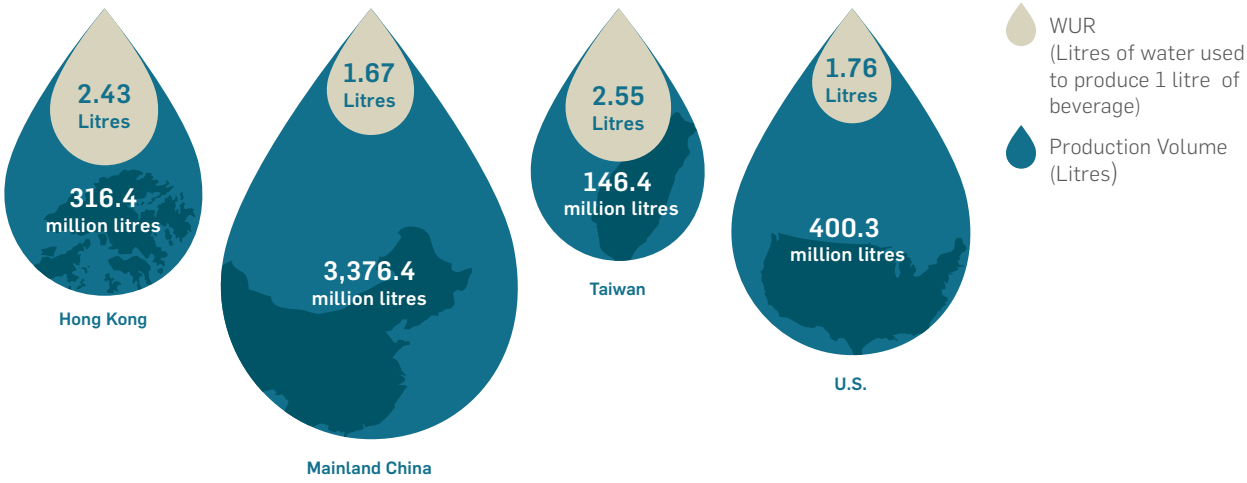
Note: (1) TCCC System's WUR goal is calculated based on a 25% reduction compared with the 2010 baseline WUR of 2.26

When broken down by market, our WUR rates in Mainland China and the U.S. are comparatively low compared to Hong Kong and Taiwan. The high WUR rates seen in Hong Kong and Taiwan can be explained by the diverse mix of products, which require increased frequencies for cleaning and rinsing as we change over the product line more often. This product mix includes a number of hot fill products (teas, herbal drinks, juice and milk products), which require more water during the change process compared to concentrate beverages, which dominate Mainland China.

2016 WUR Rates from Published Sustainability Reports

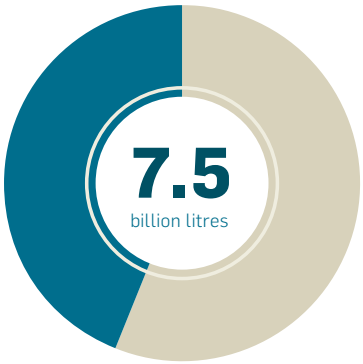
Bottling Partner	WUR Rate
Coca-Cola Amatil	2.08
FEMSA	1.72
Coca-Cola European Partners	1.61
Coca-Cola Hellenic Bottling Company	1.93
The Coca Cola System (overall)	**1.96**

2017 Water Use Ratio by Market for Legacy Operations:



2017 Total Water Use

In 2017, we used approximately 7.5 billion litres[16] of water to produce 4.2 billion litres of beverages across our four markets.



Production volume: 4.2B litres of water

Manufacturing volume: 3.3B litres of water

Note: Sales volume in 2017 was 5.8B litres. The production volume is less than the sales volume due to the contribution of co-packers and the arrangement with the National Product Supply Group in the U.S. See page 18.

Reduce - Water Efficiency

To increase water efficiency, we apply innovative water-substituting technologies. Dry lubricants are used on bottle conveyors in place of soapy water to move cans and bottles along production lines. Rather than using water to rinse bottles and cans, ionised air is used in our air rinse systems as a substitute. All of our legacy bottling plants in Mainland China currently use this ionised air system to rinse bottles.

Switching production lines from manufacturing of one beverage type to another requires cleaning and sanitation of tanks and pipes. This is known as cleaning in place (CIP). This process is responsible for 2% to 10% of our overall water consumption, and is viewed as key opportunity to improve our WURs. Through alternative rinsing methods, such as pulse rinsing and the use of on/off spray rinse (instead of continuous spray), we can minimise the amount of water and energy used. To ensure we are maintaining sufficiently hygienic conditions that meet the requirements of both local regulations and TCCC, we established automatic settings in our facilities to apply the appropriate amount of water and cleaning agents.

This year, the U.S. has seen material increases in the WUR of all production facilities compared with 2016. The WUR rose from 1.71 in 2016 to 1.76 in 2017 due to an increased number of beverage flavours and packaging sizes, which require more changeovers of production line and greater CIP requirements. In 2018, we will work with each bottler as well as TCCC to identify other water-saving opportunities to mitigate these WUR rises.

Across our production facilities, we also invest in equipment maintenance and upgrades such as fixing pipes to prevent water leaks and the use of epoxy floors to reduce amount of water needed for cleaning.

Recycle – Water Reuse

With proper treatment of what would otherwise be considered wastewater, we have identified ways to reduce our consumption of freshwater by recycling wastewater on-site. Wastewater is reused in cooling towers, cleaning, irrigation, and toilet flushing. Depending on the existing water quality of the wastewater and its intended purpose for reuse, we will consider the need to treat the water on-site prior to reuse. All wastewater discharged by us adheres to TCCC, local, and World Health Organisation (WHO) standards.

[16] One billion litres is equal to 1,000 million litres.

Across Hong Kong, Taiwan and Mainland China, we collected and reused 691 million litres of recycled water in our manufacturing processes. This represents a decrease of 214 million litres, compared to 2016, or 24%. We installed an integrated system in which PET bottles are blown and filled in the same machine that rinses bottles with purified air instead of water. The volume of untreated water reused in 2017 was therefore less than in 2016. This mechanism was implemented across ten bottling plants in Mainland China in 2017, such as, Hefei, Fuzhou and Wenzhou.

The two bottling plants in the U.S. reused over 10 million litres of water within the manufacturing process in 2017. The bottling plant in Utah sends backwash water to the condensing tower. Pump seal cooling lines and the ozone generator cooling also send water to the condensing tower for reuse.

Together, these two water reuse applications save approximately 10.2 million liters of water per year. The bottling plant in Idaho reuses water from pumps in the syrup room to vaporize carbon dioxide. The same water is reused again for removing heat from ammonia compressors. While originally designed as an energy efficiency project, the project in Idaho presented an opportunity to save water while also saving energy. The Idaho plant reuses up to approximately 360,000 liters of water per year.

ACHIEVEMENTS & SET BACKS IN 2017

1. Through **CIP optimisation** in Hong Kong and Fuzhou, we saved **16.7 million litres** of water per year, compared to 2016.

2. Reuse of **CIP rinsing water** and **PET / aluminium can rinsing water** in Taiwan saved **35.3 million litres** of water per year, compared to 2014.

3. In Mainland China, we save **121.5 million litres** of water every year since 2016 by **reusing reverse osmosis water** at our Hangzhou, Zhengzhou, Wenzhou, Xiamen and Hefei bottling plants.

4. **Reclamation of steam condensation** water for cleaning of cooling towers in Hong Kong, Zhengzhou and Taiwan saved **14.72 million litres** of water per year, compared to 2015.

5. The **use of dry lubricants** in place of soapy water saves approximately **1.1 million litres** of water per year when compared to 2014, however this figure is dependent on the length of the conveyor.

1. In the U.S., the WUR rose from 1.71 in 2016 to 1.76 in 2017 due to an increased number of flavours and packaging sizes, which require more changeovers of production line and greater CIP requirements.

Replenish

Together, TCCC and Swire Beverages' ambition is that for every drop of water that goes into our beverages (sales volume), we will return an equal amount of clean water back to the local water system – achieving a net zero impact. Replenishment projects can include supporting sustainable watershed programmes, such as source water protection, sustainable agriculture, water and soil erosion control, and wetland protection and recovery.

Watershed restoration ensures the long-term sustainability of water sources in our locations of operation. Not only is this good for the community and ecosystem, it is also vital to the viability of our business. In conjunction with TCCC, Swire Beverages invests in water replenishment projects. Our water replenishment work allows us to engage with local stakeholders. Most of these projects are done in collaboration with TCCC.

In 2017, the entire Coca-Cola System successfully replenished 155% (257 billion litres) of the water used in all beverages sold globally. Whilst Swire Beverages contributed to this accomplishment, our replenishment rate for projects solely funded by us has not yet reached the goal of returning 100% of our sales volume to the local water system.

The Coca-Cola System's 2017 Water Replenishment Ratio

In 2017, the Coca-Cola System
replenised 155% of the water used
in its global sales volume

Mainland China

Water Replenishment at Lianhu Park Wetland – Zhengzhou (2011 onwards)

Since 2011, our Zhengzhou bottling plant has been partnering with the local community to replenish a nearby city park. After the construction of Lianhu wetland in this city park, it suffered from insufficient water supply and poor water quality. To mitigate these conditions, we began replenishing this wetland with treated water.

Every year, approximately 160 million litres of treated water is diverted to the wetland by our bottling plant. After more than 10 years of replenishment work, the project has replenished the aquifer and restored the habitats and biodiversity of this degraded urban wetland.

It has also helped alleviate short-term water shortages in the city by providing reclaimed water for alternative uses, reducing the burden on the municipal water supply. This project has successfully replenished 3.3% of water used in our operations in Mainland China in 2017.

U.S.

Chalk Creek – Utah / Jesse Creek–Idaho Replenishment Projects (2013 onwards)

Through collaboration with Bonneville Environmental Foundation, Trout Unlimited and The Nature Conservancy, we restored stream flows in Chalk Creek, Utah and Jesse Creek, Idaho. The trout migration route had been obstructed by man-made physical barriers, which were removed to restore ecosystem connectivity. The irrigation system of surrounding farmland was upgraded to facilitate water replenishment. The restoration works protect thousands of juvenile Bonneville Cutthroat Trout from being trapped in canals by restoring stream flows during their migration season. Each year Swire Beverages contributes by replenishing approximately 272.1 million litres of water, approximately 48% of water used in our U.S. legacy operations.

Skunk Creek Replenish Project / Fraser Replenish roject – Colorado (2017 onwards)

Swire Beverages and TCCC jointly invested in a water replenishment project led by Colorado Water Trust to restore Skunk Creek, a tributary to the upper Fraser River watershed in Colorado. The 10-year project will restore water flows to Skunk Creek and downstream tributaries during low-flow periods in the summer months. After five years, the project has replenished an average of 316 million litres of water annually, equivalent to around 55% of replenishment for our U.S. legacy operations.

Looking Forward

With our acquisitions and re-alignment in Mainland China and the U.S., it is expected that our production volume will approximately increase by two-thirds in 2018 compared to 2017.

Whilst our WURs in the U.S. are expected to remain broadly the same, in Mainland China, our WURs could rise as the product mix and number of unit cases (SKUs) expand. This could be partially offset by incremental improvements being made by water metering projects and other innovative technologies adopted, which lead to small but meaningful incremental gains. In Hong Kong, both total water consumption and WUR are expected to remain the same, while in Taiwan with the closure of our plant in Kaohsiung in mid-2018 - and this volume being largely moved to our co-packers - total production volume will fall and WUR will remain consistent with 2017 levels.

As for our co-packers, including CCBMH, we intend to commence the engagement process in 2018 to encourage them to report their WURs, as well as to share best practices in water efficiency. This will be a two-way process. For Mainland China and the U.S., this process is expected to take a number of years due to our large footprint in these markets. As for Taiwan, we anticipate this could take place relatively quickly. We intend to report some co-packer WURs in our 2018 Sustainable Development Report.

CARBON

There is unequivocal evidence that increasing concentrations of carbon dioxide and other greenhouse gases (GHGs) in our atmosphere, in part from human activity, are leading to rising global temperatures. A changing climate has serious implications for society and business, with expected impacts including more frequent extreme weather events, greater water scarcity and reduced crop yields.

In the face of this challenge, 175 governments have ratified the Paris Agreement and committed to climate change mitigation, adaptation and financing, to keep temperature rises to well below two degrees above pre-industrial levels. As national targets for emissions reduction are set, it is imperative that businesses establish their own decarbonisation plans and targets.

Our GHG Emissions Profile

TCCC has estimated the share of carbon emissions across its value chain to produce the "drink in your hand[17]". In 2016, the proportion of emissions at each stage is estimated to come from:

- Ingredient 20%-25%
- Packaging 25%-30%
- Manufacturing 10%-15%
- Distribution 5%-10%
- Cold drink equipment 30%-35%

Swire Beverages only has direct control over the emissions from core business operations. Our emission sources are shown on the following chart.

Estimated Share of Carbon Across The Coca-Cola System's Value Chain

Ingredient	Packaging	Manufacturing	Distribution	Cold drink equipment
20%-25%	25%-30%	10%-15%	5%-10%	30%-35%

[17] https://www.coca-colacompany.com/2016-sustainability-report

2017 SWIRE BEVERAGES CARBON EMISSIONS

Supply chain

Ingredients

Packaging - all types

Not measured

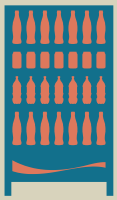
Core business operations

1,991,316 tonnes CO_2e

11.2%
Manufacturing
222,498 tonnes

1.9%
Distribution
37,796 tonnes

86.9%
Cold drink equipment (CDE)
1,731,022 tonnes



See scope on P.27

Consumers

Collection, Recovery and Recycling

Not measured

To reduce the emissions over which we have direct control, we must accurately capture and measure our GHG footprint, explore opportunities to improve energy efficiency, and maximise our use of renewable energy. In line with SwireTHRIVE, our long-term ambition is to become a sector leader in energy efficiency and emissions reductions.

We monitor our performance in energy efficiency by tracking our energy use ratio (EUR), the amount of energy needed to produce one litre of beverage. This is a performance metric which TCCC requires its global bottling partners to monitor.

We also recognise our responsibility to reduce emissions across the entire lifecycle of our products, and work to positively influence and collaborate with our suppliers, customers and other stakeholders in our value chain.

Scope & Methodology of Calculation

The data disclosed in this report covers only part of our Core Business Operations for 2017 legacy operations only, segmented under manufacturing, distribution and CDE. This can be clarified as follows:

Scope 1: direct emissions generated from fuel combustion in the boilers in our owned and managed bottling plants, owned and operated vehicles, and fugitive emissions from refrigerants used in our CDE.

Scope 2: indirect emissions, which include emissions from purchased electricity in all owned and operated bottling plants and warehouses. Our Scope 2 calculations omit emissions from purchased steam (see Energy Source for Boilers in Mainland China table on P. 31), purchased electricity in our owned and managed distribution centre's, co-packers, CCBMH, contractors and other third parties involved in distribution. It also excludes the electricity consumed by our CDE at our customers' premises.

Scope 3: Other indirect GHG emissions as a consequence of the activities of the company, but occuring from sources not owned or controlled by the company. Currently we do not capture this data.

Calculation methods: For Scope 1 and 2 emissions which we capture, we use the calculation methodology from The *Greenhouse Gas Protocol*. For the fugitive emissions from refrigerants used in our CDE, we use the methodology from *ifeu (Institut Fur Energie – und umweltforschung heidelberg)*.

EUR is a metric solely capturing the Scope 1 and Scope 2 emissions within the four walls of our owned and managed bottling plants from Scope 1 and 2 parameters as mentioned above.

Energy and Carbon in our Four Markets

The fuel types used to generate electricity will influence the carbon footprint of electricity users. More fossil fuels mean more GHG emissions generated per unit of electricity. The fuel mix differs in each of our operating markets. While coal is the most used energy source in the western U.S.[18], several states generate a significant proportion of their electricity from renewables including hydroelectric, solar, wind, geothermal and biomass. These states include Idaho, Nevada, Oregon and Washington.

Hong Kong, Mainland China and Taiwan also generate most of their electricity from coal. Each of these markets has its own national emissions reduction targets. In Hong Kong, the Climate Action Plan 2030+ includes phasing out coal and replacing it with natural gas and other cleaner, non-fossil fuel sources[19].

Mainland China's 2020 climate goals aim to reduce emissions by capping coal consumption and speeding up the development of clean energy[20]. In Taiwan, the New Energy Policy and GHG Emission Reduction and Management Act aim to reduce emissions by 50% by 2050 and increase the amount of renewable energy generated by 2025[21].

[18] Includes Swire Beverages' operating area in the western U.S., covering Arizona, California, Colorado, Idaho, Nebraska, Nevada, New Mexico, Oregon, South Dakota, Utah, Washington and Wyoming.

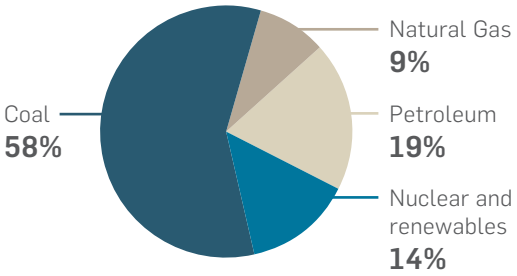
[19] http://www.enb.gov.hk/sites/default/files/pdf/ClimateActionPlanEng.pdf

[20] http://unfccc.int/files/national_reports/non-annex_i_parties/biennial_update_reports/submitted_burs/application/pdf/chnbur1.pdf

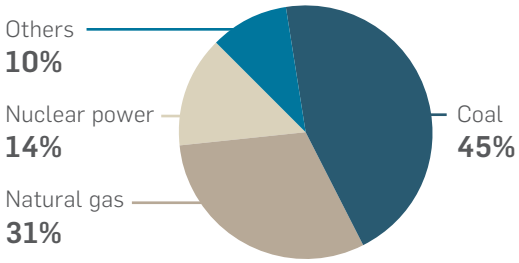
[21] https://www.moea.gov.tw/mns/ietc_e/content/Content.aspx?menu_id=21511

Energy Mix in our Four Markets where We Operate

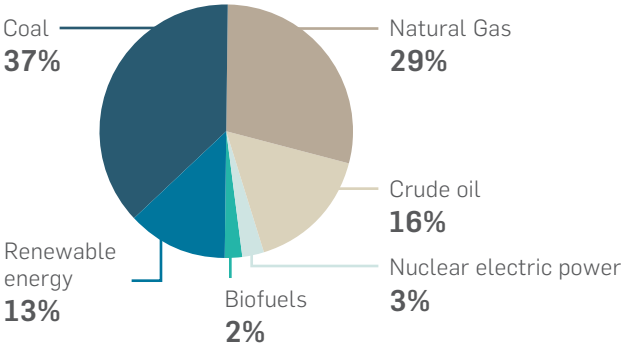
Southern Mainland China
Energy consumption (Excluding Zhanjiang)



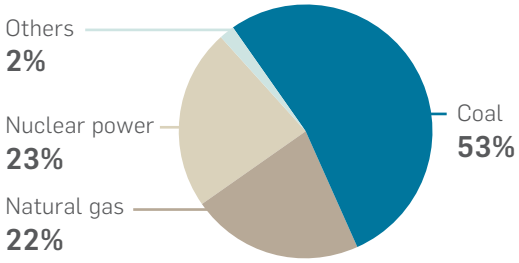
Taiwan
Total electricity generation



Western U.S.
Energy Production



Hong Kong
Fuel mix



Data sources:

Hong Kong: Environment Bureau (Data from 2012):
http://www.enb.gov.hk/sites/default/files/en/node2605/Consultation%20Document.pdf

Mainland China: MDPI (2017) - data extracted for 11 provinces and Shanghai Municipality:
http://www.mdpi.com/2071-1050/9/11/2115/pdf

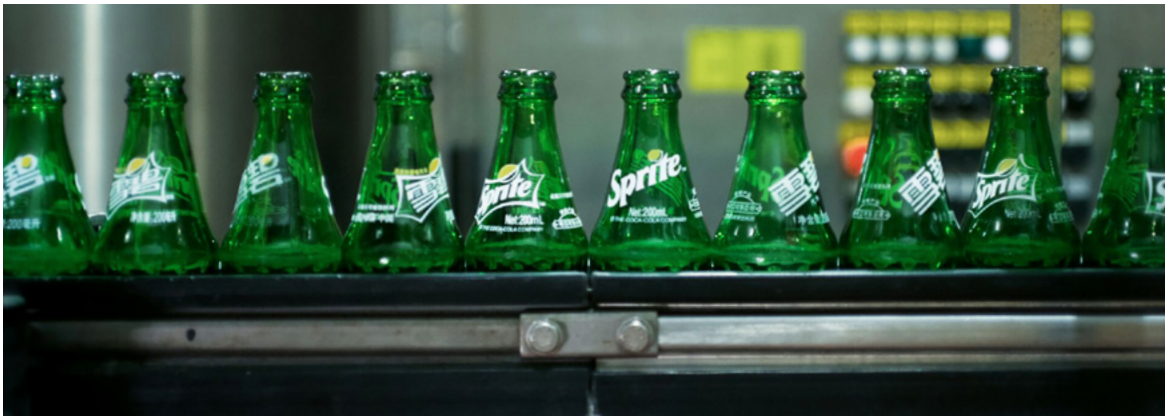
Taiwan: U.S. Energy Information Administration (Data from 2015):
https://www.eia.gov/beta/international/analysis.cfm?iso=TWN

Western U.S.: U.S. Energy Information Administration (2015) – data extracted for 13 States:
https://www.eia.gov/state/

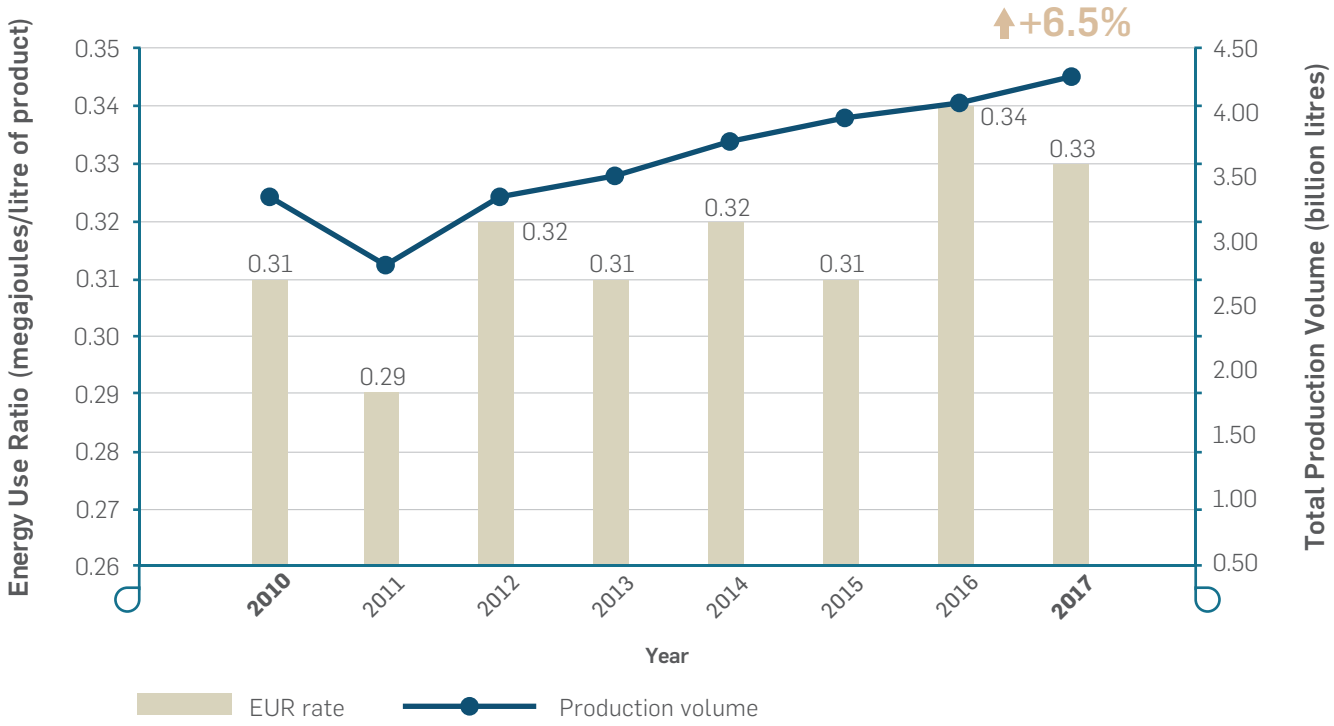
Reducing Emissions from our Core Business Operations

Manufacturing

Manufacturing contributes 11.2% of the total GHG emissions from our operations, and is responsible for 45% of our total direct energy consumption. Energy used in the manufacturing process is primarily purchased electricity, a small amount of natural gas and purchased steam. In 2017, we continued converting all boilers to natural gas and upgrading facilities to take advantage of energy recovery. We use renewable energy in some of our plants, and are exploring better design for new bottling plants by aiming for LEED green building certification[22].

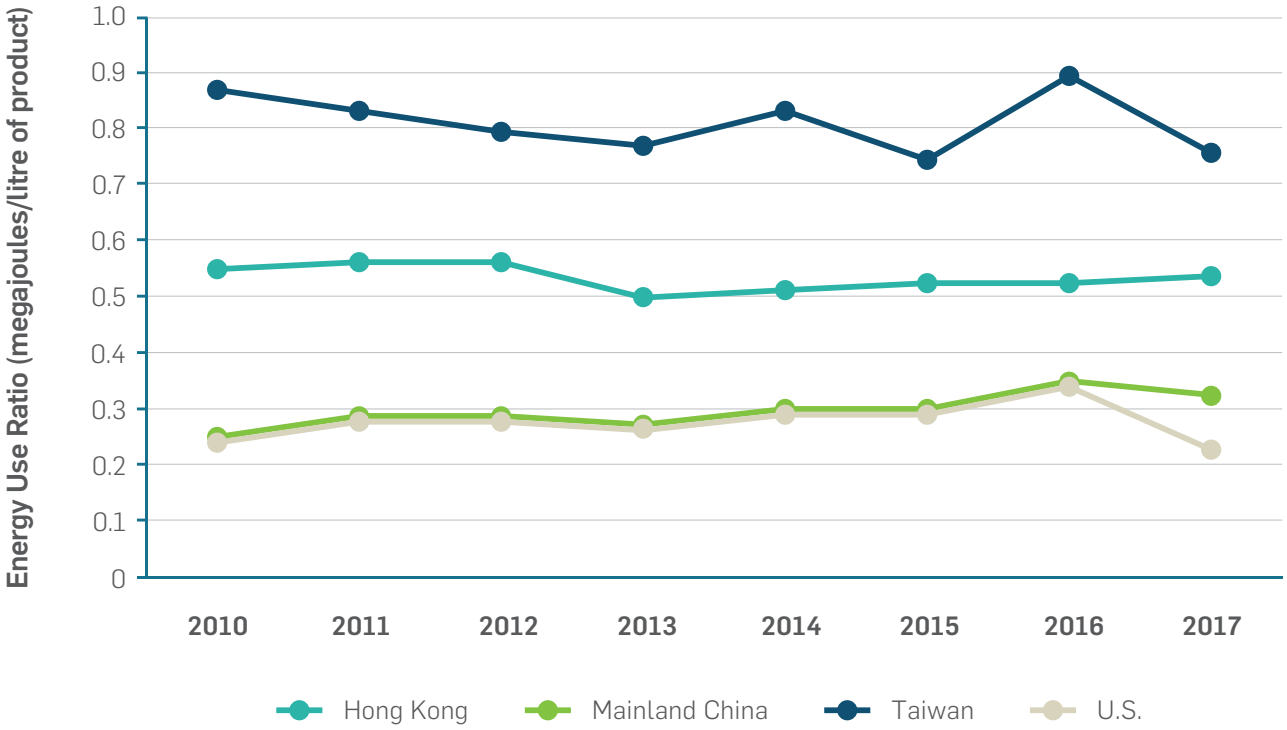


Energy Use Ratio and Production Volume



[22] Leadership in Energy and Environmental Design (LEED) is a rating system devised by the United States Green Building Council

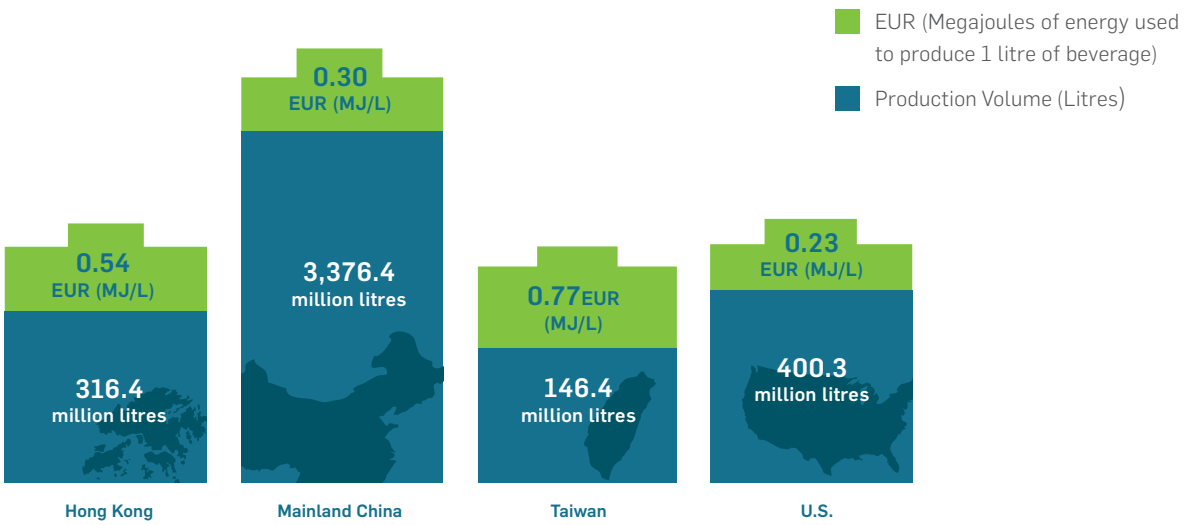
Historic Energy Use Ratio by Market



Since 2010, our overall EUR has increased by 6.5%. In 2017, our EUR across all markets was 0.33 megajoules per litre of product. Energy efficiency in all markets remained relatively stable over the last seven years.

Our bottling plants in Mainland China and the U.S. have lower EUR rates compared to those in Taiwan and Hong Kong. This is a result of the simpler product profile, which require less energy during production. In Hong Kong and Taiwan, our product profile includes teas, which require more energy in the production process for cleaning and pasteurisation.

2017 Energy Use Ratio by Market



Converting Boilers from Oil to Natural Gas

Boilers are a critical piece of equipment within manufacturing plants. Hot water is needed for dissolving sugar, producing teas and soya bean-based drinks, and in the CIP processes. Our boilers are powered by a dedicated fuel source[23] . Over the past decade, we have been gradually converting oil-fired boilers to run on natural gas. This conversion process has significantly reduced the GHG emissions and air pollutants generated. As of 2017, most of the bottling plants have been converted. Five of our bottling plants purchase a certain amount of steam from a third party to supplement their boiler capacity, when required.

Energy Source for Boilers in Mainland China

	Guangdong		Zhejiang		Anhui	Jiangsu	Fujian		Henan	
	Guangzhou	Huizhou	Hangzhou	Wenzhou	Hefei	Nanjing	Xiamen	Fuzhou	Zhengzhou	Luohe
No. of Bottling Plants	1	1	1	1	1	1	1	1	1	1
Natural Gas	✓	✓ (2)					✓	✓		
Purchased Steam (1)			✓	✓	✓	✓			✓	✓

Note:

(1) Our energy supplier generates steam from coal, which is then piped to our bottling plants upon purchase

(2) Our Huizhou plant has two boilers, its main boiler was converted from biomass to natural gas in 2017, the backup boiler remains diesel powered

As the conversion process took place incrementally over several years, we were unable to fully quantify the associated emissions reductions. Using our Xiamen bottling plant as a test case, we calculated that converting from oil to natural gas boilers enabled us to reduce carbon emissions by 593 tonnes annually. Another benefit of this upgrade is the annual reduction of sulphur dioxide and nitrogen oxide emissions, which were reduced by 8.2 tonnes and 1.5 tonnes respectively.

In Taiwan and Zhengzhou, Mainland China, condensed water from steam generated by the boilers is fed back into the boiler system rather than being discharged into drains. As this water is already warm, less energy is required to heat it, reducing energy consumption.

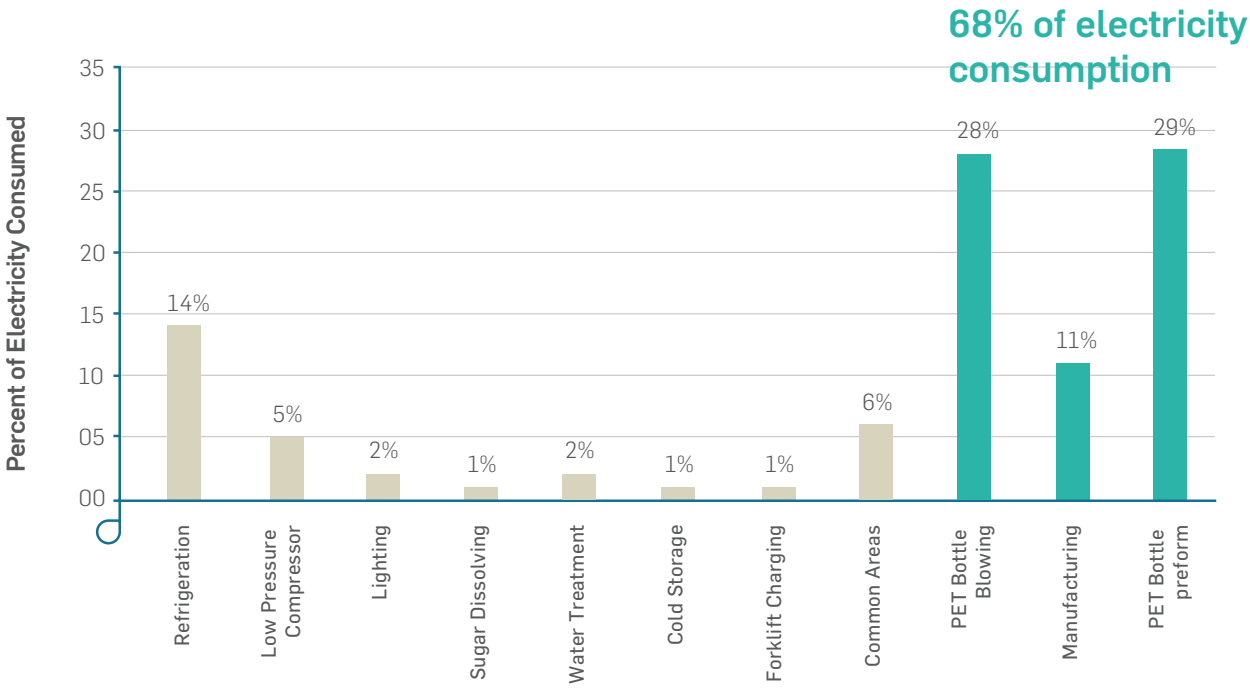
PARTNERSHIP WITH TSINGHUA UNIVERSITY

In 2017, Swire Beverages partnered with the Building Research Centre of Tsinghua University to launch a three-year programme to explore energy efficiency opportunities within our bottling plants. With RMB 1 million of funding from Swire Beverages, Tsinghua University is providing on-site monitoring, analysis and research on electricity use for five of our bottling plants across Mainland China in Hangzhou, Huizhou, Luohe, Guangdong and Nanjing.

Initial studies at the Huizhou plant show that significant improvements can be made in the areas of refrigeration and high-pressure air compressor production areas (PET blowing, PET preform and production line). These account for around 68% of the energy consumption of the plant.

[23] Hong Kong uses electricity at night and natural gas during the day as this is the most economical

Tsinghua University Study: 2016 Electricity Consumption at Huizhou Plant



Efficient Lighting and Air Conditioning Systems

For operations of our scale, seemingly minor systems such as lighting and air conditioning can substantially impact our overall environmental performance if not properly managed. Each bottling plant is responsible for managing the efficiency of its own systems. Measures implemented to improve lighting efficiency include the use of LED and T5 lights. For air conditioning systems, some bottling plants conduct energy efficiency assessments, and if energy efficiency is below 80% we will engage the manufacturer to conduct maintenance work to improve energy efficiency.

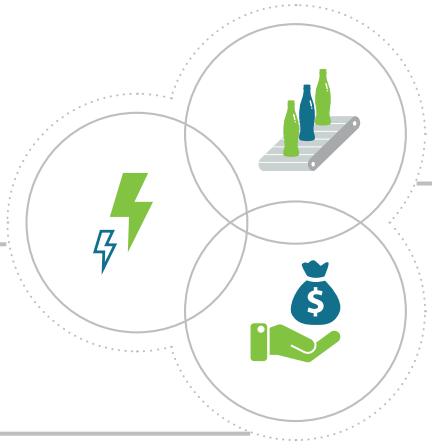
Using Renewable Energy

The renewable energy we use at bottling plants is generated on-site. Currently, we have 4 bottling plants that use at least one type of renewable energy. Solar energy from photovoltaic panels is the most common. In addition to photovoltaic panels, solar heater systems are used to use the sun's energy to heat water. For some bottling plants in Mainland China, methane gas is captured from the wastewater treatment process and used to produce steam, minimising the amount of energy purchased for our boilers.

Generating approximately

6 million kilowatt hour

of renewable energy per year



4 bottling plants

Saving

HK$ 748,000 every year

Applying for LEED Certification

LEED, or Leadership in Energy and Environmental Design, is an internationally recognised standard to evaluate the environmental performance of a building and encourage market transformation towards sustainable design. Luohe is our first certified bottling plant which received LEED Platinum certification in 2011. Since then, three more bottling plants have obtained Silver and Gold level certifications, one bottling plant in the U.S. and two in Mainland China. Through this process, we incorporate a number of different improvements in our energy and other environmental performance areas during both construction and operation of the plant.

Bottling Plant	LEED Certification Level	Performance Highlights
Luohe, Mainland China	Platinum	Emission reduction of CO_2 is equivalent to 1,200 – 1,500 tonnes per year and conserves 25,000 tonnes of water annually.
Hefei, Mainland China	Gold	Building design incorporates sustainable components including energy efficiency and careful sourcing of construction materials. Solar roof panels are installed to provide clean energy to be used on-site.
Draper, Utah, U.S.	Silver	Sixty-two percent of building materials are manufactured and extracted within 805km from the bottling plant. Thirty-one percent of the building materials were made from recycled materials.
Fuzhou, Mainland China	Silver	Uses green materials, such as grass planting brick and permeable brick to minimise and reflect heat from the outside.

Distribution

Distribution covers our owned and managed vehicles that we use for primary transport associated with delivering our beverages from bottling plants to our distribution centres or customers. None of our GHG emissions associated with the operations in our distribution centres, third party distribution centres, third party primary transportation and all secondary transportation (i.e. from our customers to the end consumer) are measured. Distribution under what we measure, as laid out under *Scope*, is responsible for 1.9% of our overall carbon emissions.

Upgrading our Vehicle Fleet

With the support of a Hong Kong government subsidy for electric vehicles (EVs), eight vehicles owned and operated by Swire Beverages in Hong Kong have been converted to hybrids and EVs.

Currently, Hong Kong is the only market that owns Euro VI trucks. Recognising the improved environmental performance when compared with other vehicle models, we hope to convert older trucks to Euro VI in all markets.

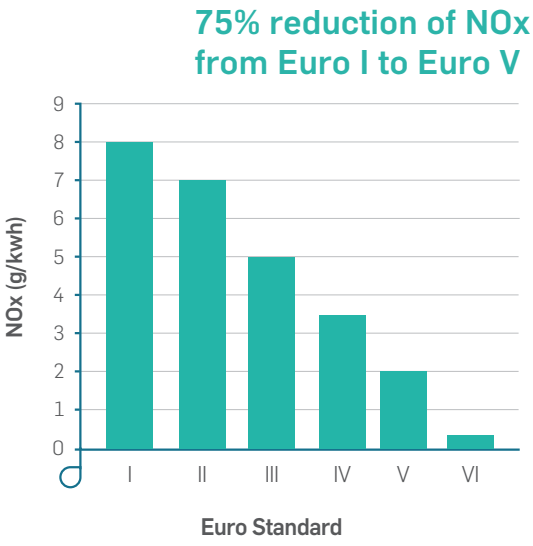
Number of Vehicles by Type at each Market

	Hong Kong	Mainland China	Taiwan	U.S.
Electric	2	0	0	0
Hybrid	6	0	0	46
EURO V / Tier 2	129	57	24	723[1]
EURO VI / Tier 3	11	0	0	97[1]

Note:

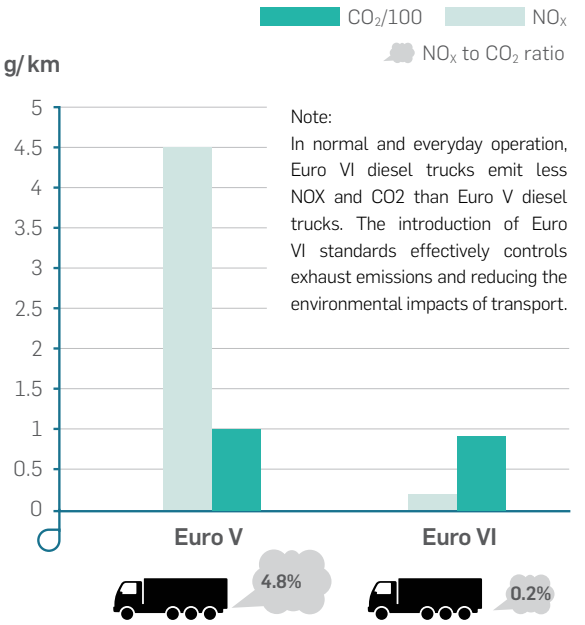
(1) The U.S. uses different vehicle classifications under the U.S. Environmental Protection Agency. The Tier 2 regulation introduced more stringent numerical emission limits relative to the previous Tier 1 requirements, and a number of additional changes that made the standards more stringent for larger vehicles. Under the Tier 2 regulation, the same emission standards apply to all vehicle weight categories, i.e. cars, minivans, light-duty trucks, and sport utility vehicles have the same emission limit.

NOx Emission Requirements for Euro Standard Trucks



Data Source:
https://www.dieselnet.com/standards/eu/hd.php

Comparing Real-world Gaseous Emissions from Euro V and Euro VI Diesel Trucks



Data Source:
"European Union: Emissions of toxic nitrogen oxides by Euro 6 diesel passenger cars are more than double modern diesel trucks". https://www.theicct.org/news/press-release-EU-NOx-emissions-HDV-LDV-comparison

PARTNERSHIP WITH THE HONG KONG POLYTECHNIC UNIVERSITY

Through collaboration with Hong Kong Polytechnic University's Electrical Engineering Department and Green Power Industrial Limited, we have developed and installed solar panels on four of our trucks to power the air conditioning systems. In summer, the air conditioning systems use solar power to keep temperatures inside the truck cool for drivers. As the trucks move, solar panels collect and store energy in a battery to power a stand-alone electric air conditioner that can be engaged when the engine stops. Batteries allow solar energy to be stored, allowing the system to operate on cloudy or rainy days.

Route Optimisation

"Road Show" is a transport route optimisation software we use across all markets to improve the time and fuel efficiency of our beverage transportation process. By inputting delivery locations and volumes of products to be delivered, this software maps out the shortest total distance for the route.

Cold Drink Equipment

Cold Drink Equipment (CDE) covers coolers, vending machines and fountain equipment. Carbon emissions associated with CDE result from electricity used to power these machines[24] and in the older models the ozone-depleting substances (ODS) they use as refrigerants[25], including chlorofluorocarbons (CFCs) and hydrofluorocarbons (HFCs). In a total lifecycle picture of carbon emissions from CDE, build and end-of-life management would also be taken into account. The emissions generated from our CDE under what we measure, as laid out under Scope in this section, is responsible for 86.9% of our overall carbon footprint.

[24] The electricity used by these machines is paid for by our customers and therefore we do not capture these emissions.

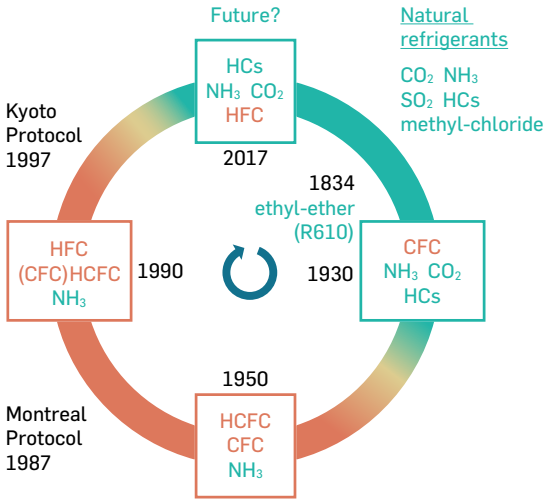
[25] We capture the emissions of the ozone-depleting substances given off by these machines.

Number of Cold Drink Equipment by Type in Each Market in 2017

	Hong Kong	Mainland China	Taiwan	U.S.
Coolers	4,635	426,071	11,904	8,705
Vending machines	6,418	6,435	3,728	20,614
Dispensers	1,560	12,519	4,961	6,746
TOTAL	12,613	445,025	20,593	36,065
Proportion of CDE	2%	87%	4%	7%

Upgrading Coolers and Vending Machines

Older models of coolers contain CFC and HFC refrigerants which are ODS and considered potent GHGs. Since 2008, we have been phasing out CDE which use CFCs and HFCs, but today this equipment still makes up 74% of our total CDE. We align our procurement process with TCCC's 2011 policy, which states: by the end of 2015, new CDE purchases of cooler size larger than 300L, vending machines and fountains should be 100% HFC-free; by the end of 2017 new purchases that are larger than 150L should be 100% HFC-free; and by the end of 2020 all new purchases should be 100% HFC-free. Today this means CDE which use hydrocarbons (HCs) as refrigerants, combined with lower electricity usage.



Data source

Refrigerants: There is still no vision for sustainable solutions
https://www.sciencedirect.com/science/article/pii/S0140700717305066

Market	CFC	HCFC	HFC	CO_2	HC	No Refrigerant	Total
Hong Kong	1,665	1,216	5,980	2,870	39	1,121	12,891
Mainland China (Legacy only)	0	0	34,598	110,427	0	0	445,025
Taiwan	0	0	17,048	4,511	40	0	21,599
U.S. (Legacy only)	13,693	0	77,678	979	107	34,990	127,447
Total	15,358	1,216	435,304	118,787	186	36,111	606,962

Performance Highlights

Generating approximately
6 million kilowatt-hour
of electricity per year from
renewable sources on-site

Four LEED
Certified plants
(three in **Mainland China**
and one in the **U.S.**)

26%
of **cold drink equipment (CDE)**
are HFC and CFC-free

Market	% of CDE with HC or CO_2	% of CDE with HFCs
Hong Kong	23%	69%
Mainland China (Legacy only)	25%	75%
Taiwan	21%	79%
U.S. (Legacy only)	1%	72%
Total	20%	74%

CASE STUDY: ASSESSING THE CARBON FOOTPRINTS OF THREE MAJOR BEVERAGES IN TAIWAN

To better understand the carbon footprint of our beverages, we initiated a detailed carbon footprint assessment for three of our key beverages sold in Taiwan: Minute Maid (450ml) and two sizes of Coca-Cola (600ml and 2L). The study measured emissions generated from different stages of the product cycle covering ingredients sourcing, manufacturing, distribution, consumption and disposal/recovery. For all three products, ingredients sourcing had the highest footprint relative to the other steps, followed by manufacturing and distribution.

To ensure its validity, the assessment was done by a third-party consultant who conducted a portion of the assessment at our bottling plant. The assessment results were submitted to the Taiwan Environmental Protection Agency Executive Yuan (EPA), a cabinet-level executive agency responsible for protecting and conserving the environment, to obtain permission to put this information on our products. During our discussion with the EPA, we determined carbon reduction targets for these three products.

A reduction target of 3% compared to the overall emissions generated from these products' entire lifecycle was established. Since 2010, when the initial assessment was completed, we have reviewed our progress every three years. We have successfully reached our target of reducing the emissions of our Coca-Cola (2L) beverage by 3%, by reducing the weights of primary and secondary packaging and implementing energy-saving initiatives during the manufacturing stage. We are still working towards the 3% reduction goal for our Minute Maid (450ml) and Coca-Cola (600ml) beverages.

One challenge identified is the lack of control Swire Beverages has on the carbon emissions generated from processes outside its own operations, such as the electricity and water consumption of our suppliers. We will continue to identify ways to collaborate with our suppliers to improve their environmental performance so that we can reach our target of a 3% reduction. In parallel, we will implement energy efficiency improvements and technologies to reduce the carbon emitted in areas where we have direct control.

Moving Forward

Through our partnership with Tsinghua University, we have identified ways to reduce our manufacturing energy footprint through appropriate capital expenditure around improvements in chillers, an expanded energy metering system, and retrofitting of equipment around high-pressure air compressor production (blowing, preforms).

We also plan to start expanding the coverage of the data we collect to include co-packers and third party hauliers.

For our CDE, we expect to make positive steps to speed up the phase out of all CFC and HFC CDE, and order only the most energy efficient HFC-free equipment – namely hydrocarbon-based CDE. We will encourage the original equipment manufacturers (OEMs) to embrace high levels of recyclability in the components of the equipment, models which need less electricity to operate, as well as looking to put in place an audited end-of-life management programme across all four territories.

Finally, in Hong Kong and Mainland China, expected shifting of the fuel mix from coal to natural gas, nuclear and renewables will have a large positive impact on our overall carbon footprint.

PACKAGING AND WASTE MANAGEMENT

The speed at which public concern over plastic pollution in our oceans has resulted in actions from businesses and policymakers is unprecedented. Recent studies have revealed the extent of the problem - an estimated 8 million tonnes of plastic waste leaks into our oceans every year, posing a threat to marine life that become entangled or mistake it for food, and ultimately finding its way into our global food system. There is a need for radical change. Rather than being discarded after use, plastics can be recovered and recycled to be used as raw materials for new products, creating a circular economy.

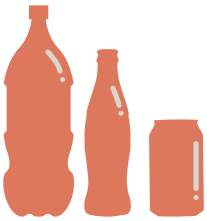
Swire Beverages will place a great deal of attention in managing the impact we, as a beverage bottler, have in plastics consumption. Packaging is an integral part of our business and is used at all stages of manufacturing, distribution, merchandising and storage of our beverages. We need packaging not only to protect beverage quality and ensure consumer safety, but also as a medium for transporting small beverage containers in bulk.

Working as part of The Coca-Cola System, we recognise that mitigating the environmental impacts of packaging requires a holistic approach across our greater value chain. Going beyond innovative packaging design and further lightweighting, we are engaging consumers, and participating in policy advocacy and partnerships along our value chain to address this issue[26] . Faced with growing volumes and shrinking serving sizes, both resulting in increased packaging, these measures help minimise the recyclable materials that end up in landfills and in the natural environment.

[26] https://www.coca-colaindia.com/stories/sustainability/packaging-recycling/our-approach-to-sustainable-packaging

Our Packaging Types and Limitations in Recovery after Use

We have four main categories of packaging: primary, secondary, tertiary and 'other' to ensure product safety and uphold beverage quality.

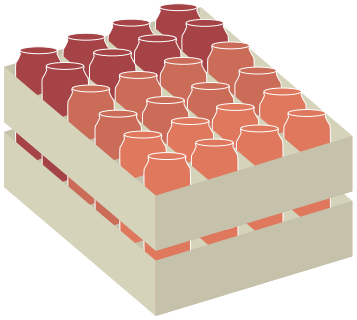


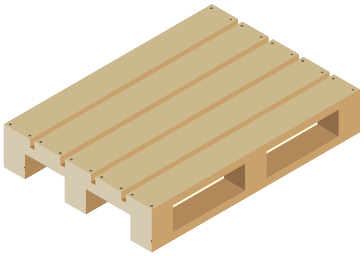
Primary packaging

Material that first envelops the product and holds it. It applies to product volumes of up to 3L. This level of packaging has direct contact with the beverage content – i.e. bottle, label, closure, closure ring.

Secondary packaging

Used to group individual beverage containers together





Tertiary packaging

Packaging that is used for bulk handling (steel drums for juices, slip trays, pallets, hard plastic crates, etc.), warehouse storage and shipping.

Other

Other packaging materials, including festive merchandise packaging and giveaways during holiday periods and marketing materials associated with shop signage, calendars, notebooks, clothing, umbrellas, and others.

Primary and 'other' packaging are the most difficult to manage and track at the end of their lifecycle, which falls outside of our direct control. Doing so would require collecting accurate verifiable data on the discarded volume, method of discard, collection and recovery rates and volume loss into the environment. It would also require integrating local municipal waste collection with recovery systems for recyclables. This must then be supported by processes that convert these materials back into raw materials to be reused.

Secondary and tertiary packaging recovery rates within our manufacturing facilities are relatively easier to manage and track as they fall under our direct control[27]. We ensure these materials are separated by type at our bottling plants, and then given or sold to recyclers.

Scope

We capture data for all primary, secondary and tertiary packaging used in the manufacturing and distribution process, by type, volume and market in the operations managed by us. Outside primary packaging, packaging information of our co-packers is not captured. Currently, we do not have accurate data for 'other' packaging, nor for what happens to the single-use primary packaging once the beverage has been consumed. In this section, we will report on the packaging information for our legacy operations only, and state what we can verify is the status on sold packaging post consumption.

2017 Primary Packaging Volumes

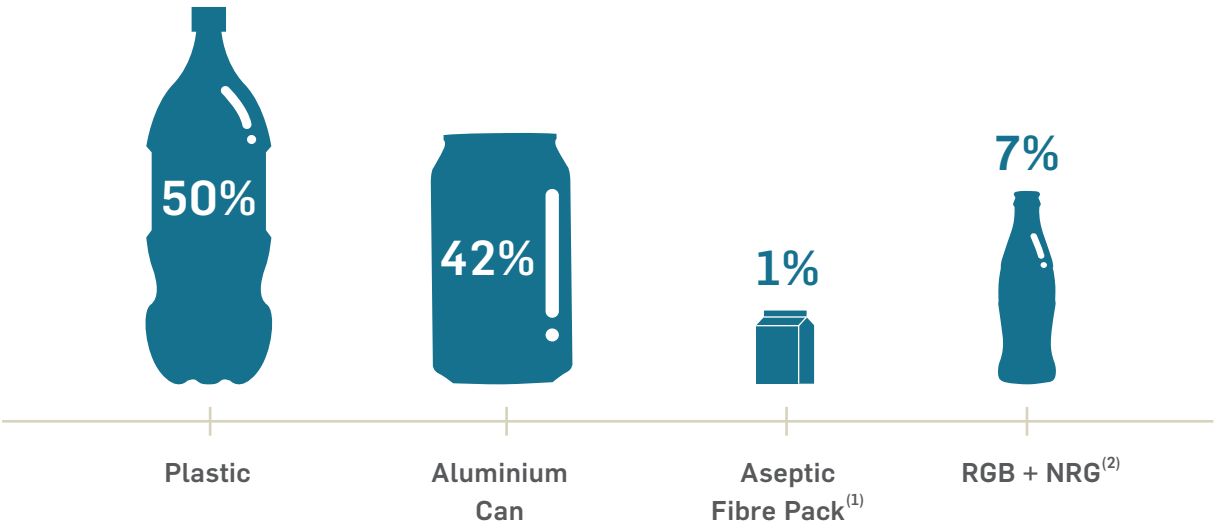
The raw materials used in our packaging include a range of plastics, paper and cardboard, aluminium, tin plate[28] and glass. Aluminium and plastic, in the form of Polyethylene terephthalate (PET) and Polypropylene (PP)[29] , are our most commonly sourced materials for primary packaging. This is directly correlated with our beverage container mix, which is dominated by plastic bottles and aluminium cans. In 2017, our business sourced 149,813 tonnes of raw materials to produce our primary packaging.

[27] There would be some loss in both secondary and tertiary packaging in and around third party managed distribution and warehousing.

[28] This includes a mix of tin and steel

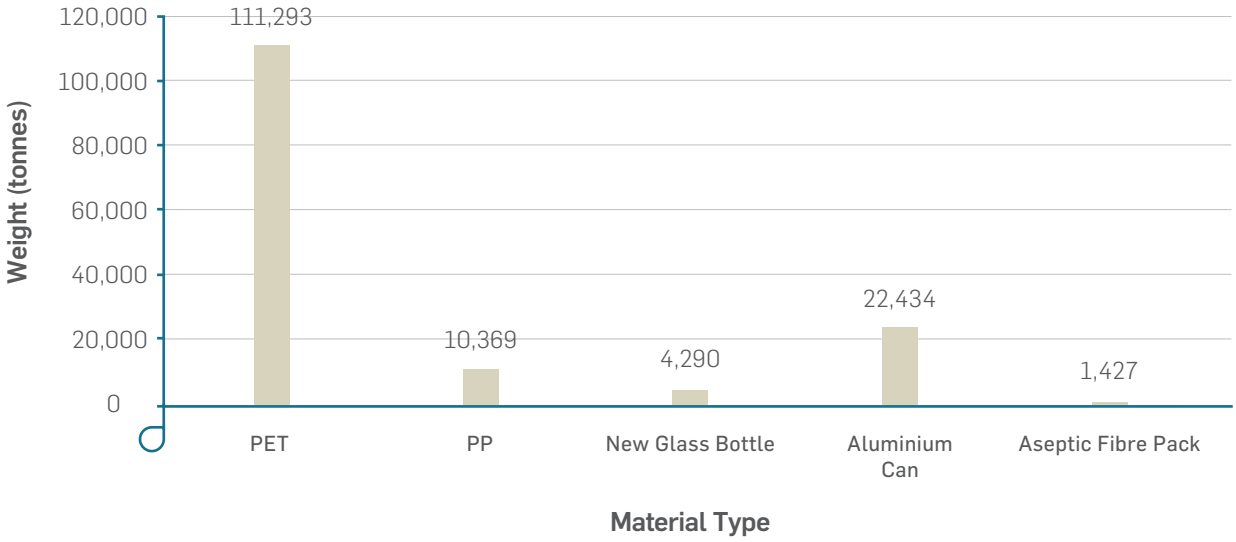
[29] PET, type 1 and PP, type 5

2017 Overall Proportion of Primary Packaging based on Sales Volume



Note: Steel cans used in cold coffees are excluded as these products are manufactured by our co-packers.
(1) Trade names: Tetra Pak and Combibloc
(2) RGB: Returnable Glass Bottles, NRG: Non-returnable Glass Bottles

2017 Total Material Used for Primary Packaging



2017 Primary Packaging Type by Weight

Market	PET	HDPE	PP	RGB/NRG[1]	Aluminium can	Aseptic fibre packs	Post Mix BIB[2]
Hong Kong	38%	4%	5%	4%	36%	12%	<1%
Mainland China	78%	5%	7%	3%	8%	-	-
Taiwan	66%	-	1%	8%	22%	3%	<1%
U.S.	36%	-	6%	-	50%	-	1%
Overall Legacy Operations	**70%**	**4%**	**7%**	**3%**	**14%**	**1%**	**<1%**

Note:

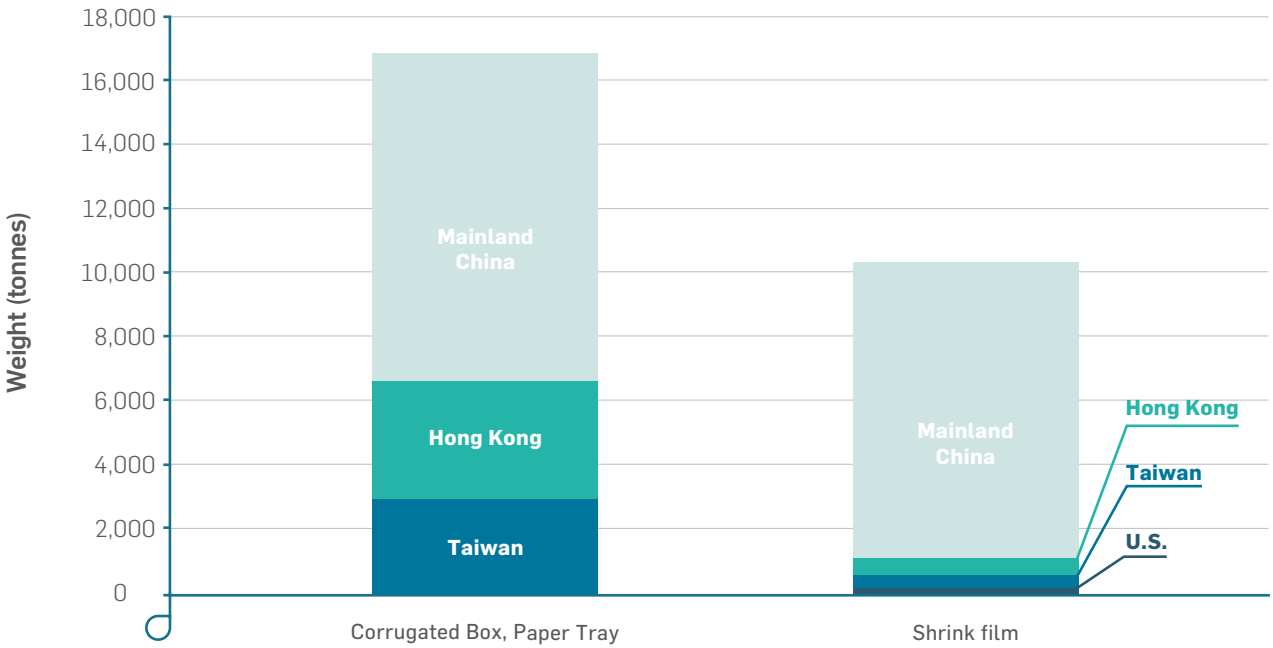
(1) RBG: Returnable Glass Bottles; NRG: Non-returnable Glass Bottles

(2) Post Mix BIB: Post Mix Bag in Box, is a plastic bladder made with type 4 LDPE Polythyelene in a cardboard box.

Just less than 80% of our container mix[30] for primary packaging is composed of plastics (PET, and PP), followed by a smaller portion (14%) of aluminium cans, and finally with glass and aseptic fibre packs, together making up of less than 5%.

[30] Calculated by the volume of materials purchased to manufacture packaging

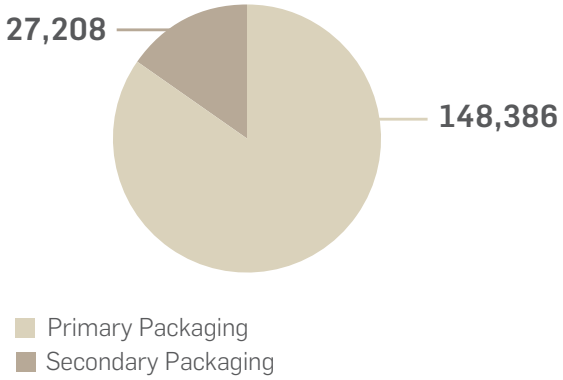
Total Materials Used for Secondary and Tertiary Packaging

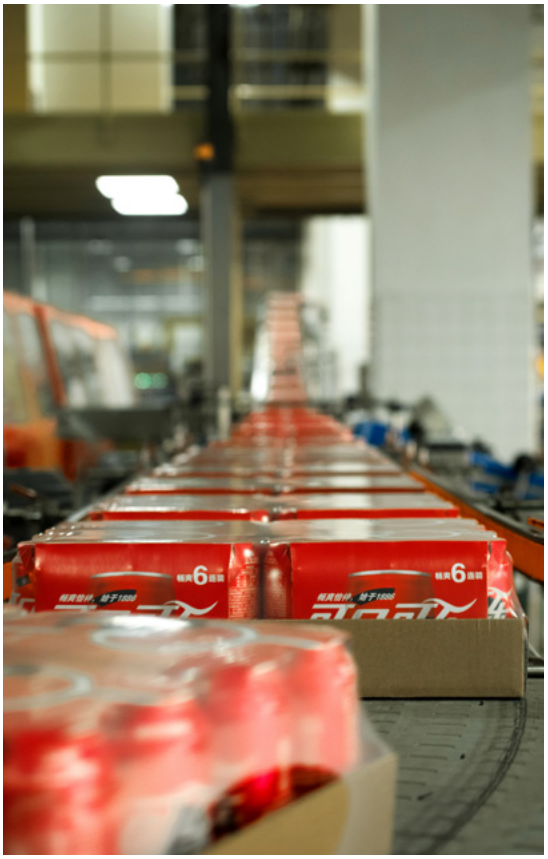


Total Weight of Materials Used for Secondary and Tertiary Packaging (Tonnes)

	Mainland China	Hong Kong	Taiwan	U.S.
Corrugated Box, Paper Tray	10,223	3,620	2,927	0
Shrink film	9,325	507	412	194

2017 Proportion of Primary Packaging Compared with Secondary Packaging (Tonnes)





Recyclability of Primary Packaging

100% Recyclability

Our aim is for all of our primary packaging to be 100% recyclable by 2025. Today, most of the packaging we use is 100% recyclable, except for aseptic fibre packs[31] and post mix bag in box (BIB). The challenge is that even if our packaging can technically be recycled, without sufficient local infrastructure and consumer awareness or incentives, the packaging may not be recovered and hence not recycled.

In the tables below, we have tried to map out the recycling landscape in our four markets based on publicly available information. We do not have reliable data on post consumption collection and recovery outside of the RGB and carboy we recover ourselves by reverse logistics. We have left blanks where we were unable to identify a reliable data source.

2017 Details on Primary Packaging Types Used in Hong Kong

	Is it technically recyclable?	Percent of recycled content used	Collection & Recovery rate	Is there local recycling infrastructures?	Is it crushed locally?	Is it baled and exported for recycling?
Returnable Glass Bottle	Yes	0%	95%	partial	5%	-
Non-returnable Glass Bottle	Not produced in Hong Kong					
PET	Yes	0%	7%	No	-	7%
Carboy	Yes	0%	95%	No	-	-
Aseptic fibre pack	Partial	0%	-	No	-	-
Tin	Yes	0%	-	No	-	-
Aluminium Can	Yes	50-60%	informal sector - thought to be approximately 50%, but unverifiable	No	-	~50%
Post mix BIB	No	0%	-	No	-	-
Pouch	No	0%	0%	No	-	-

Note:
(1) The loss in collection and recovery of RGB and Carboy is due to breakage, unacceptable scuffing or loss by customer
(2) With the implementation of Operation National Sword on January 1, 2018, Hong Kong can no longer export baled PET to Mainland China
(3) Tetra Pak, one of the brands of aseptic fibre pack, is FSC approved in Hong Kong
(4) The Hong Kong Environmental Protection Department (EPD) only has municipal solid waste data published up to 2016 (http://www.epd.gov.hk/epd/english/environmentinhk/waste/data/stat_treat.html) and it does not provide clarity on PET exported volumes. 157 tonnes per day of PET (bottles, trays etc) go to landfill, and through our field research, we believe 10 tonnes per day were exported for recycling predominately into flake/pellets, which is being consumed by the polyester industry.
(5) RGB is given to a glass recycler who crushes it. The glass is not part of a closed loop, but is down-cycled.
(6) We do not produce or sell products packaged in pouch

[31] Inclusive of the plastic straw, straw bag and associated glue to keep the bag on the aseptic fibre pack.

2017 Details on Primary Packaging Types used in Mainland China

	Is it technically recyclable?	Percent of recycled content used	Collection & Recovery rate	Is there local recycling infrastructures?
Recyclable Glass Bottle	Yes	0%	95%	Yes
Non-recyclable Glass Bottle	Not produced in Mainland China			
PET	Yes	0%	informal sector - thought to be high, but unverifiable	Yes - to be pellet and flake - mainly for the polyester industry
Carboy	Yes	0%	95%	Yes - informal
Aseptic fibre pack	-	0%	0%	partial
Tin	Yes	0%	0%	Yes
Aluminium Can	Yes	0%	informal sector - thought to be high, but unverifiable	Yes
Post mix BIB	No	0%	-	-
Pouch	-	-	-	-

Note: (1) CCBMH, one of our co-packers, produces beverages in asceptic fibre pack and coffees in tin cans
(2) The loss in collection and recovery in RGB and Carboy is due to breakage, unacceptable scuffing or loss by customer
(3) Food grade packaging laws prohibit the use of recycled materials
(4) Collection and recovery of RGB and Carboy is done by ourselves. The figures provided are based on our calculations
(5) We do not produce or sell products packaged in pouch

2017 Details on Primary Packaging Types used in Taiwan

	Is it technically recyclable?	Percent of recycled content used	Collection & Recovery rate	.s there local recycling infrastructures?
Recyclable Glass Bottle	Yes	0%	99%	Yes
Non-recyclable Glass Bottle	Not produced in Taiwan			Yes
PET	Yes	0%	74%	Yes
Carboy	Yes	0%	99%	Yes
Aseptic fibre pack	-	0%	25% - official data, it should be higher; mainly for paper	-
Tin	Yes	0%	95%	-
Aluminium Can	Yes	0%	95%	-
Post mix BIB	No	0%	0%	No
Pouch	-	-	-	-

Note: (1) The loss in collection and recovery in RGB and Carboy is due to breakage, unacceptable scuffing or loss by customer
(2) Food grade packaging laws prohibit the use of recycled materials
(3) We do not produce or sell products packaged in pouch

2017 Details on Primary Packaging Types used in U.S.

	Is it technically recyclable?	Percent of recycled content used[3]	Collection & Recovery rate[4]	Is there local recycling infrastructures?
Recyclable Glass Bottle	-	-	-	-
Non-recyclable Glass Bottle	Yes	26%	40%	Yes
PET	Yes	4%	30%	No
Carboy	-	-	-	-
Aseptic fibre pack	-	-	-	-
Tin	-	-	-	-
Aluminium Can	Yes	70%	49%	No
Post mix BIB	No	0%	-	No
Pouch	-	-	-	-

Note: (1) The loss in collection and recovery in RGB and Carboy is due to breakage, unacceptable scuffing or loss by customer
(2) in our operations we manufacture no glass packaging's, but do sell NGB.
(3) Coca-Cola Bottlers Sales and Service (CCBSS) is the source for recycled content.
(4) American Beverage Association is the source for recovery percentage (U.S. average).
(5) We do not produce or sell products packaged in pouch

Use of Recyclable Materials in our Primary Packaging

One of the ways that we can promote recycling is by creating a market for recycled materials. We can do this by using recycled input materials to make our primary packaging. Today, in Mainland China and Taiwan, the use of recycled materials in food grade packaging is forbidden. In our other two markets, Hong Kong and the U.S., it is allowed, but to date is only used in our aluminium cans. We are looking at changing this, and specifically in the use of recycled PET (rPET) in Hong Kong and the U.S. A secondary benefit in the use of rPET and / or recycled aluminium, is a reduction in the carbon emissions over a lifecycle basis.

Reduce: Innovative Primary Packaging Design

Over the past decade, TCCC has been engaging suppliers and universities to explore ways to reduce the overall amount of material used in our primary packaging. This process is known as 'lightweighting'. In Hong Kong, Mainland China and the U.S., we have successfully decreased the weight of our PET containers, bottle caps and bottleneck lengths for packaged water.

The lightweighting results for bottles varies between brands and beverage volume. As each beverage container of three water brands, Bonaqua (Hong Kong), Ice Dew (Mainland China) and Dasani (U.S.) has a slightly different shape, the lightweighting results differ. By volume, generally small bottles (up to 500ml) tend to yield a higher reduction when compared bottle sizes larger than 500ml.

There are fewer opportunities for lightweighting for containers which hold sparkling beverages and hot fill products (those which require heating, including teas), due to the high pressure exerted on these

containers from carbonation or heating, significant lighweighting reductions would compromise safety and quality of the product. That said, moving from hot fill lines to alternative manufacturing technologies – aseptic lines which do not require heating of beverages – would eliminate the challenges that heating presents, and therefore making lightweighting possible.

Container Weight Reduction after Lightweighting Since 2010

23-45%
Lighter

Water

Hong Kong, Mainland China, U.S.

2-23%
Lighter

Sparkling

Hong Kong, Mainland China, Taiwan

5-12%
Lighter

Hot fill (teas)

Hong Kong

16-66%
Lighter

Bottle cap

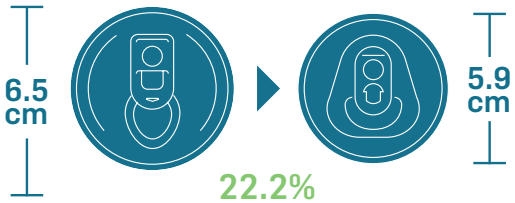
Hong Kong, Mainland China, Taiwan

25-38%
Lighter

Bottleneck length

Hong Kong, Mainland China, Taiwan

In Hong Kong, to reduce the amount of aluminium used, we redesigned our cans to make them lighter composition. Shortening the diameter of the can reduced its weight by 22.2% while maintaining the same product volume. This has saved approximately 1g of aluminium per can, an annual savings of 289 tonnes of aluminium.



22.2%
Weight reduced

Aluminium Can

Hong Kong, Mainland China, Taiwan

Reducing Secondary and Tertiary Packaging

For manufacturing processes in Hong Kong and the U.S., we have replaced empty can paper separator to reusable plastic separator. In the transport phase, wooden pallets are rented from third party contractors. This arrangement helps to facilitate a high reuse rate.

Policy Advocacy and Partnerships

To influence our value chain, we partner with relevant stakeholders, especially on a market level, to identify opportunities and solutions to minimise impacts.

In Hong Kong in 2017, we helped form a broad representative group of stakeholders, named #Drink Without Waste, including academia, NGOs, key soft drink producers, key retailers, recyclers and a think tank. The group drew up a request for proposal for a consultant to study and advise, and produce a list of pragmatic recommendations which could be adopted by the Hong Kong Government and other key stakeholders, to keep single-use soft drink packaging from landfill, and ideally processed into a resource. The research and recommendations are due in mid-2018.

CIRCULAR ECONOMY

Together with TCCC, Swire Beverages supports the circular economy concept to address post-consumption plastic. This concept can significantly reduce the amount of waste which ends up in the natural environment. A circular economy, by definition, is a restorative and regenerative design that looks beyond the 'take, make and dispose'[32] consumption model. This year, we joined the Ellen MacArthur Foundation's New Plastics Economy (NEPC)[33], a global initiative committed to reducing the environmental footprints of plastics through innovation in packaging, as well as engaging consumers in better recycling solutions. This approach will require ongoing collaboration with stakeholders along our value chain.

Waste Management

To complete the picture of the materials discarded from our business operations, we have identified five other categories of waste. These are:

- Organic waste generated from the production of certain beverages
- Sludge generated from our wastewater treatment plants
- Vending machines, coolers and fountains beyond economic repair
- Discarded vehicles
- Waste generated from offices

We currently do not have information on the waste generated from vending machines, coolers and fountains that are beyond economic repair and discarded vehicles from our own fleet. As for organic waste, sludge from wastewater treatment processes and waste from our offices, we track the volume we generate to monitor performance, sludge being the most material of these.

Sludge from Wastewater

Most of the sludge we generate is discarded at landfills, this is the case in Hong Kong and most bottling plants in Mainland China. All sludge generated from our Taiwan bottling plants and a small portion from Mainland China bottling plants is collected by recyclers.

Market	Volume of Sludge Generated (tonnes)
Hong Kong	280
Mainland China[(1)]	2,700,826
Taiwan[(2)]	476
U.S.[(3)]	0

Note: (1) 34% is collected by recyclers and is not discarded at landfills
(2) All sludge is collected by recyclers
(3) There are no wastewater treatment facilities at our bottling plants in the U.S. as water is discharged to municipal wastewater treatment systems

32 https://www.ellenmacarthurfoundation.org/circular-economy

33 https://swirenews.swire.com/2017-09/Newswire/Swire-Beverages-Joins-Global-Initiative.html

Organic Waste

Hong Kong is the only market where organic waste is generated as a result of our product mix, which includes tea and soya milk. In 2017, 104 tonnes of organic waste and sludge was generated and sent to local landfills. In 2018, Hong Kong will open an Organic Waste Treatment Facility where all our tea leaf and soya bean residue will be sent. Organic waste sent to this facility will be treated and converted into compost. Biogas generated from this process will be collected and used as renewable energy.

Moving Forward

In January 2018, Mainland China introduced the new Operation National Sword policy, to ban imports of certain types of waste. This will have a global impact, especially on countries which export a significant portion of baled recyclables to Mainland China. Our operations in Hong Kong and the U.S. will be affected. We hope that, as a consequence of this declaration, local markets will develop policies to address waste separation, collection and recovery.

In parallel, TCCC launched its primary packaging strategy, World Without Waste[34] , in January 2018. This strategy outlines three goals for The Coca-Cola System to deliver:

1. By 2025, 100% of primary packaging will be recyclable
2. By 2030, 50% of all primary packaging will comprise of 50% recycled packaging content
3. By 2030, for every bottle which is placed into the environment, one will be taken out

We will be heavily involved in this effort, and will work closely with TCCC on the mechanics of how to achieve this.

Our focus and challenges ahead are vast and will require a holistic approach. First, we need to be able to measure and verify the volume of post-consumer packaging that is collected, recovered and recycled, which often has a substantial lag time element and source data that can vary in accuracy, so we can better understand the baseline situation to identify suitable solutions. Second, we need to explore with TCCC further improvement opportunities for primary packaging design, which includes increasing the proportion of recycled materials in our primary packaging.

For secondary and tertiary packaging, we will launch reduction programmes.

Third, we need to engage the authorities in Mainland China and Taiwan regarding the use of recyclable material in food grade packaging. This will be done in conjunction with TCCC and other relevant stakeholders and is expected to be a lengthy process.

Lastly, we need to improve the quality of our data on other types of waste and aspire towards operating in a way where no waste is sent to landfills.

[34] http://www.coca-colacompany.com/stories/world-without-waste

PRODUCT RESPONSIBILITY

Providing high-quality beverage options to our consumers requires research and transparency through all stages of the bottling process. From sourcing high-quality raw ingredients, monitoring sugar content in our products, to transparent labelling, we provide consumers with information to make decisions with the peace of mind that our products are made from high-quality ingredients.

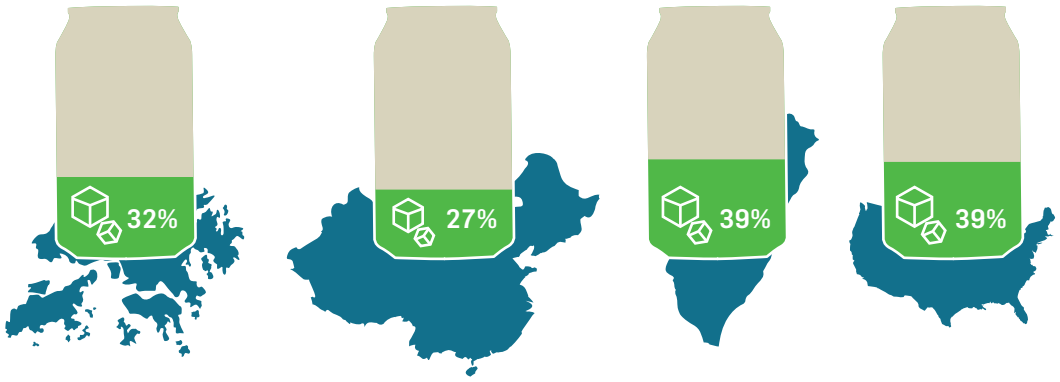
PRODUCT CHOICE

TCCC and Swire Beverages support the current recommendation by several leading health authorities, including the World Health Organisation (WHO), that people should limit their intake of added sugar to no more than 10% of their total energy/calorie consumption. We are committed to providing beverage choices to consumers to enable them to manage calorie intake without giving up the great tastes they love. In line with TCCC's Our Way Forward strategy[35], and in response to the evolving preferences of customers worldwide, The Coca-Cola System is making improvements both inside and outside the bottle.

TCCC controls all the beverages formulations that Swire Beverages, as a bottling partner, manufactures, distributes and sells. Inside the bottle, TCCC is rethinking many of its recipes to reduce calories and sugar, and looking for ways to make beverages more nutritious by adding vitamins, minerals and electrolytes. Swire Beverages is supporting TCCC's aims by increasing low and no-sugar beverage options, using new sweetener alternatives, and providing a broader range of different drinks including teas, juices and purified water.

Outside the bottle, we are offering smaller packaging sizes, making it easier to control sugar intake, and more accessible calorie information so consumers can make informed choices.

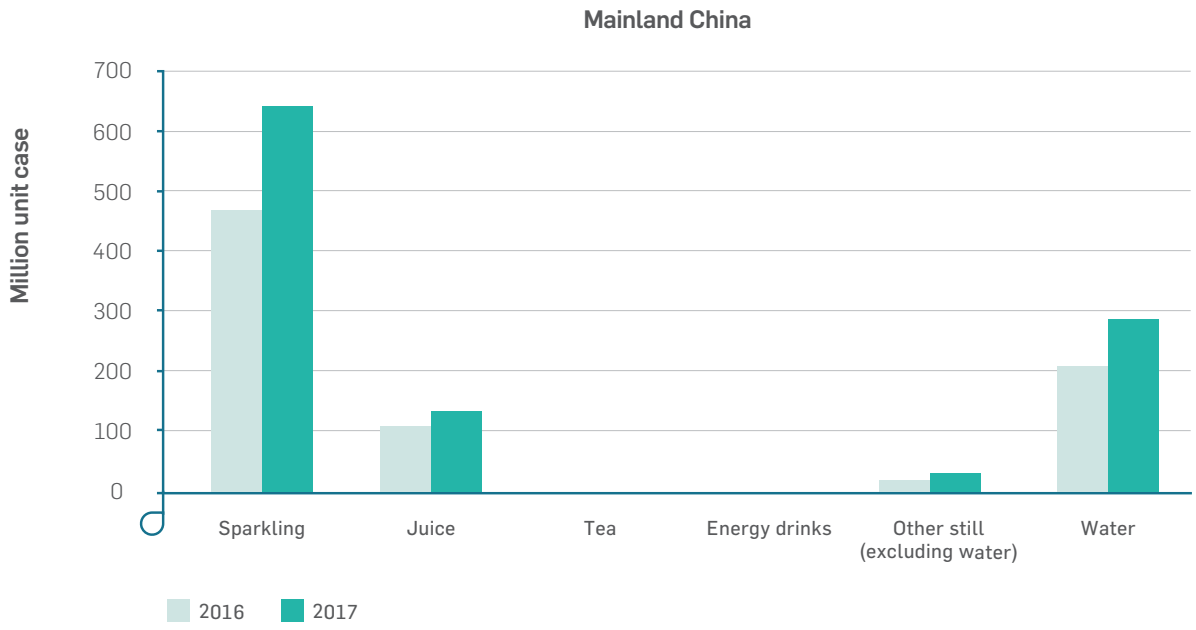
Percent of No- and Low-Sugar Beverages by Sales Volume

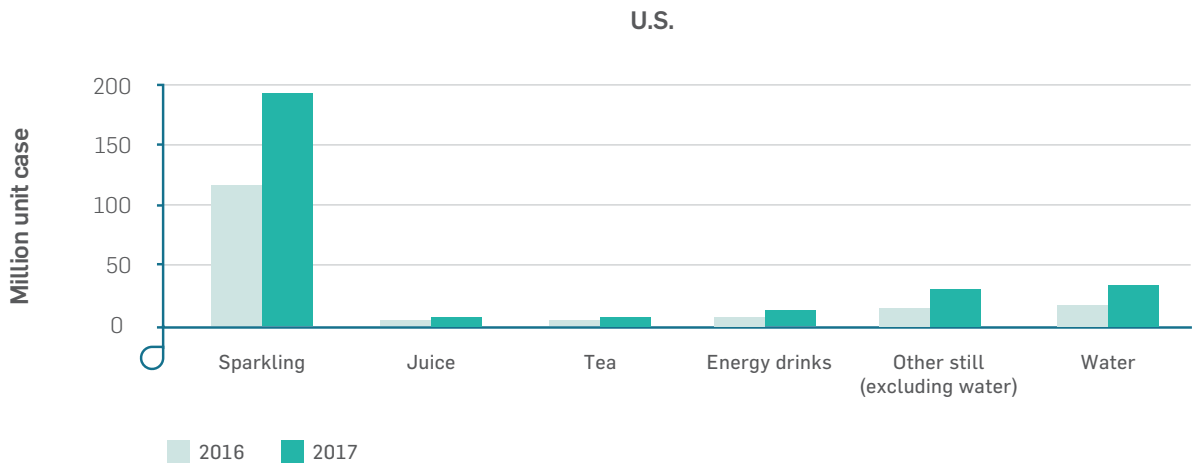


Market	Hong Kong	Mainland China	Taiwan	U.S.

[35] https://www.coca-colacompany.com/stories/our-way-forward

The Category Mix in Our Two Largest Territories

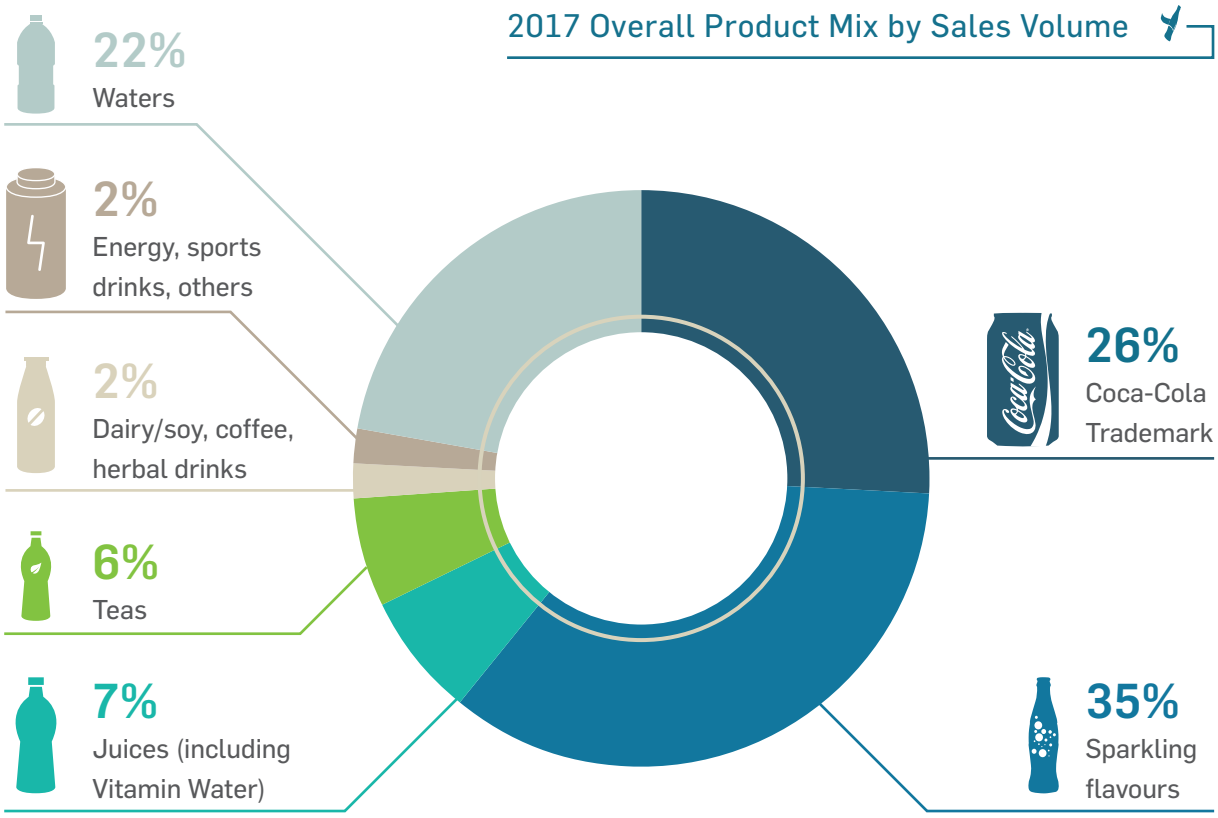




Note: (1) One unit case is equal to 5.678 litres of beverages. It is a measurement equal to 24 eight-ounce servings of beverages.
(2) This information is taken the Swire Pacific 2017 Annual Report

As per the above, today's volume in Mainland China and the U.S. is dominated by sparkling, followed by water, with a small portion of juices, teas, energy drinks and other still. This data takes into consideration of both legacy and new territories and reflects the actual data from 2017 sales.

Together with TCCC, we have begun a journey toward a goal of reducing sugar content in our beverages without compromising flavour. Across all markets, we offer a wide range of beverage products with Coca-Cola trademark and sparkling being the most dominate in terms of sales volume. Currently, 31% of our overall product portfolio by sales volume is low and no sugar beverages. There is no universal definition of low-sugar, but internally we use the most common metric from CODEX[36] . Low sugar for liquid food is defined as products containing no more than 5 g of sugar per 100 ml of liquid.



Inside our beverages, we have identified alternative sweeteners that allow us to maintain our signature flavours. These alternatives are chosen because they are safe to consume and maintain the refreshing flavour of our beverages. We continually look for ways to improve our beverages through adding vitamins, minerals, and electrolytes.

Next-Generation Sweetener Innovation

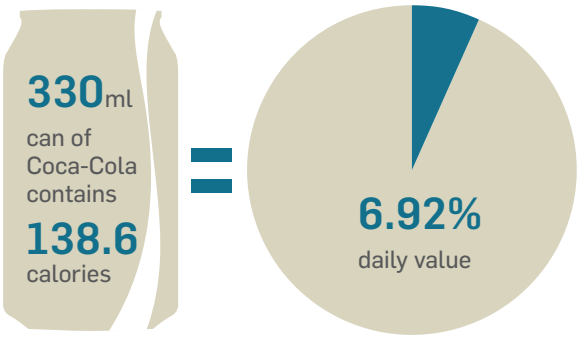
TCCC's quest for alternative sweeteners has expanded beyond their own research and development team. This year, the External Technology Acquisition Team invited people around the world to share ideas of naturally sourced, safe, low- or no-calorie compounds that have a similar taste to sugar[37] .

[36] The Codex Alimentarius international food standards, guidelines and codes of practice contribute to the safety, quality and fairness of this international food trade. Consumers can trust the safety and quality of the food products they buy and importers can trust that the food they ordered will be in accordance with their specifications.

[37] http://www.coca-colacompany.com/stories/coca-cola-launches-crowdsourcing-challenges-to-find-next-generat

PRODUCT LABELLING AND MARKETING

We want to help consumers make informed dietary choices. Across all four markets, we clearly label each beverage with a list of ingredients, additives and flavours used. We are transparent about sugar and caffeine content, calories per serving, and provide other nutritional information in total and as a percentage of daily value to give consumers guidance on how much of their recommended daily allowance one serving represents. We voluntarily provide easy-to-find calorie information so consumers can make informed decisions easily. We endeavour to ensure that all nutritional information is factual, meaningful, easy to understand, and that all of our product labels fully comply with local regulations and requirements.



In the U.S., we support an industry-wide initiative by providing caffeine along with calories-per-serving, serving-per-container and front-of-pack calorie information.

In 2018, the Hong Kong Government will launch a new labelling scheme for pre-packaged food to help consumers make healthier choices and improve dietary habits. A designated label will be added to products that qualify as no-sugar and low-sugar under the scheme. We will support this scheme and all qualifying no- and low-sugar products will carry these labels when the scheme is launched.


Nutrition Facts

1 Serving Per Container

Serving Size	1 Can
Amount Per Serving	
Calories	**140**
	% Daily Value
Total Fat 0g	0%
Sodium 45mg	2%
Total Carbohydrates 39g	14%
Total Sugars 39g	
Includes 39 Added Sugars	78%
Protein 0g	%
Vitamin D	0%
Calcium	0%
Iron	0%
Potassium	0%

Not a significant source of fat, *trans* fat, cholesterol, dietary fiber, vitamin D, calcium, iron and potassium.

Caffeine Content: 34 mg/12 fl oz

INGREDIENTS
CARBONATED WATER, HIGH FRUCTOSE CORN SYRUP, CARAMEL COLOR, PHOSPHORIC ACID, NATURAL FLAVORS, CAFFEINE.

GMO
This product includes ingredients sourced from genetically engineered (GE) crops, commonly known as GMOs. Click here to see The Coca-Cola Company's position on GMO's.

Product Label from the U.S.

Responsible Marketing

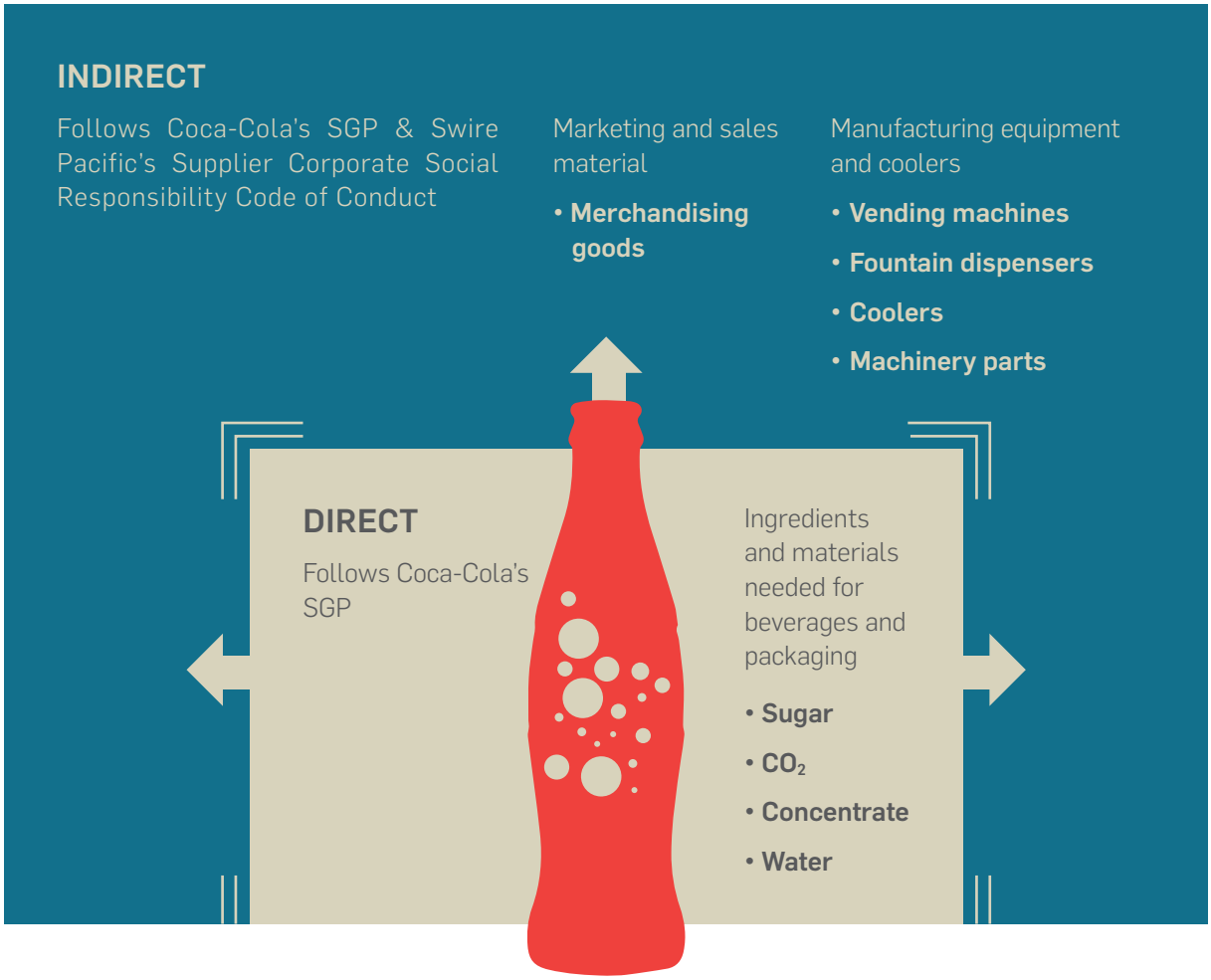
We abide by TCCC's Responsible Marketing Policy and will not market directly to children under the age of 12. Our advertisements are not designed to appeal specifically to children, and we do not directly target children in our campaigns, for example, we will not advertise our products in primary schools.

PROCUREMENT & SOURCING

With our consumers' demand for accountability, there is a need for us to be transparent with our commitments to integrity and quality within our value chain. We take responsibility to only source goods that are obtained in a way that does not degrade the natural environment, and only procure services from those who utilise workplace accountability practices.

TCCC's Suppliers Guiding Principles (SGP) provide an overarching set of standards we expect from our suppliers covering workplace policies, health and safety, human rights, environmental protection and business integrity. All bottlers within The Coca-Cola System, including Swire Beverages, must follow the SPG. This governance model helps to ensure supply chains within The Coca-Cola System uphold the pledge of quality, safety and sustainability awareness beyond legal compliance.

We categorise procured goods into two groups. Direct goods include raw materials which are used for manufacturing or packaging, and indirect goods are items for marketing these beverages. The procurement of both direct and indirect goods involving TCCC must follow the SGP. In addition, all raw materials are sourced from a list of suppliers that have been approved by TCCC to better ensure manufactured beverages meet TCCC's standard.



Under The Coca-Cola System, our major suppliers must undergo third-party audits to assess their sustainability performances. This audit process is simultaneously intended to encourage improved performance over time. The comprehensiveness of the audit process helps us to better understand our suppliers' sustainability progress whilst simultaneously encouraging improved performance over time.

In addition to the SGP, we abide to the Swire Pacific Supplier Corporate Social Responsibility Code of Conduct. We apply these two documents in parallel given their similarities: both documents address regulatory compliance, forced/child labour, health and safety, environmental issues, and compensation and working hours. Beyond the SGP, under the Swire Pacific Supplier Corporate Social Responsibility Code of Conduct, suppliers are also encouraged to provide clear, accurate and appropriate reporting of their progress towards achieving their own sustainable development objectives.

Collaboration with other bottlers in Mainland China

In 2004, Swire Beverages formed a consortium with neighbouring bottlers in Mainland China to collaboratively manage suppliers and the procurement process. Its objective is to pool resources and knowledge between bottlers to better manage the procurement process. This arrangement encourages transparency amongst bottlers where supplier information is shared to prioritise those who are acting in line with the SGP. Through this agreement, full transparency of information from all participating companies becomes mandatory and decisions for actions must be in full agreement with all parties.

WORLD CLASS OPERATIONS

To bridge the gaps between ourselves and our suppliers' operational processes, management approach, culture and expectation for quality, we introduced the "World Class Operations" (WCO) management and benchmarking system in June 2017. The WCO is our own pursuit of continuous improvement in seven areas with our suppliers: supply risk & continuity, finance, sustainability, capability & productivity, quality & customer service, innovation, and regulatory & social responsibility amongst our suppliers. It supports a shared vision and common language to achieve end-to-end supply chain interactions, enhancing our supplier's overall performance and help achieve zero defects.

To kick off the programme, we held the first World Class Operation Summit on 14th June 2017, where 34 of our suppliers participated, all of which were interested in participating in the WCO management and benchmarking system. By the end of 2017, 22 suppliers have completed the first site visit with initial assessment, seven of which have signed contracts committed to implementing the WCO management and benchmarking system.

FOOD SAFETY AND PRODUCT QUALITY

The quality of our products and safety of our consumers is of utmost importance. We avoid food safety risk factors by eliminating reliance on fragmented supply chains, unnecessary use of additives and limiting human contact exposure during the manufacturing process. Through the combined efforts of our procurement process and implementation of compliance and management systems, we ensure the quality of our products comply with relevant local rules and regulations as well as standards outlined in the Coca-Cola operating Requirements (KORE). More details can be found in the *Compliance and Management Systems* and *Procurement and Sourcing* sections.

To check that proper measures are in place, product quality and safety compliance are assessed through unannounced, internal and external audits at our bottling plants[38]. Unannounced audits ensure bottling plants are "audit-ready" at all times. Any food safety concerns flagged during audits will result in removal from production line.

All bottling plants follow the ISO 22000 system to ensure our products remain safe throughout the manufacturing process. This system increases the transparency and traceability of our products from the source by facilitating communication with suppliers and consumers both upstream and downstream of the value chain.

In November 2017, our bottled water in Mainland China failed a random quality sampling test by the Food and Drug Administration of Fuyang City. The incident is currently still under further investigation, once results are confirmed, more information will be provided in the following report.

Total Product Management

The Total Product Management (TPM) system is integrated across our entire operations including procurement, manufacturing, warehousing, and distribution to consumers. It identifies the necessary processes to protect products from being damaged or contaminated. First, the performance of bottling plants regarding how products are managed and handled at different operational stages is assessed. Then, management uses these findings to derive annual TPM plans. These plans outline the leading personnel, team actions, required training, governance structure and review process necessary for better handling and management of products to ensure quality and product safety.

[38] http://www.coca-colacompany.com/stories/quality#Ingredient

WORKPLACE

SAFETY

Swire Beverage aspires to have zero incidents across all operations. Staff at bottling plants, warehouses, distribution centres and even our sales staff can face safety risks if awareness is lacking. Fostering a safety culture has been our continued focus as we strive for zero harm.

We operate across four territories which differ in culture, operating procedures, scale and use of contractors. Whilst we have strict procedures in place to manage safety inside our bottling plants, distribution centres and warehouses, it can be challenging to manage potential safety risks outside of these spaces. By integrating an open and honest safety reporting culture, adopting forward looking leading safety indicators, embracing technology where necessary and adapting our standards to the local culture, we can better prevent incidents.

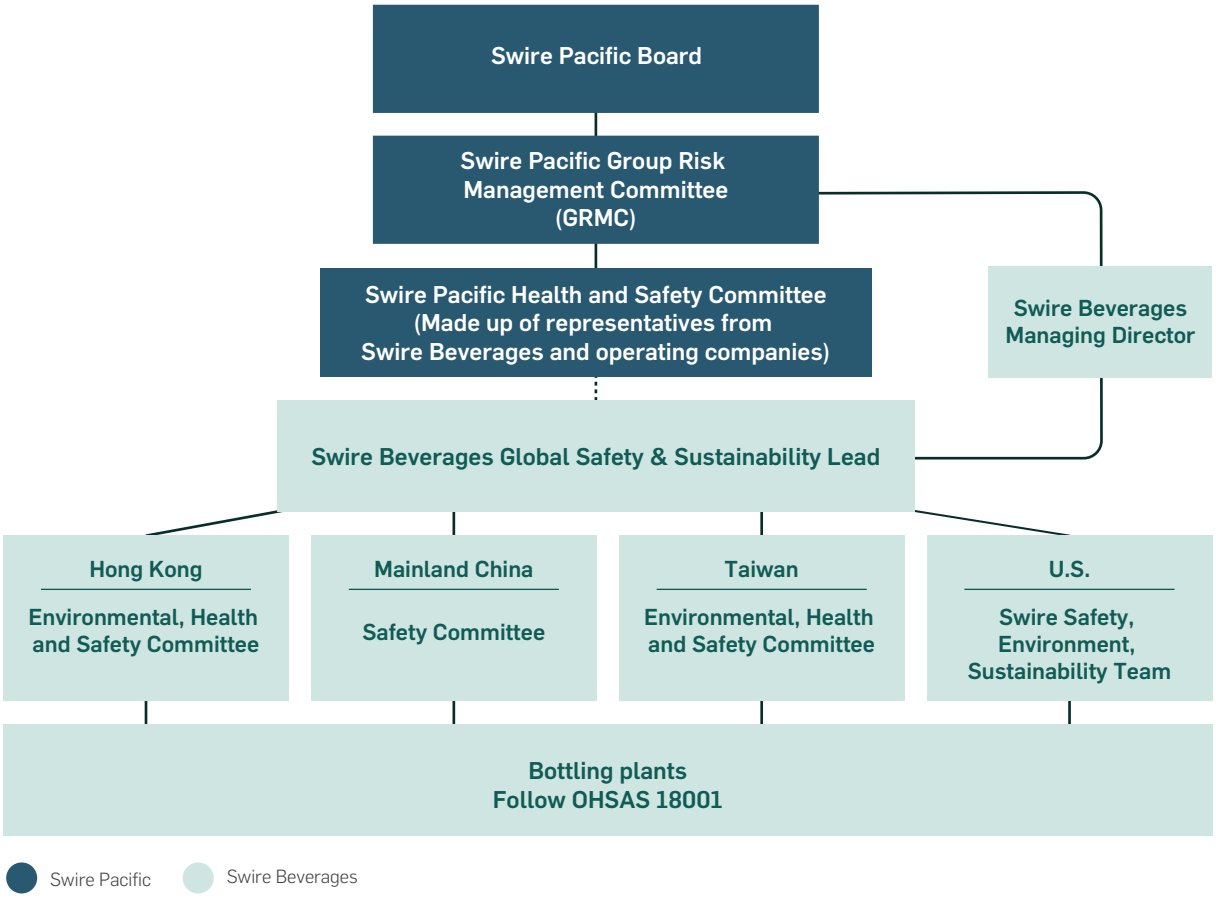
Scope

Our safety data covers all employees – this includes both employees and contractors working within our owned and managed manufacturing, warehouse, distribution, sales and marketing facilities. We further strive to track all serious injuries[39] and fatalities from transportation, warehouse and distribution contractors which we do not own or manage, and all fatalities caused by our employees or contractors which affect the general public.

The data presented in this section covers a full year's worth of data in 2017 for both our legacy and new territories.

[39] Serious injuries are defined as incidents that require hospitalisation of an employee or contractor and/or an incident that may result in investigation by external parties.

Safety Governance Structure



Swire Beverages' overall safety performance is governed by the Swire Pacific Health and Safety Committee, which is comprised of members from different operating companies of the Group, including Swire Beverages, as well as the GRMC. This committee is responsible for developing group-level health and safety policies, monitoring performance, promoting education and training, sharing best practices and developing internal capabilities.

At an operating company level, safety governance is integrated within our sustainability governance process. Performance is tracked through our Monthly Safety Report, where information on each market is reported to the Global Safety and Sustainability Lead. It is consolidated and sent to all senior management in all four territories for commentary. Bi-monthly functional meetings are held between our Managing Director, Executive Director of Supply Chain and the Global Safety and Sustainability Lead to discuss performance and progress. This information is then reported to the Swire Beverages' Advisory Board.

At the regional-level, the health and safety governance structures differ slightly across the four markets, where each market has established their own health and safety committees or equivalent that meet on a regular basis. Their role is to determine the best approach to track safety performance as well as to identify the appropriate framework for compliance on relevant regulations and standards.

Within bottling plants, management is responsible for implementing the Occupational Health and Safety Assessment Series standard OHSAS 18001, which outlines the requirements set by the Swire Pacific Health and Safety Committee. Each bottling plant has an assigned safety manager to address concerns and identify areas for improvement.

Workplace Health and Safety Events

Every year, we participate in the John Swire & Sons and Swire Pacific Health and Safety Conference. This is a group-level event where operating companies gather to share best practices on management techniques and to learn about innovations in the health and safety landscape across the entire portfolio of businesses.

The Coca-Cola Company Safety Council holds annual meetings with members of TCCC and bottlers of the Coca-Cola System to discuss health and safety. Swire Beverages' involvement goes beyond attending the meeting every year – our Executive Director of Supply Chain is currently the Joint-Chair of the Council.

Safety Performance Metrics

Considering the relative scale of our operations in each market, the majority of incidents naturally occur in Mainland China. For example, a high number of sales staff means that more staff are commuting to customer locations and thus there is a higher probability of traffic-related incidents.

Metrics	Mainland China	Hong Kong	Taiwan	U.S.
Total Employees	20,027	1,284	897	6,674
Number of Sales Staff	12,125	502	264	4,663
Number of Bottling Plants	18	1	2	6
Number of Distribution Centres	201[1]	0	1[2]	48
Number of Owned Vehicles	950	240	109	2,027

Note:

(1) Includes 113 distribution centres managed/owned by Swire Beverages and 88 managed/owned by third party

(2) Distribution centre is managed/owned by Swire Beverages

Leading Indicators

We began reporting leading indicators in 2017 to measure the frequency of proactive activities to prevent injuries. In contrast to our historical reporting on lagging indicators, leading indicators measure activities carried out that help prevent or control injury. We intend to enhance the quality and focus of our reporting on leading indicators going forward.

2017 Safety Performance Relating to Leading Indicators

Market	First Aid Reports	Near Miss Reports Raised	Safety Observation & Communication	Workplace Safety Inspections
Mainland China	205	73	9,403	325
Hong Kong	188	36	114	64
Taiwan	45	3	371	55
U.S.	92	0	0	0
TOTAL	530	112	9,888	444

Lagging Indicators

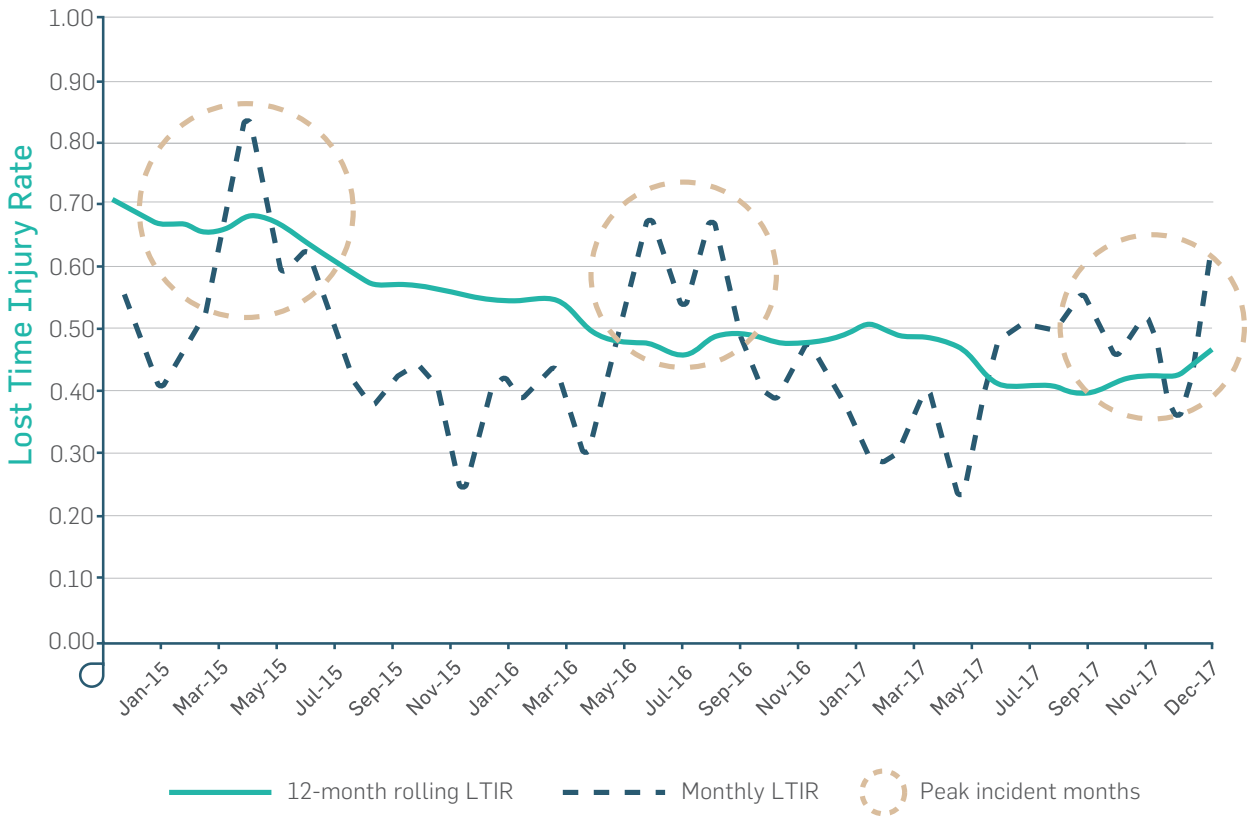
Lagging Indicator performance is tracked across four indicators:

- Lost time injury rate[40] (LTIR), is an indicator of incident frequency
- Lost day rate[41] (LDR), indicates the severity of incidents
- Total incident rate[42] (TIR), measures the frequency of reporting
- The number of fatalities

Although we are experienced with recording lagging indicators, there is a need to further encourage monitoring at bottling plants where reporting rates (TIR) are low.

There has been an overall decreasing trend in the LTIR and LDR over the last two years. This, however, is off-set by peaks seen in and around the busiest times of the year (as depicted by the dotted brown circles in the graph below). These peaks correspond with the highest production volumes in the warm summer months, in all four markets. The peak depicted in the winter of 2017 was primarily driven by snow and icy conditions in Mainland China.

Lost Time Injury Rate Performance (Frequency): 2015 to 2017



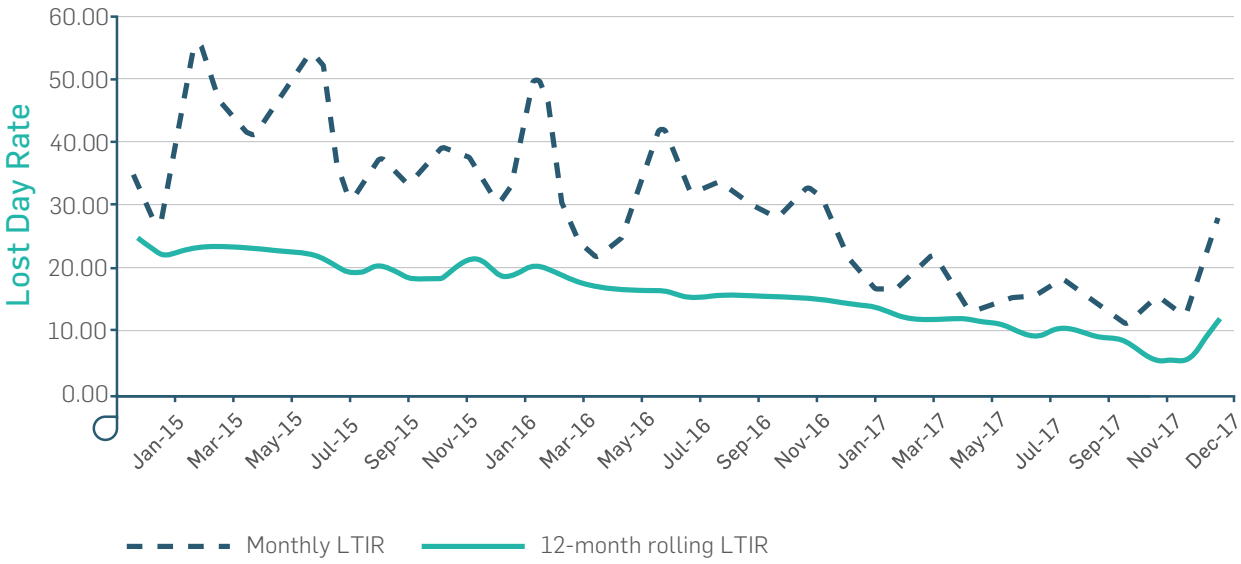
[40] LTIR calculated by (Number of LTIs x 200,000) / (Number of Hours Worked in the reporting period). The calculation is based on 200,000 hours (100 direct employees working 40 hours per week for 50 weeks)

[41] LDR is calculated by (Number of Workday lost x 200,000) / (Number of Hours Worked in the reporting period). The LDR is an indication of Lost Days per 200,000 hours and not the number of Lost Days per LTI.

[42] TIR is the Number of [(Medical Treatment Cases + LTIs) x 200,000] / (Number of Hours Worked in the reporting period)

The 12-month rolling LTIR rate in December 2017 was 0.50, which is low when compared to similar bottling and distribution type businesses[43]. As increased reporting frequency yields higher LTIR, this low number is a reflection of the work we have to do to further encourage reporting specifically in Mainland China, which has the single greatest effect on these metrics.

Lost Day Rate Performance Chart (Severity): 2015 to 2017



[43] Coca Cola European Partners has a LTIR of 1.66 in 2016. Amatil has a LTIR of 1.7 in 2016.

2017 Fatalities

After recording zero work-related fatalities in 2015 and 2016, we unfortunately had two fatalities in 2017, both of which were traffic related.

Road Safety in Mainland China

We deliver packaged beverages to our customers as part of our operations. In Mainland China, we transport 17.8 million litres[44] of beverages every day from our bottling plants to retailers and customers' warehouses. Aside from beverage delivery, our 12,125 sales representatives and contract sales representatives commute to customer locations, mostly on electric motorbikes. As a result, road safety is one of our primary concerns in our Mainland China operations.

When addressing motorbike safety, local legislation often lacks mandatory requirements for helmet use. To help achieve zero harm, we provide free, certified and weather-appropriate helmets to all employees who commute via motorbikes. Different helmet types are provided at different times of the year so that drivers can stay warm during winter and cool in the summer. We are further implementing relevant courses on safe driving, including a series of classroom lessons and defensive driving training to all sales representatives. We encourage staff to extend their safety awareness and to use their helmets outside of working hours.

Another challenge lies in the high turnover rate for sales representatives which requires more training to be provided to new joiners.

To encourage and give recognition to our bottling plants with good traffic safety performance, our "Gold Helmet Award" was introduced in 2017. This award is given to bottling plants with no accidents for 100, 200 and 365 days. Our bottling plant in Guangdong West, Mainland China received this award in 2017 in recognition of its success in achieving 411 consecutive days without an incident.

[44] In 2017, we transported approximately 3.9 million litres with Swire Beverages owned vehicles and our hired contractors transport around 13.9 million litres.

Traffic Management inside our facilities in Mainland China

In Nanjing and Hangzhou bottling plants, we created two traffic management pilot projects. Its objective is to implement an organised system to direct onsite pedestrians and traffic safely, with a long-term goal of introducing the system across all bottling plants in Mainland China. Measures include: single direct fleet flow, reverse parking for cars, fleet in/out checklist, full 5S[45] in and around the outdoor area within the perimeter of the plant, improving light levels in the areas of manual work, training, provision of road signs and providing physical barriers between fleet and area where people operate on-ground within the loading areas.

Moving Forward

Our focus is to encourage open and honest reporting on health and safety across all markets. With this information, we can better identify specific preventative measures and reduce the number of incidents. We will launch two programmes in 2018 to directly address the most common incidents in Mainland China and the U.S. In Mainland China, we will focus on improving traffic safety for sales and distribution staff, especially for electric motorbikes. In the U.S., where ergonomic injuries caused by moving heavy objects and other warehouse-related tasks are most common, we will launch an intensive ergonomics program with Pristine Condition[46].

[45] 5S is a system to reduce waste and optimize productivity through maintaining an orderly workplace. The term refers to five steps – sort, set in order, shine, standardize, and sustain.

[46] http://pristinecondition.com/

GENDER EQUALITY

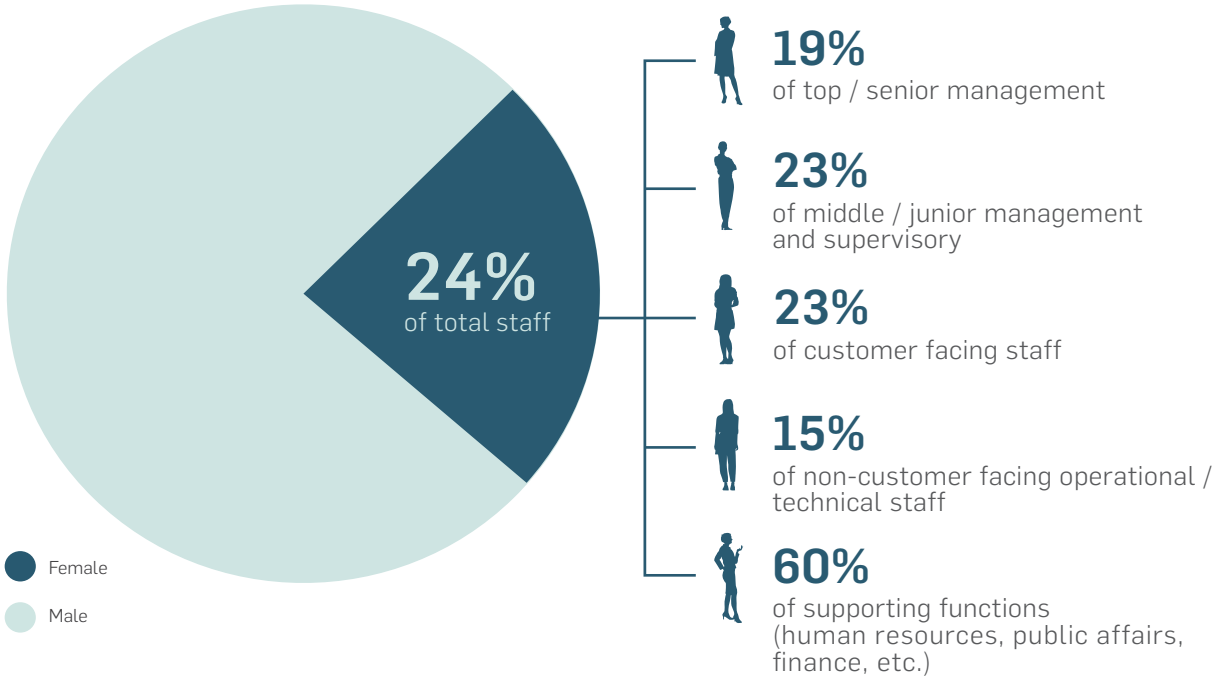
Studies have shown that better gender diversity is correlated with improved financial returns[47] and improved efficiency[48]. Despite the best efforts of leading companies, statistics show that women today often remain underrepresented in the corporate workplace[49]. Swire Beverages is committed to gender equality and understands that diversity leads to better business outcomes. We are working towards achieving gender equality in our business by creating an unbiased work environment, increasing the proportion of women in our workforce, and establishing an inclusive culture.

All Swire Beverages employees are given access to the same resources and opportunities regardless of their gender. This is achieved when there is an equal salary for the same level of experience, equal opportunities for leadership roles, and the elimination of discrimination and institutional barriers in the workplace.

Scope

The information presented in this section covers all our employees in both legacy and new territories operations.

Percentage of Workforce by Gender



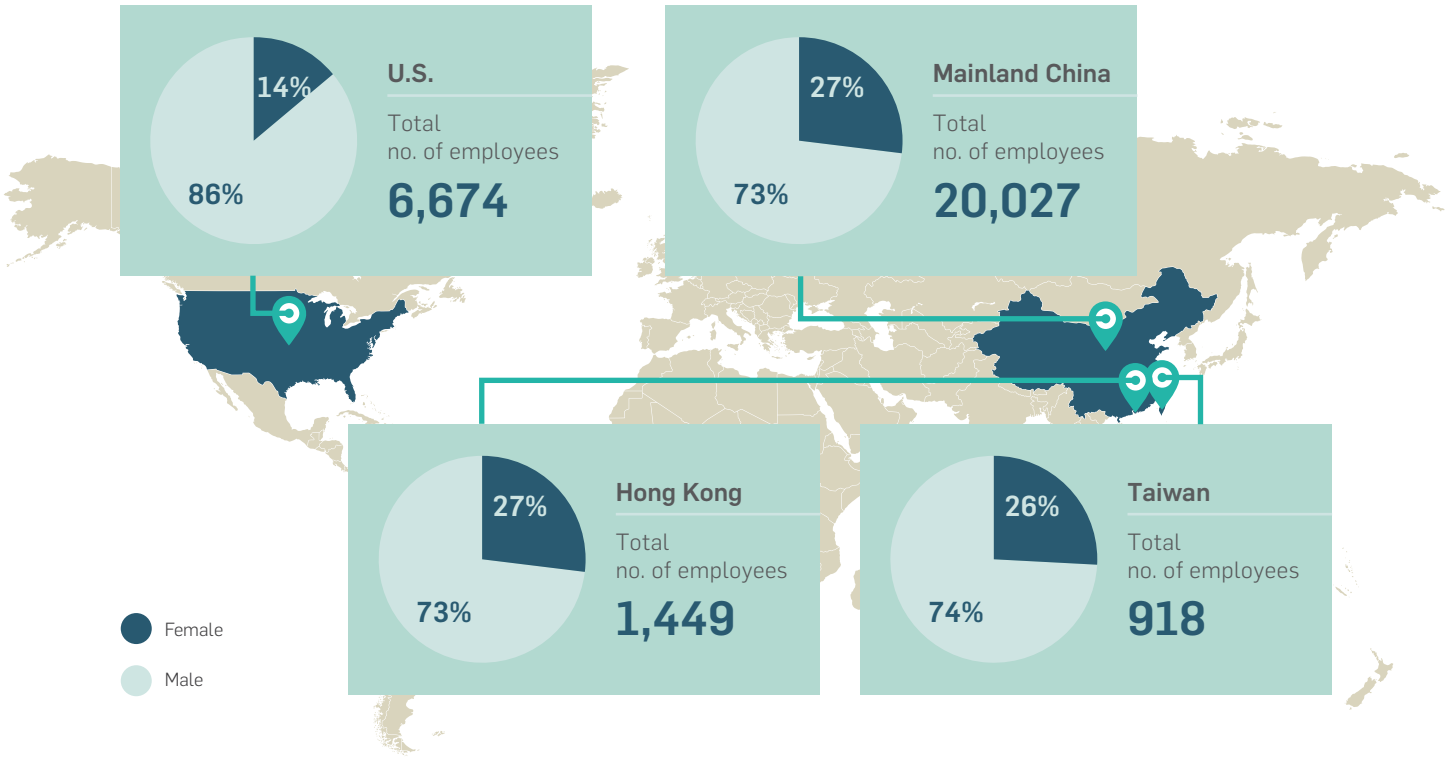
In 2015, Swire Pacific launched its Swire Women's Network, offering a platform for all Swire Pacific operating companies to share insights on gender equality. The network aims to attract and groom female talent by supporting their career advancement. It offers employees capacity-building and mentorship programmes, and forums for discussion.

47 https://www.mckinsey.com/business-functions/organization/our-insights/why-diversity-matters

48 http://news.mit.edu/2014/workplace-diversity-can-help-bottom-line-1007

49 Women In the Workplace 2017 by McKinsey & Company and LeanIn.Org

Percentage of Workforce by Gender in Each Market



Gender Equality Initiatives

Our approach to achieving gender equality differs between markets, as each region is unique in its workforce size and legislation. The majority of our employees are located in Mainland China. Across all markets, we monitor the proportion of female staff by age and by function at all employment levels. Our operations in all markets follow and comply with local laws and regulations relevant to gender equality.

Our vision in Mainland China is to create an unbiased work environment by improving the female proportion of our workforce, and establishing an inclusive culture. As part of our Mainland China Diversity & Inclusion System Assessment in 2017, we identified 3 key areas of focus:

1. Improving the female ratio among sales representatives and senior leadership
2. Developing our female staff
3. Creating and communicating female-friendly working environment

The Equal Employment Opportunity Commission (EEOC) in the U.S. requires the consideration of both gender and ethnicity diversity in hiring. Under the rules of the EEOC, hiring and employment trends must match the gender and ethnicity demographics of the state. With our expansion in mid-2017, our new operating locations now cover different demographics. As part of our plan to meet the EEOC requirements, our human resources team in the U.S. has hired an external consultant to prepare an Affirmation Action Plan (AAP) to be finalised in March 2018.

2017 Training Initiatives and Programmes in Mainland China

- Swire Beverages Women's Network launched its WeChat platform for Mainland China staff to share individual stories as a source of inspiration and empowerment.
- Every two years, we host a Female Leadership Forum. All female managers are invited to the forum to learn from each other through workshops and seminars. The event offers the opportunity for them to form a stronger network.
- Our Gender Equality Workshop invites our sales teams, sales and marketing directors, regional sales managers, sales officers and supervisors to improve their awareness on gender diversity. This year, staff from seven legacy bottlers in Mainland China joined the workshops. We have plans to expand this training to include seven new territories bottlers in 2018.
- "Be the Best You Can Be" is a training programme to help female leaders increase their awareness on the issues around gender equality and the need to empower other women around them. Sixty female leaders from 14 bottling plants were trained to be trainers for other female colleagues. Our goal is to train over 300 leaders in 2018.

Moving Forward

As part of our commitment to gender equality, we will be establishing the Swire Beverages Gender Equality Steering Committee in 2018. This committee will be established by our Divisional Executive Board and chaired by our Managing Director. It will be responsible for the development of strategies and defining of key performance indicators (KPIs) to promote gender equality across the organisation, as well as setting up project teams working on developing action plans for recruitment and fostering a female-friendly workplace.

COMPLIANCE AND MANAGEMENT SYSTEMS

Our compliance and management systems across all markets follow the manufacturing and distribution policies of TCCC. This quality management programme, referred to as the Coca-Cola Operating Requirements (KORE), governs the quality of our beverages to meet TCCC's standards. KORE outlines requirements and policies, specification and programmes to ensure product safety and quality, occupational safety and health and environmental standards[50]. This programme promotes the highest performance in these categories with endorsement from leadership throughout The Coca-Cola System. It is reviewed regularly to ensure standards are relevant and up-to-date. In addition to abiding to the requirements of TCCC, we ensure compliance with local regulations and standards of our operating markets.

As an operating company under Swire Pacific, our compliance and management systems are also aligned with Swire Pacific's standards. We report our performance to both Swire Pacific and TCCC.

We implement ISO 14001 environmental management system across all of our owned and manage bottling plants across all markets. This system facilitates our efforts in minimising negative impacts to the environment arising from our operations, along with compliance with applicable laws and regulations. Other management systems to control quality include ISO 17001 and ISO 9001. Our occupational health and safety management system follows the Occupational Health and Safety Assessment Series (OSHSA) 18001. For product safety, all bottling plants are certified under the Food Safety System Certification ISO 2200.

Our co-packers are also required to obtain the same ISO and OSHA certifications as us.

[50] http://www.coca-colacompany.com/stories/quality

COMMUNITY ENGAGEMENT

Positively influencing the local community where we operate is a key component of our sustainability efforts. Our community initiatives are guided by our community engagement CSR policy, which outlines our five core areas for community initiatives. These core areas reflect our business's corporate culture and values, and we contribute to addressing these themes through partnerships, employee volunteers, and donations.

WATER STEWARDSHIP AND ENVIRONMENTAL PROTECTION

ACTIVE LIVING

YOUTH DEVELOPMENT

WOMEN EMPOWERMENT

EMERGENCY RELIEF

Swire Group Charity Trust

Each year, we donate a portion of our profits to the Swire Group Charitable Trust, from which funds are disbursed to non-profit organisations in Hong Kong and Mainland China. In 2017, Swire Beverages contributed HK$2.53 million to this fund.

Under our CSR policy, we have an established framework for each bottling plants to set aside funds to put towards programmes and projects related to these five core areas. In 2017, Swire Beverages including legacy and new territories operations, contributed HK$3.89 million to the communities across our four markets. These donations were spread across 54 charity events, involving 4,374 employee volunteers.

Water Stewardship and Environmental Protection

Water is a key ingredient in our products and vital to communities and ecosystems. To protect this precious resource, we partner with governments and NGOs to develop and implement projects that preserve important river basins, watersheds and wetlands along with their associated biodiversity.

In addition to water stewardship, we support projects related to other key environmental issues, such as research and awareness building for communities regarding waste management as well as energy conservation.

Mini-Wetland Project (Mainland China)

The residents of Shitang Village in Jiangsu Province have experienced significant economic benefits from agritourism. During peak season, the village plays host to up to 20,000 daily visitors, and the wastewater generated presented a significant threat to the local environment and the people.

In response, Swire Beverages and TCCC launched the Mini-Wetland Project in 2016, which uses an artificial wetland to purify wastewater generated from the farmhouses in the village. The man-made ecosystem mimics the biological processes in nature to absorb pollutants and filter the water, treating up to 180 tonnes of wastewater per day. The project passed final inspection and has been accepted by the Nanjing Water Affairs Bureau.

The project is an example of a successful "golden triangle" partnership between government, civil society and business. In conjunction with the China International Centre for Economic and Technological Exchanges of the Ministry of Commerce, and the United Nations Development Program, we can successfully implement this project.

Water Stewardship Project (Taiwan)

2017 marks the ten-year anniversary of our Water Stewardship Project in Taiwan. Initially this project began as a public education campaign to raise water conservation awareness. Ten years later, we are now exploring opportunities to invest in innovative technologies to conserve water in mountainous areas of rural Taiwan.

Over the last ten years, the project has successfully raised awareness of water scarcity among the public, and delivered education classes to more than 10,000 primary students. We contribute to this project through sponsoring community initiatives, partnership with NGOs, and participating in river clean-ups and awareness-building activities.

Aside these projects described above, we are also involved in water replenishment projects in the U.S. which are discussed in the *Water Stewardship* section.

Active living

Swire Beverages promotes active and healthy living for both consumers and employees, through its support of sporting events and other activities.

Xiamen's Run (Mainland China)

The Xiamen Run is a charity event that has been organised by our Xiamen bottling plant since 2014. This event attracts athletes from government, media and private companies to participate in a 20km run. The donations collected are put towards purchasing and installing water purifying systems in local schools to provide clean water to children. Over the past three years, we have installed 143 water purifying systems across 87 schools.

Hunger Run (Hong Kong)

The Aquarius HUNGER RUN is an annual charity running event organised by the social enterprise, FOODSPORT. This unique event counts calories burnt by participants during the run, which are converted into the equivalent amount of food for donation to Food Angel, a local charity providing food assistance for people in need in Hong Kong.

Youth Development

We believe education is fundamental for a growing community and that by educating the younger generation they become positive and engaging members of society. We assist the communities we serve by offering youth with special needs the support and infrastructure for education.

The Coca-Cola Hope School (Mainland China)

Since 1993, TCCC has built over one hundred Hope Schools under Project Hope. Over RMB 150 million has been invested in helping 100,00 children in rural areas of Mainland China. Under this project, Swire Beverages has helped to build 28 Hopes Schools across Mainland China in the last 20 years. These schools provide education to disadvantaged youth in rural areas. The project supports the construction costs to build Hope Libraries, e-learning centres and multimedia classrooms across Mainland China.

The Coca-Cola Scholars Foundation (U.S.)

The Coca-Cola Scholars Foundation invests in exceptional high school students who are dedicated to leadership, and actions that positively impact others. Each year, this foundation sends 150 bright, young innovators into post-secondary education with a US$20,000 scholarship. Swire Beverages has supported this foundation through donations for more than 30 years.

Women Empowerment – 5by20

Releasing the potential of women across the globe is essential in achieving sustainable development. Women around the world provide significant contributions to The Coca-Cola System and in recognition of the challenges they face, TCCC developed the 5by20 initiative to improve the economic empowerment of five million women entrepreneurs within the global value chain by 2020. This initiative offers women access to business skills training courses, financial services and connections with peers or mentors, giving them the tools and skills to build a successful business.

Entrepreneurial skills and professional training organised by Swire Beverages were provided in junction with relevant organisations, including the Zhengzhou Women Entrepreneur Association. To date, 13 of our bottling plants in Mainland China have provided 443 education programmes and development opportunities for 150,000 women in the beverage supply chain.

Disaster relief

When natural disasters strike and impact the livelihood of the communities we serve, very often affected citizens will suffer from shortages of reliable and safe drinking water. In situations like these, TCCC and Swire Beverages support the local communities by providing bottled water to affected citizens in a timely manner as part of the Clean Water 24 emergency plan. Within 24 hours of a natural disaster, Swire Beverages will identify the nearest warehouse and arrange for delivery. In collaboration with local governments, supporting organisations and NGOs, we can successfully deliver water to affected areas in a timely manner. Swire Beverages has been participating in this programme for five years, during this time we have delivered 6.5 million bottles of water to more than 1.6 million people with an average response time of 10.5 hours.

We also participate in proactive measures to address challenges posed by natural disasters. Yunnan, Mainland China, has been known to experience a high number of natural disasters and because of this, management forums have taken place to discuss cooperation mechanism to overcome challenges when natural disasters strike. Swire Beverages, in conjunction with local governments, volunteers, media and experts gathered at the, "Disaster Management Forum" to identify potential solutions in 2017.

GLOBAL HEART OF AMBASSADOR AWARD

Li Yan Xia, our administrative manager at Swire Coca-Cola Yunnan Beverages was awarded the Global Heart of Ambassador Award for her passionate and selfless actions when a magnitude 6.5 earthquake struck her home province of Yunnan. Yan Xia visited the region and started a campus aid programme at the Coca-Cola Hope Primary School in Wujixiang. Her work not only helped those in need, her motivation inspired her colleagues to participate in the programme. Together with the support of the local government and media, families in crisis were invited to spend Chinese New Year with the Coca-Cola team. Yan Xia welcomed two children in crisis to stay at her house for the festivities during Chinese New Year and has created a lifelong relationship with these children whom she is still in contact with regularly.

Coca-Cola Pavilion and Plant Tours

Our bottling plants in Hong Kong, Taiwan and Mainland China carry a collection of Coca-Cola artefacts that are showcased at the Coca-Cola Museum of each plant. The museums offer a preview on the history of Coca-Cola through displays of bottles and souvenirs from different periods of the past. As a way to engage local communities, our museums are opened to visitors free-of-charge. During the tour, visitors get a snapshot of our beverage production line and learn about how we manage our key environmental issues, packaging, water and energy consumption throughout the manufacturing process.

Moving forward

Aligning our legacy community initiatives with new territories operations in Mainland China and the U.S. will be an area of focus in 2018. Through creating synergy between existing and new bottling plants, we can encourage sharing of best practices amongst our bottlers to better support the communities we serve with what they need. We will continue to collaborate with government and NGOs to build long-lasting partnerships to ensure that the work we do will have long-term positive impacts.

NEW TERRITORIES

During the reporting year, Swire Beverages acquired a number of new bottling plants in Mainland China and the U.S. The environmental performances of new bottling plants were not included in this report because we did not have full operating control during the reporting year. In some cases, data was not collected for some bottling plants prior to its acquisition.

From the information that was collected, we determined the performances of the three key areas, water use ratio (WUR), energy use ratio (EUR) and waste generation ratio (WGR) of new bottling plants and compared it with our legacy plants in Mainland China and the U.S. The performance of new bottling plants is similar to our legacy operations with slight variations in terms of which areas performed better or worse. For example, WUR in Mainland China's legacy plants performed better than new bottling plants with a WUR of 1.70 compared with 1.77. On the other hand, when comparing their WGR, we saw that new bottling plants performing slightly better.

Based on this information, we anticipate the overall post-acquisition performance would remain similar to our existing conditions, assuming there are no major changes in product mix.

	Water Use Ratio		Energy Use Ratio		Waste Generation Ratio	
	Legacy	New Territories	Legacy	New Territories	Legacy	New Territories
Mainland China	1.70	1.77	0.30	0.30	2.60	2.20
U.S.	1.76	1.60	0.23	0.29	3.16	5.20

In 2018, we will align the data collection process for our new bottling plants and will begin reporting all data with a consistent format. We will have obtained one full year's worth of data at our new bottling plants, by the next Sustainable Development Report and data from the new bottling plants will be integrated into our overall performance.

ABOUT THIS REPORT

This is Swire Beverages Limited's first Sustainable Development Report, covering the period between 01 January 2017 and 31 December 2017. This report has been prepared in accordance with the GRI Standards: Core Option. The scope includes bottling plants owned and operated by Swire Beverages in Hong Kong, Mainland China, Taiwan and the western U.S.

Due to the dramatic increase in the size of our business, the data we have reported in this report is largely derived from our legacy operations (excluding Shaanxi, which departed our Mainland China territory in July 2017). In many of the sections we present this against previous year's data, providing absolute and ratio comparisons.

For more information, comments or suggestions, please contact our safety and sustainability team at:

- Email: William Davies, Global Safety and Sustainability Lead at SD@swirebev.com
- Mail: Scholastica Sze Wan Tsoi, Manager – Health and Safety at 33/F Dorset House, Taikoo Place, 979 King's Road, Hong Kong Island, Hong Kong

William Davies

Global Safety
and Sustainability Lead

Scholastica Sze Wan Tsoi

Manager
Health and Safety

Credits: This report was prepared in collaboration with CSR Asia, Urban Air, and Etienne Leung.

AWARDS AND RECOGNITIONS

Market	Year	Bottling Plant / project type / location	Name of Award / Recognition	Awarding Organisation
Mainland China	2011	Luohe bottling plant	LEED Platinum Certification	U.S. Green Building Council
Mainland China	2013	Fujian bottling plant	LEED Silver Certification	U.S. Green Building Council
Mainland China	2016	Sustainability projects based in: Fujian, Guangdong, Liaoning, Shangdong, Zhejiang	Sustainability - Best Project Award	The Coca-Cola Company
Mainland China	2016	Community projects based in: Henan, Hunan, Liaoning, Shangdong, Shaanix, Yunnan	Sustainability - Best Communicator Award	The Coca-Cola Company
Mainland China	2016, 2017	Guangdong, Huizhou, Zhengzhou, Wenzhou, Zhejiang, Hefei, Jiangsu, Xiamen, Luohe, Zhanjiang, Jiangxi	Outstanding Enterprises in Water and Energy Conservation in China Beverage Industry	China Beverage Industry
Mainland China	2016	Zhengzhou	Second Place in the Environment and Safety Victory Cup of Coca-Cola China	The Coca-Cola Company
Mainland China	2016		Advanced Collectives in "World Water Day" and "World Water Week"	Development Zone Water Saving Office
Mainland China	2016		Advanced Unit of Solid Waste Management in Zhengzhou City	Zhengzhou Environmental Protection Bureau
Mainland China	2016		Level 2 Enterprise of Safe Production Standardisation	Henan Province Safety Supervision Bureau
Mainland China	2016	Wenzhou	Harmonious Enterprise in Wenzhou City	Wenzhou City Leading Group on Building a Harmonious Labor Relations
Mainland China	2016	Luohe	2016 Advanced Unit for Safe Production in Development Zone	Management Committee of Luohe Economic and Technological Development Zone
Mainland China	2016		2016 Advanced Worker for Safe Production in Development Zone	Management Committee of Luohe Economic and Technological Development Zone
Mainland China	2016		2016 Advanced Unit for Occupational Health in Luohe City	Luohe Safety Production Committee
Mainland China	2016	Jiangxi	Advanced Unit for Safety Culture in Jiangxi Province	Jiangxi Provincial Bureau of Safe Production Supervision
Mainland China	2016	Guangxi	Model Unit for Occupational Health in Nanning City	Nanning Safe Production Supervision Bureau
Mainland China	2016	Kunming	Advanced Unit for Safe Production, Model Unit for Safety Hazard Investigation	Management Committee of Kunming National Hi-tech Industrial Development Zone
Mainland China	2017	Jinxiu bottling plant, Hefei	LEED Gold Certification	U.S. Green Building Council
Mainland China	2017	Guangdong, Huizhou	Hong Kong - Guangdong Cleaner Production Excellent Partner (Manufacturing)	Guangdong Provincial Economic and Information Commission. The Environment Bureau of the Hong Kong SAR Government

Market	Year	Bottling Plant / project type / location	Name of Award / Recognition	Awarding Organisation
Mainland China	2017	Wuhan	"Environmental Protection Green Label Enterprises" in Hubei Province	Hebei Provincial Environment Protection Department
Mainland China	2017	Wuhan	Outstanding Cleaner Production Enterprises in Wuhan City	Wuhan Municipal Development and Reform Commission, Wuhan Municipal Environment Protection Bureau
Mainland China	2017	Guangdong, Huizhou	Safety Model Enterprise in Guangdong Province	Guangzhou Municipal Public Security Bureau
Mainland China	2017	Wenzhou	District's Advanced Unit in Safe Production	Development Zone Safety Supervision Bureau
Mainland China	2017	Hefei	Model Enterprises for Safety Culture in Hefei City	Hefei Safe Production Supervision Bureau
Mainland China	2017		Enterprises with A-level Comprehensive Performance in Hefei Economic and Technological Development Zone	Hefei Economic and Technological Development Zone
Mainland China	2017	Jiangsu	Advanced Unit for Special Equipment Management in Nanjing City	Municipal Bureau of Quality Supervision
Mainland China	2017		Advanced Unit for Safe Production in High-tech Zone	High-tech Zone Management Committee
Mainland China	2017	Xiamen, Guangxi, Shenmei Jinqiao, Shenmei Minhang	Level 2 Enterprise of Safe Production Standardisation	Xiamen Safe Production Management Association, Guangxi Zhuang Autonomous Region Safety Production Supervision Bureau, Shanghai Safe Production Association
Mainland China	2017	Zhanjiang	2016 Advanced Unit for Safe Production in Development Zone	Safe Production Committee of Zhanjiang Economic and Technological Development Zone
Mainland China	2017	Wuhan	2016 Outstanding Unit for Safe Production (Development Zone)	Management Committee of Wuhan Economic and Technological Development Zone, Hannan District People's Government
Hong Kong	2016	Hong Kong	Quality Food Traceability Scheme 2016 - Gold Enterprise Winner	GS1 Hong Kong
Hong Kong	2016		Friends of EcoPark 2015/16	Environmental Protection Department
Hong Kong	2016		Consumer Caring Scheme 2016	GS1 Hong Kong
Hong Kong	2016		Caring Company 2016	The Hong Kong Council of Social Service
Hong Kong	2017		Quality Food Traceability Scheme 2017 - Diamond Enterprise Winner	GS1 Hong Kong
Hong Kong	2017		Certificate of Excellence - Hong Kong Sustainability Award 2017/18	Hong Kong Management Association
Hong Kong	2017		Consumer Caring Scheme 2017	GS1 Hong Kong
Hong Kong	2017		Caring Company 2017	The Hong Kong Council of Social Service
Hong Kong	2017		Energy Saving Charter	Electrical and Mechanical Services Department
Taiwan	2016	Taiwan	Taiwan Enterprise iSport Award	Taiwan iSport
Taiwan	2017		Taiwan Enterprise iSport Award	Taiwan iSport
Taiwan	2017	Hefei	Model Home of Workers for Anhui Province	Anhui General Labour Union
U.S.	2013	Draper (Utah)	LEED Silver Certification	U.S. Green Building Council
U.S.	2016	Utah	Utah Green Business Award	Utah Business Magazine
U.S.	2017		Best of State – Beverage Industry	Best of State - Utah
U.S.	2017		Water Champion	Salt Lake Chamber

GRI STANDARDS INDEX TABLE

GRI Standard	Disclosure Number and Title	Section	Page no./ explanation/ reasons for omissions
GRI 101: Universal Disclosures 2016			
GRI 102: General Disclosures 2016			
102-1	Name of the organisation	About this Report	P.75
102-2	Activities, brands, products, and services	Our Business	P.4
102-3	Location of headquarters	Our Business	P.6
102-4	Location of operations	Our Business	P.6-7
102-5	Ownership and legal form	Our Business	P.4
102-6	Markets served	Our Business	P.6-7
102-7	Scale of the organisation	Our Business	P.5-7
102-8	Information on employees and other workers	Our Business	P.6-7
102-9	Supply Chain	Product Responsibility - Procurement & Sourcing	P.55-57
102-10	Significant changes to the organisation and its supply chain	Our Business	There are no significant changes to the supply chain as a result of the acquisition of new territories bottling plants
102-11	Precautionary principle or approach	Approach to Sustainable Development - Corporate Governance & Sustainability Management and Governance	P.11
102-12	External initiatives	Performance Tables	P.82
102-13	Membership of associations	Performance Tables	P.82-83
102-14	Statement from senior decision maker	Message from our Managing Director	P.2-3
102-16	Values, principles, standards, and norms of behaviour	Approach to Sustainable Development	P.8-13
102-18	Governance structure	Approach to Sustainable Development - Corporate Governance	P.10-11
102-40	List of stakeholder groups	Approach to Sustainable Development - Sustainability Management and Governance - Engaging Stakeholders	P.12
102-41	Collective bargaining agreements	-	In Hong Kong, there is no legal framework for collective bargaining with trade unions. In Mainland China, we are normally required to liaise with official trade unions. Employees can present grievances and report improprieties and breaches of the Code of Conduct through established channels.

GRI Standard	Disclosure Number and Title	Section	Page no./ explanation/ reasons for omissions
102-42	Identifying and selecting stakeholders	Approach to Sustainable Development - Sustainability Management and Governance - Engaging Stakeholders	P.12
102-43	Approach to stakeholder engagement	Approach to Sustainable Development - Sustainability Management and Governance - Engaging Stakeholders	P.12-13
102-44	Key topics and concerns raised	Approach to Sustainable Development - Sustainability Management and Governance - Engaging Stakeholders & Material Issues	P.13
102-45	Entities included in the consolidated financial statements	-	Please see Swire Pacific's Annual Report 2017 for more details
102-46	Defining report content and topic boundaries	Approach to Sustainable Development - Sustainability Management and Governance - Material Issues	The boundary and scope of material issues are decribed in each section
102-47	List of material topics	Approach to Sustainable Development - Sustainability Management and Governance - Material Issues	P.13
102-48	Restatements of information	-	No applicable
102-49	Changes in reporting	-	This is Swire Beverages's first report.
102-50	Reporting period	About this Report	P.75
102-51	Date of most recent report	About this Report	P.75
102-52	Reporting cycle	About this Report	P.75
102-53	Contact point for questions regarding the report	About this Report	P.75
102-54	Claims of reporting in accordance with the GRI Standards	Approach to Sustainable Development	P.9
102-55	GRI content index	GRI Standards Index Table	P.78-81
102-56	External assurance	-	No external assurance for report content

Material Topics			
GRI 200: Economic Topics 2016			
GRI 204: Procurement Practices 2016			
GRI 103	Management Approach 2016	Product Responsibility - Procurement & Sourcing	P.55-57
204-1	Proportion of spending on local suppliers	-	Under The Coca-Cola System, Swire Beverages's supplier list is already been predetermined by The Coca-Cola Company. Swire Beverages selects suppliers from this list only.

GRI 300: Environmental Topics 2016			
GRI 301: Materials 2016			
GRI 103	Management Approach 2016	Environment - Packaging and Waste Management	P.38
301-1	Materials used by weight or volume	"Environment - Packaging and Waste Management	P.41-43

GRI Standard	Disclosure Number and Title	Section	Page no./ explanation/ reasons for omissions
GRI 302: Energy 2016			
GRI 103	Management Approach 2016	Environment - Carbon	P.32-34
302-1	Energy consumption within the organisation	Performance Tables	P.84-85
302-3	Energy intensity	Environment - Carbon	P.32-34
GRI 303: Water 2016			
GRI 103	Management Approach 2016	Environment - Water Stewardship	P.17
303-1	Water withdrawal by source	Environment - Water Stewardship; Performance Tables	P.19 ; P.85
303-3	Water recycled and reused	Environment - Water Stewardship; Performance Tables	P.21-22 ; P.85
GRI 305: Emissions 2016			
GRI 103	Management Approach 2016	Environment - Carbon	P.27
305-1	Direct (Scope 1) GHG emissions	Performance Tables	P.84
305-2	Energy indirect (Scope 2) GHG emissions	Performance Tables	P.85
305-6	Emissions of ozone-depleting substances (ODS)	Performance Tables	P.85
GRI 306: Effluents and Waste 2016			
GRI 103	Management Approach 2016	Environment - Water Stewardship Environment - Packaging and Waste Management	P.21-24 ; P.46-49
306-2	Waste by type and disposal method	Performance Tables	P.85-86
GRI 307: Environmental Compliance 2016			
GRI 103	Management Approach 2016	Compliance and Management Systems	P.68
307-1	Non-compliance with environmental laws and regulations	Food safety and Product Quality	P.57
GRI 400: Social Topics 2016			
GRI 403: Occupational Health and Safety 2016			
GRI 103	Management Approach 2016	Workplace - Safety	P.58
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities.	Workplace - Safety Performance Tables	P.60-63 ; P.87

GRI Standard	Disclosure Number and Title	Section	Page no./ explanation/ reasons for omissions
GRI 405: Diversity and Inclusion 2016			
GRI 103	Management Approach 2016	Workplace - Gender Equality	P.65-67
405-1	Diversity of governance bodies and employees	Performance Tables	P.88
GRI 413: Local Communities 2016			
GRI 103	Management Approach 2016	Community Engagement	P.69-70
413-1	Operations with local community engagement, impact assessments, and development programs	Community Engagement Performance Tables	P.70-73 ; P.88
GRI 417: Marketing and Labeling 2016			
GRI 103	Management Approach	Product Responsibility - Product Labelling and Marketing	P.54
417-1	Requirements for product and service information and labelling	Product Responsibility - Product Labelling and Marketing	P.54
GRI 419: Socioeconomic Compliance 2016			
GRI 103	Management Approach 2016	Compliance and Management Systems	P.68
419-1	Non-compliance with laws and regulations in the social and economic area	-	There were no reported cases of non-compliance during the reporting period.
Additional materials topics not covered by the topic-specific Standards			
Sugar			
GRI 103	Management Approach 2016	Product Responsibility - Product Choice	P.51
Indicator	Percent of portfolio with low sugar options in each market	Product Responsibility - Product Choice	P.53
Food Safety and Product Quality			
GRI 103	Management Approach 2016	Product Responsibility - Food Safety and Product Quality	P.57
Indicator	Non-compliance with relevant laws and regulations	-	There were no reported cases of non-compliance during the reporting period.

PERFORMANCE TABLES

External initiatives

Hong Kong	Energy Saving Charter 2017 on Indoor Temperature	2017
	Hong Kong Green Organisation	2015 to 2017
Mainland China	Guangdong Food Safety Society (member)	2017
	China Beverages Association (director)	2017
	Shanghai Food Safety Federation	2013
	Shanghai Pudong Food Safety Management Association	2011
	Shanghai Association for Food & Cosmetic Quality Safety Management	2009
U.S.	Clean Utah, a program of Utah DEQ	2016
	Rain Barrel Project, with TCCC and The River Network	2017

Membership of associations

Hong Kong	The Hong Kong Beverages Association Limited	Executive Committee Member
	GS1 - The Global Language of Business	Board Member
	Efficient Consumer Response	Chairman
	Green Cross Group	Member
	Grocery Trade Magazine	Honour Advisory Board Member
Mainland China	Anhui Provincial Foreign Investor Association	Member
	China Beverage Industry Association	Member; Executive Director
	Jiangsu Province Food Safety Association	Member
	Nanjing Business Association	Executive Director
	Nanjing Foreign Investment Association	Vice President
	Nanjing Food Industry Association	Vice President
	Nanjing Food Association	Vice President

Mainland China	Xiamen Printing Association	Member
	Standardization Technical Committee for Plastic Products of Fujian Province	Member
	Fujian Food Science and Technology Society	Member
	Guangzhou Circular Economy Cleaner Production Association	Member
	Zhengzhou Food Safety Association	Member

Mainland China	Henan Association for Foreign Investment	Vice President
	Henan Enterprise Association	Vice President
	Zhengzhou Enterprise Association	Vice President
	Zhengzhou Food Industry Association	Vice President

U.S.	American Beverage Association	Member
	State Beverage Associations	Member
	Coca-Cola Bottling Association	Member
	Various governance boards of TCCC	Member
	Bonneville Environmental Foundation	Partner
	Utah Open Lands	Partner
	Trout Unlimited	Partner
	The River Network	Partner
	Colorado Water Trust	Partner
	UCAIR (Utah Clean Air Partership)	Partner
	Business for Water Stewardship	Partner
	Change the Course	Member

Taiwan	Taiwan Beverage Industry Association	Director
	Taiwan Food Industry Development Association	Executive Director
	American Chamber of Commerce in Taipei	Member
	European Chamber of Commerce Taiwan (joined under the name Swire Beverages)	Member

Environmental Performance Table

			Legacy Territories				New Territories			OVERALL TOTAL
	Unit	TOTAL	Hong Kong	Mainland China	Taiwan	U.S.	TOTAL	Mainland China	U.S.	
Energy - Direct										
Stationary source										
Diesel	GJ	-	-	-	-	-	2,169	2,169	-	2,169
Towngas	GJ	71,331	71,331	-	-	-	-	-	-	71,331
Natural gas	GJ	193,779	-	75,576	65,644	52,558	217,276	64,561	152,715	411,055
Liquid petroleum gas	GJ	14	-	14	-	-	8,282	8,282	-	8,296
Mobile source										
Diesel	GJ	394,957	31,478	74,035	17,568	271,876[1]	64,795	64,795	-	459,752
Gasoline	GJ	136,266	3,725	7,082	8,055	117,403	4,632	4,632	-	140,898
Energy - Indirect										
Towngas	GJ	70,331	70,331	-	-	-	-	-	-	70,331
Electricity	GJ	2,660,716	99,224	2,479,591	41,858	40,043	588,343	431,203	157,140	3,249,059
Steam	GJ	7,370		7,370	-	-	85,490	85,490	-	92,860
Direct energy consumption by primary source	GJ	796,348	106,535	156,708	91,267	441,838	297,154	144,439	152,715	1,093,502
Indirect energy consumption by primary source	GJ	2,738,417	169,554	2,486,961	41,858	40,043	673,833	516,693	157,140	3,412,250
Total	**GJ**	**3,534,765**	**276,089**	**2,643,668**	**133,126**	**481,881**	**970,987**	**661,132**	**309,854**	**4,505,752**

Carbon										
Scope 1 - Direct GHG Emissions from Stationary Source										
Diesel	Litres	58,851	-	58,851	-	-	60,243	60,243	-	119,094
Towngas	MJ	71,331,024	71,331,024	-	-	-	-	-	-	71,331,024
Natural gas	MJ	193,779,274	-	75,576,477	65,644,418	52,558,379	217,275,656	64,560,955	152,714,701	411,054,930
Liquid petroleum gas	MJ	303	-	303	-	-	180,053	180,053	-	180,356
Subtotal	CO_2e	13,720	3,794	3,888	3,353	2,685	16,837	9,034	7,803	30,557
Scope 1 - Direct GHG Emissions from Mobile Source										
Diesel	Litres	10,971,037	874,396	2,056,532	487,991	7,552,118[1]	1,799,858	1,799,858	-	12,770,895
Gasoline	Litres	4,167,159	113,925	216,576	246,342	3,590,316	141,657	141,657	-	4,308,816
Subtotal	CO_2e	37,842	2,616	5,794	1,819	27,613	123,061	95,448	27,613	160,903

Note:

[1] The figure presented includes both legacy territories and new territories.

			Legacy Territories				New Territories			OVERALL TOTAL
	Unit	TOTAL	Hong Kong	Mainland China	Taiwan	U.S.	TOTAL	Mainland China	U.S.	
Scope 2 - Indirect GHG Emissions										
Diesel	MJ	70,331,022	70,331,022	-	-	-	-	-	-	70,331,022
Towngas	MJ	739,087,735	27,562,162	688,775,141	11,627,282	11,123,150	163,428,658	119,778,745	43,649,913	902,516,393
Natural gas	Therms	2,047,320	-	2,047,320	-	-	23,747,132	23,747,132	-	25,794,452
Subtotal	CO_2e	195,689	18,620	165,582	6,862	4,625	116,634	95,448	21,186	312,323
Ozone depleting substances										
Subtotal	CO_2e	6,294,676	1,049,286	-	773,170	4,472,220	-	-	-	6,294,676
Total	CO_2e	**6,528,207**	**1,070,522**	**171,376**	**781,851**	**4,504,458**	**239,695**	**190,896**	**48,799**	**6,767,902**

Water										
Total water consumed (withdraw from source)	Tonnes	7,493,183	769,957	5,647,243	373,288	702,695	5,200,015	3,464,557	1,735,458	12,693,198
Total waste water	Tonnes	2,954,456	395,619	2,005,061	251,423	302,353	1,764,691	1,346,994	417,697	4,719,147
Wastewater - onsite treatment (total usage)	Tonnes	2,604,736	395,619	1,957,694	251,423	-	-	-	-	2,604,736
Water - recycled (treated)	Tonnes	320,280	98,613	163,443	58,224	-	148,153	148,152.67	-	468,433
Water - recycled (untreated)	Tonnes	370,431	-	326,030	44,401	-	375,710	375,710	-	746,141
Total recycled water	Tonnes	**690,710**	**98,613**	**489,473**	**102,625**	**-**	**523,863**	**523,863**	-	**1,214,574**

Waste										
Recycling - Paper/ Carton	kg	2,130,231	421,220	1,052,679	98,708	557,624	1,484,585	531,134	953,450	3,614,816
Recycling - Glass	kg	2,318,422	145,895	1,707,847	464,680	-	813,093	583,954	229,139	3,131,515
Recycling - Cap	kg	30,393	18,045	12,348	-	-	10,635	10,635	-	41,028
Recycling - Plastic	kg	2,337,985	197,821	1,482,930	295,984	361,249	1,103,330	618,597	484,733	3,441,314
Recycling - Metal	kg	1,780,643	117,873	746,164	130,894	785,712	1,337,160	355,092	982,068	3,117,803
Recycling - Alumium	kg	109,971	15,590	87,193	7,188	-	21,431	21,431	-	131,403
Recycling - PET	kg	715,219	88,033	542,426	84,760	-	324,379	324,379	-	1,039,598
Recycling - Wood	kg	341,093	150,301	140,392	50,400	-	3,337,915	67,689	3,270,226	3,679,007
Other recyclable waste	kg	590,452	5	560,007	30,440	-	50,786	50,786	-	641,238
Total waste recycled or recovered	kg	**10,354,408**	**1,154,783**	**6,331,986**	**1,163,054**	**1,704,585**	**8,483,314**	**2,563,698**	**5,919,616**	**18,837,722**
Recyclig - Harzardous wastes	kg	59,050	-	58,890	160	-	24,760	24,760	-	83,810
Non-recyclable waste	kg	4,830,535	1,340,884	2,253,054	1,236,596	-	1,693,743	1,693,743	-	6,524,277
Waste - Commercial/ Industrial	kg	193,250	-	-	-	193,250	114,795	-	114,795	308,044

			Legacy Territories				New Territories			OVERALL TOTAL
	Unit	TOTAL	Hong Kong	Mainland China	Taiwan	U.S.	TOTAL	Mainland China	U.S.	
Total waste generated		**15,437,242**	**2,495,667**	**8,643,930**	**2,399,810**	**1,897,835**	**10,316,611**	**4,282,200**	**6,034,411**	**25,753,854**
Recycled solid waste	%	**67%**	**46%**	**73%**	**48%**	**90%**	**82%**	**60%**	**98%**	**73%**
Packaging Footprint - Primary Packaging										
vPET	Tonnes	110,051	4,102	96,492	4,064	5,393	-	-	-	110,051
BioPET	Tonnes	438	122	-	-	316	-	-	-	438
rPET	Tonnes	804	-	-	-	804	-	-	-	804
Glass	Tonnes	4,290	403	3,406	481	-	-	-	-	4,290
Aluminium	Tonnes	22,434	3,842	9,616	1,371	7,605	8,158	5,918	2,240	30,592
Caps/closures: PP	Tonnes	10,369	506	8,836	53	974	4,245	4,245	-	14,614
Aseptic fibre packs	Tonnes	1,427	1,238	-	189	-	352	-	352	1,779
Packaging Footprint - Secondary & Tertiary Packaging										
Corrugated Box, Paper Tray	Tonnes	16,770	3,620	10,223	2,927	-	-	-	-	16,770
Shrink foil	Tonnes	10,438	507	9,325	412	194	5	-	5	10,443
Total weight of material used	**Tonnes**	**177,021**	**14,340**	**137,898**	**9,497**	**15,286**	**12,760**	**10,163**	**2,597**	**189,781**

Social Performance Table

Workforce	Legacy Territories				New Territories	
	Hong Kong	Mainland China	Taiwan	U.S.	Mainland China	U.S.
Number of employees under permanent contract						
Male	937	9,441	646	1,716	5,200	4,023
Female	374	2,979	213	292	2,407	643
Total	1,311	**12,420**	**859**	**2,008**	**7,607**	**4,666**
Number of employees under temporary and fixed term contract						
Male	124	0	11	0	0	0
Female	14	0	17	0	0	0
Total	138	**0**	**28**	**0**	**0**	**0**
Total number of employees including permanent and temporary & fixed contracts						
Total	**1,449**	**12,420**	**887**	**2,008**	**7,607**	**4,666**

	Hong Kong	Mainland China	Taiwan	U.S.
Proportion of workforce by age group				
>30	17.7%	27.4%	9.2%	28.3%
30-50	69.1%	68.3%	69.2%	51.8%
50+	13.2%	4.3%	21.7%	19.9%
Proportion of workforce by employment category				
Top/senior management	1.5%	0.5%	1.3%	0.8%
Middle/junior management and supervisory	23.1%	7.0%	22.7%	26.0%
Customer facing staff	10.8%	56.3%	22.5%	45.0%
Non-customer facing operational/ technical staff	56.1%	29.4%	29.0%	28.2%
Other	8.5%	6.9%	24.6%	0.0%

Employee Safety	Legacy Territories				New Territories	
	Hong Kong	Mainland China	Taiwan	U.S.	Mainland China	U.S.
Total number of work-related fatalities	0	1	0	1	1	0
Lost time injury rates	1.44	0.3	0.32	0.83[1]	0.34	0.83[1]

Gender and Diversity	Legacy Territories				New Territories	
	Hong Kong	Mainland China	Taiwan	U.S.	Mainland China	U.S.
Number of female in workforce	388	2,979	230	292	2,407	643
Percent of female in workforce	27%	24%	26%	15%	32%	14%

Note:

[1] Includes both legacy territories and new territories.

Gender and Diversity	Legacy Territories			
	Hong Kong	Mainland China	Taiwan	U.S.
Proportion of female employees by employment catorgory				
Top/senior management	35.0%	13.5%	27.3%	18.5%
Middle/junior management and supervisory	41.6%	26.9%	29.2%	16.2%
Customer facing staff	54.6%	28.7%	21.2%	8.5%
Non-customer facing operational/ technilca staff	11.3%	14.1%	9.6%	20.7%
Other	72.3%	61.1%	41.7%	0.0%

Number of Board Members	
By gender	
Female	1
Male	7
By age group	
Under 30	0
30-50 years old	2
Over 5- years old	6

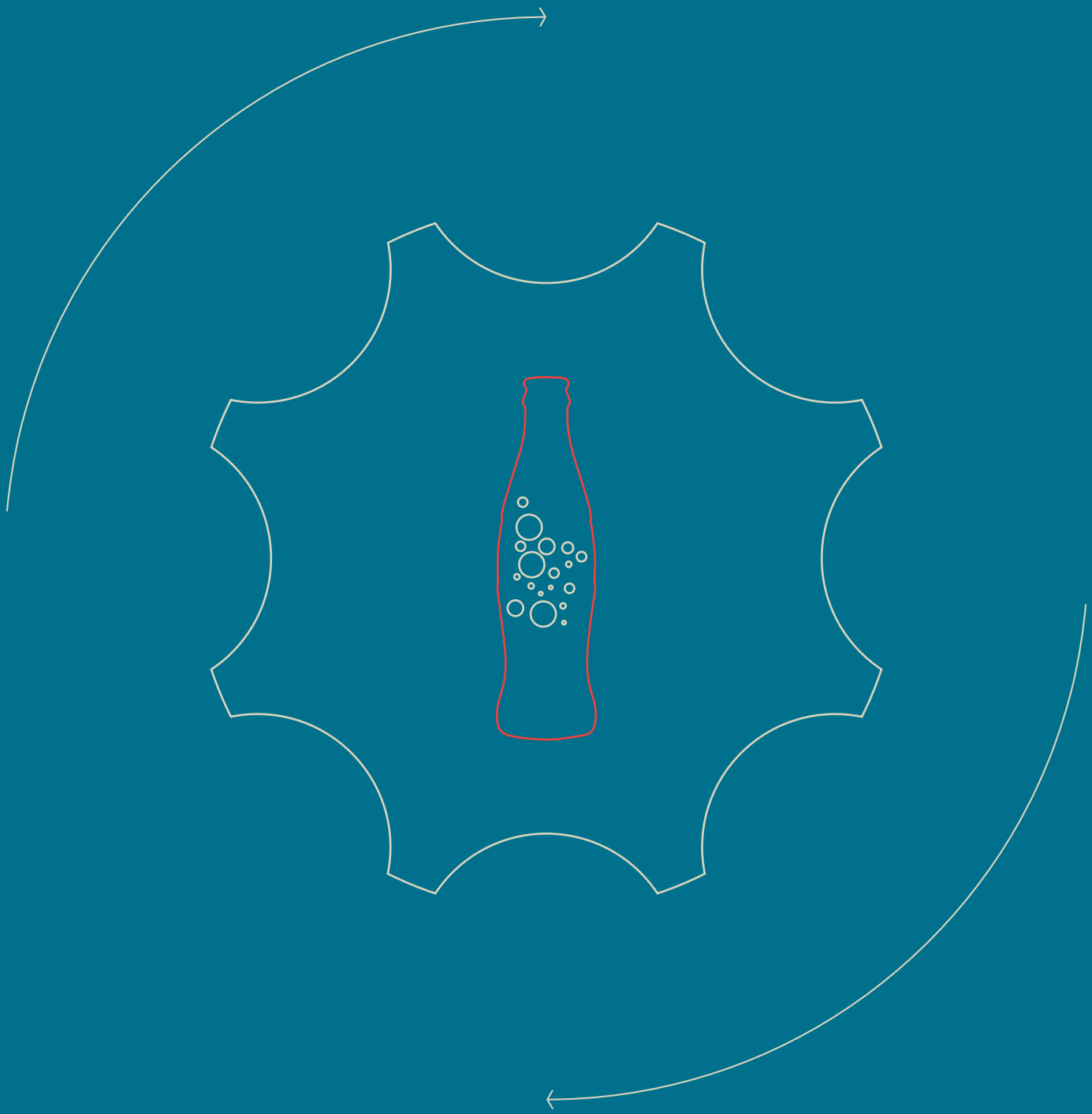
Community Engagement	Legacy Territories				New Territories	
	Hong Kong	Mainland China	Taiwan	U.S.	Mainland China	U.S.
Cash donations (HKD$)	410,670.00	589,551.25	119,072.00	2,278,723.00	487,286.16	N/A
No. of charity events	11	15	6	10	12	0
Number of employees on volunteering team	96	2,888	279	0	1,111	0
Volunteering hours outside of office hours	2,166.75	3,408	1,116	0	1,055	0
Volunteering hours during office hours	14.5	5,564	0	0	5,257	0
Total volunteering hours	**2,181.25**	**8,972**	**1,116**	**0**	**6,312**	**0**

GLOSSARY

Aseptic Fibre Pack	A type of primary packaging which is multi-layer (paper and other). This packaging type can go by the trade names of Tetra Pak and Combibloc among others.
Aseptic line	Aseptic processing is a process by which a product is sterilized and then filled in a sterile container and filling conditions at cold temperature.
Beyond Economic Repair	When the cost of repair in financial terms exceeds the cost of replacement.
BIB	Bag in box (BIB) refers to the packaging material containing beverage syrup used in fountain dispensers. Type LDPE - type 4 - plastic bladder in a cardboard box.
Carboy	Primary packaging for large volumes of water used in water dispensers. Type 7 plastic.
CDE	Cold Drink Equipment (CDE) includes vending machines, coolers and fountains.
CFC	Chlorofluorocarbons (CFC) are fully halogenated paraffin hydrocarbons that contain only carbon, chlorine, and fluorine, produced as volatile derivative of methane, ethane, and propane. They are also commonly known by the DuPont brand name Freonare. Many CFCs have been widely used as refrigerants, propellants (in aerosol applications), and solvents. Because CFCs contribute to ozone depletion in the upper atmosphere, the manufacture of such compounds has been phased out under the Montreal Protocol, and they are being replaced with other products such as hydrofluorocarbons (HFCs) (e.g., R-410A) and R-134a.
CIP	Clean in place (CIP) refers to the cleaning and sanitation of production equipment when switching production lines from manufacturing one beverage type to another.
Climate Action Plan 2030+	The Hong Kong Government's long-term action plan in combating climate change, including carbon emission reduction targets for 2030.
CO2	Carbon Dioxide, and in the context of cold drink equipment, it is an alternate form of refrigerant that does not contribute to ozone depletion.
Co-packer	Third party contract bottlers who produce and supply beverages.
Collection	A logistic process of redirecting waste to a place where is can be recovered.
COP	Conference of Parties
Direct Goods	A category of raw materials which are sourced for manufacturing or packaging beverages.
EPA	Taiwan Environmental Protection Agency Executive Yuan
ERM	Enterprise Risk Management
EUR	Energy Use Ratio (EUR) is the amount of energy used to produce one litre of beverage. It is a Coca-Cola metric.
GHG	Greenhouse gases (GHG) are types of gases that trap heat in the atmosphere.
GRI	Global Reporting Initiative (GRI) is an international independent standards organisation that helps businesses understand and communicate their impacts on environmental and social issues.
GRM	Group Risk Management
GRMC	Group Risk Management Committee
HFC	Organic compounds that contain fluorine and hydrogen atoms, they, are the most common type of organofluorine compounds. They are commonly used in air conditioning and as refrigerants in place of the older chlorofluorocarbons such as R-12 and hydrochlorofluorocarbons such as R-21. They do not harm the ozone layer as much as the compounds they replace; however, they do contribute to global warming. Their atmospheric concentrations and contribution to anthropogenic greenhouse gas emissions are rapidly increasing, causing international concern about their radiative forcing. In September 2016, the New York Declaration on Forests urged a global reduction in the use of HFCs. On 15 October 2016, due to these chemicals' contribution to climate change, negotiators from 197 nations meeting at the summit of the United Nations Environment Programme in Kigali, Rwanda reached a legally-binding accord to phase out hydrofluorocarbons (HFCs) in an amendment to the Montreal Protocol.
HDPE	High-density polyethylene (HDPE) is a type 2 plastic, and is used in this context for closures and closure rings on PET plastic bottles, amongst other things.

Hot fill	A process by which a product is sterilised and then filled at a high temperature in order to sterilise the inside of the container.
Indirect Goods	A category of materials procured for marketing beverage products.
LEED	Leadership in Energy and Environmental Design (LEED) is a rating system devised by the United States Green Building Council.
Legacy Territories	Bottling plants and associated operations already owned by Swire Beverages prior to the acquisitions in mid-2017.
Lightweighting	Redesigning primary packaging to reduce the weight of packaging materials.
Low-sugar	Beverages that contain 2.5g of sugar or less for every 100ml.
Manufacturing Volume	The amount of water used to manufacture beverages, such as the water used for cleaning. It excludes the amount of water that is used inside beverages.
NEPC	New Plastic's Economy (NEPC) is an initiative of the Ellen MacArthur Foundation.
New Energy Policy	Taiwan Government's policy to establish a low-carbon energy system by working towards being nuclear-free, developing the use of renewable energy and expanding the use of natural gas.
New Territories	Bottling plants and associated operations acquired by Swire Beverages in the territory re-alignment of mid-2017.
NGO	Non-government organisation
NPSG	National Product Supply Group (NPSG) is a coalition of bottlers working together to optimise collaboration between bottlers within the Coca-Cola System in the U.S.
NRG	Non-returnable glass bottle
'Other' packaging	Packaging materials including festive merchandise packaging and giveaways during holiday periods and marketing materials associated with shop signage, coolers, note books, clothing, umbrellas, and others.
Paris Agreement	The Paris Agreement central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework.
Pasteurisation	A process by which a product is treated by heat to eliminate viable microbiological load in the product.
PET	Polyethylene terephthalate (PET) is a type 1 plastic, and in this context is the raw material for soft drink plastic bottles.
Post-Consumption	Material generated by the end-user of a product that has fulfilled its intended purpose or can no longer be used
Pouch	A type of primary packaging which is a multilayer foil, squeezy in nature and generally with a plastic screw top. It could also be a package with a tear top if containing powder.
PP	Polypropylene (PP) is a type 5 plastic, and in this context is often the raw material for labels.
Primary Packaging	The packaging layer that first envelops the product and holds it (i.e. bottle, label, closure, closure ring).
Production Volume	The volume (unit cases) of beverages manufactured.
Recovery	Conversion of waste so that it can be used again for its original purpose or other purposes, other purposes can include generating energy.
Recycled Content	In reference to primary packaging, this term refers to the amount of recycled content contained within the primary package.

Recycling	Conversion of waste so that it can be used again for its original purpose or other purposes with the exception of generating energy.
RGB	Returnable glass bottle
rPET	Recycled PET
Sales Volume	The amount of physical unit cases of beverages sold in an accounting period.
Science Based Targets (SBT)	Targets to bring corporate (and countries) emissions in line with the climate goals set by The Paris Agreement (COP 21).
Scope 1 Emission	Direct greenhouse gas from sources owned or controlled by the company (i.e. vehicles and boilers)
Scope 2 Emission	Greenhouse gas emissions from indirect sources such as purchased electricity used within our operations and facilities.
Scope 3 Emission	Referred to as other indirect greenhouse gas emissions. They are a consquence of the activities of the company, but occur from sources not owned or controlled by the company.
Secondary Packaging	Used to group individual beverage containers together
SGP	The Suppliers Guiding Principles (SGP) is a set of guidelines issued by The Coca-Cola Company provide an overarching set of standards we expect from our suppliers covering workplace policies, health and safety, human rights, environmental protection and business integrity.
SGSC	Swire Group Sustainability Committee
Sludge	Semi-solid by-product generated from wastewater treatment process.
Sparkling	Sparkling category is a segment of the soft drinks category and refers to products that a carbonated.
TCCC	The Coca-Cola Company
Tertiary Packaging	Packaging that is used for bulk handling (i.e. steel drums for juices, slip trays, pallets, hard plastic crates), warehouse storage and shipping.
TPM	Total Product Management system (TPM) is integrated across our entire operations including procurement, manufacturing, warehousing, and distribution to consumers. It identifies the necessary processes to protect products from being damaged or contaminated.
Unit Case	One unit case = 24 x 8 ounce servings.
WUR	Water Usage Ratio (WUR) is the amount of water used to produce one litre of beverage.



2017 Sustainable Development Report