RESETcarbon

Swire Coca-Cola

SCCL SBT Progress Report 2020

Swire Coca-Cola Ltd

Date: April 2021

SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

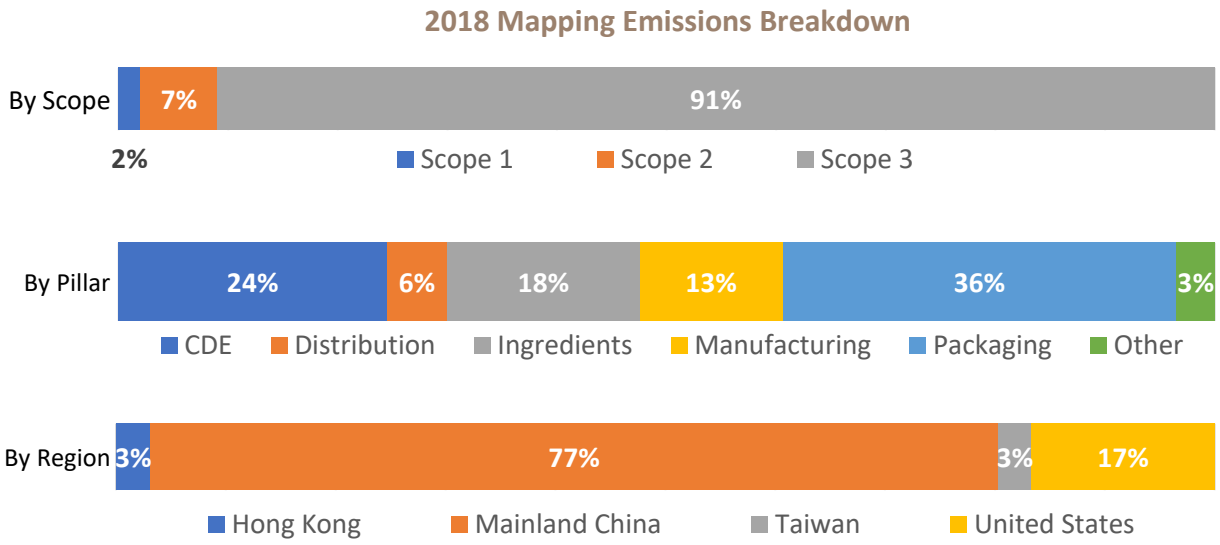
RESETcarbon

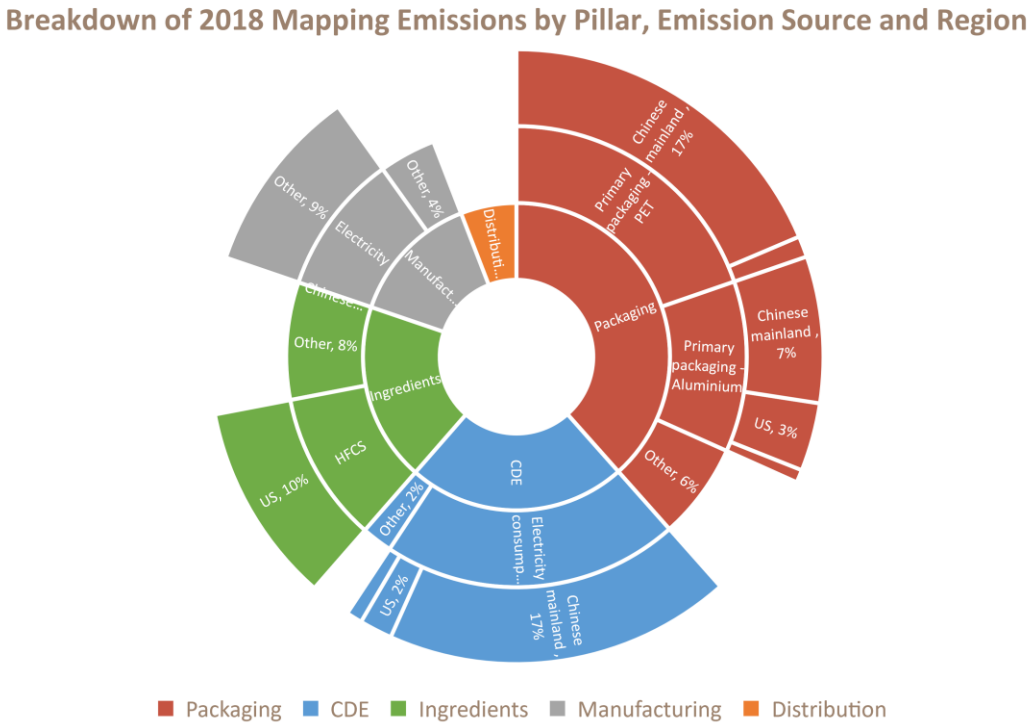
Contents

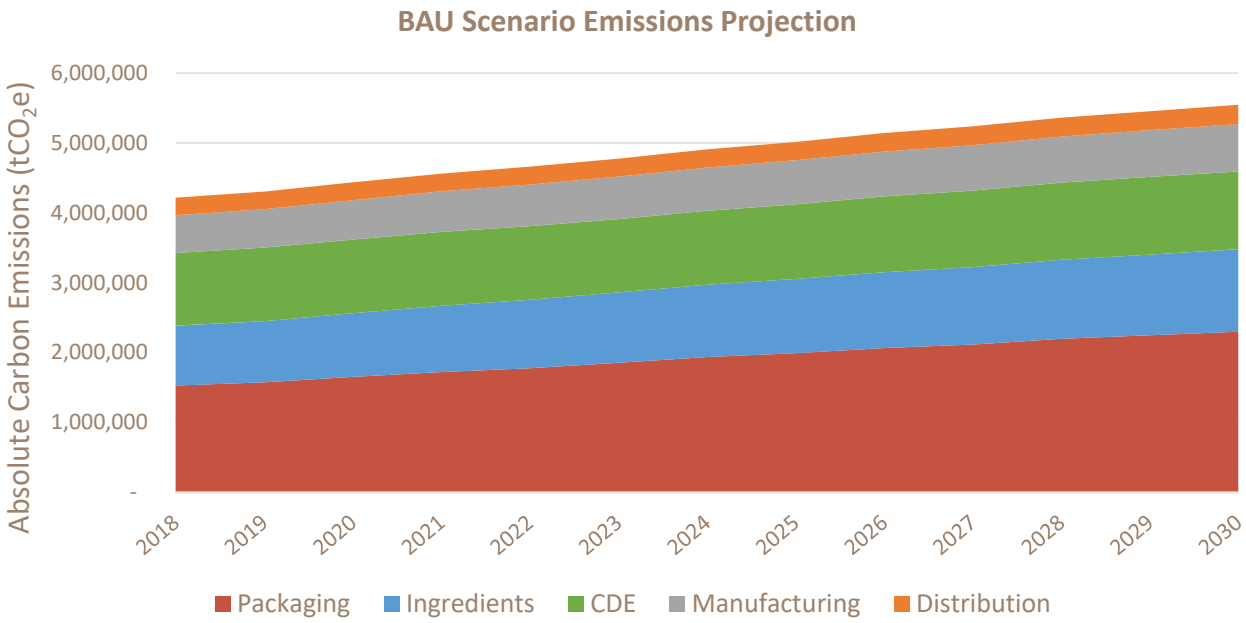
1. Background

1.1. SCCL 2018 Mapping Emissions and Business As Usual (BAU) Scenario Projection

In 2018, Swire Coca-Cola Ltd engaged a specialist consultant, RESET Carbon, to help us map our carbon emissions across the entirety of our business. The below is an overview of the findings.







1.2. Reduction Opportunities: What efforts can we take to reduce emissions?

Next, SCCL identified carbon reduction opportunities across the business through intensive consultation with SCCL's internal teams and TCCC experts. Reduction opportunities were integrated into the carbon emission projections to analyse the contribution of each reduction opportunity to meet the reduction target.

Due to the significance of the Scope 3 emissions (which by definition are outside of SCCLs operational control), reducing these emissions is critical to successfully meet, if not exceed, the targets. The key reduction opportunities include:

Key Scope 2
Reduction Opportunities

All purchased electricity in core operations from

100% Renewable Energy

We plan to transition to all purchased electricity in Core Operations to electricity derived from 100% renewable energy in the United States and Mainland China by **2026**. Aside from onsite renewable energy installations, this will require us to look for innovative and credible ways of procuring renewable energy offsite.

Key Scope 3
Reduction Opportunities

PACKAGING

The use of Recycled content in primary packaging

- Our projection includes 70% recycled PET and 100% recycled aluminium packaging in our products by 2030.
- A significant proportion of the contribution is expected to come from the Chinese mainland where today recycled PET and Aluminium in food-grade packaging is not currently standard. As such a number of projects have started with the relevant stakeholders to help put in place processes which would lead to the inclusion of recycled content in food grade primary packaging's.

Increasing primary packaging post-consumer Collection & Recovery rates – leading to increased Recycling rates

- Our projection includes an increase in the recovery rate of post-consumer single-use primary packaging's, in particular PET bottles and aluminium cans in Mainland China, the US and in Hong Kong, of up to 100% by 2030.
- We will work in collaboration with TCCC, external bottlers and relevant government stakeholders to pilot and expand programmes to support the collection, recovery and reuse of post-consumer materials.
- In Hong Kong, in addition to supporting the #Drink Without Waste (DWW) initiative, we have also invested in a state-of-the-art plastic recycling facility which is expected to commence operation in late 2021.

drinkwithoutwaste.org
www.nlplastics.com.hk

SUPPLIERS

Supplier engagement on packaging and ingredients

- The raw ingredient and packaging materials we buy from our suppliers are a key source of embedded carbon
- We will work with TCCC to engage our suppliers to (a) produce Supplier Specific Emission factors, and then b) to work up plans to reduce their carbon emissions by encouraging and incentivising increased energy efficiency and renewable energy procurement

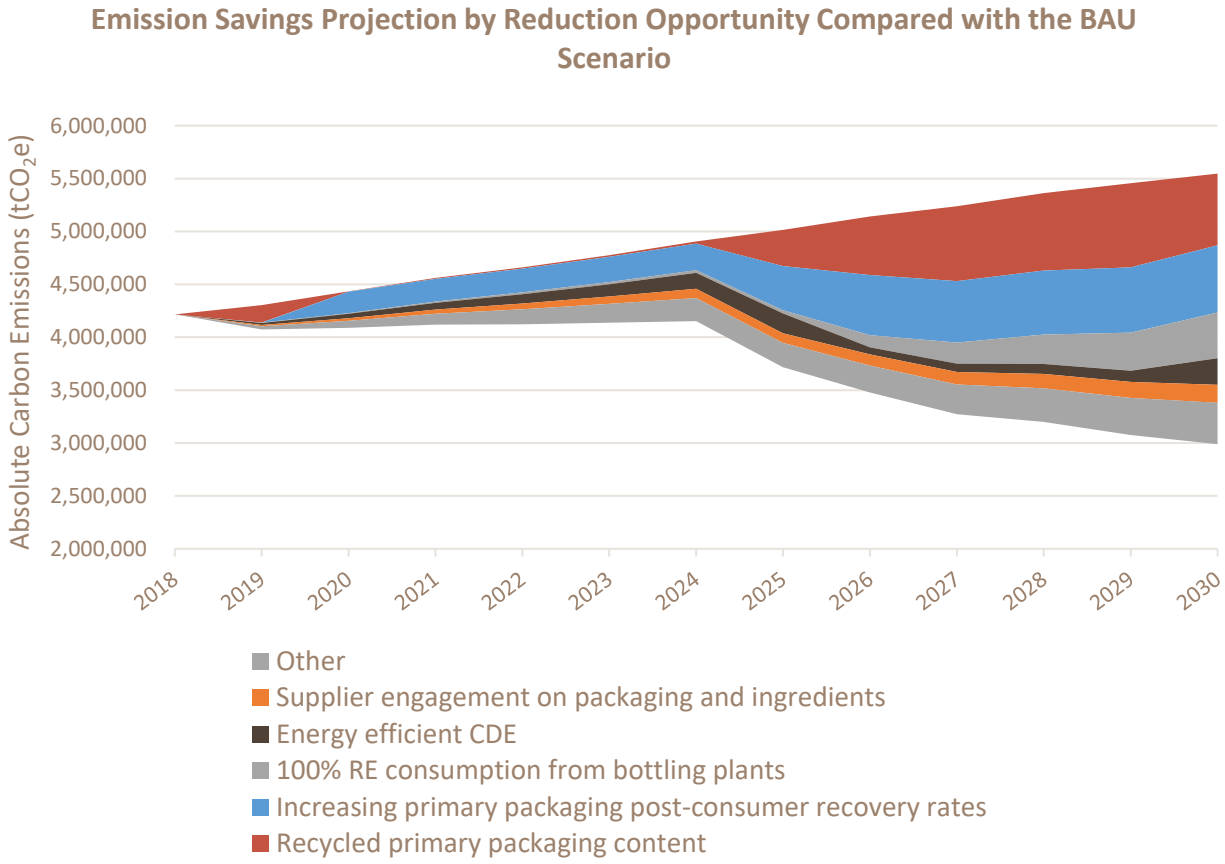
COLD DRINK EQUIPMENT

Energy efficient CDE

- Our projection incorporates energy efficiency gains through technological improvements to offset the expansion of our growing cold drink equipment (CDE) fleet – with coolers in the Chinese mainland being the key equipment segment.

1.3. Modelling Carbon Reductions: How much reduction can we achieve with the opportunities we implement?

The modelling tells us that although the vast majority of emissions are in our value chain (so Scope 3), this is where the biggest reduction opportunities also lie and we will need to work closely with our value chain partners to reduce emissions. We expect these reduction opportunities, when implemented, to deliver a 24% absolute reduction in Scope 3 emissions by 2030.



1.4. Potential Changes on the Modelling Results

In these annual progress reports we will report on material changes that will impose an impact on our 2018 BAU scenario projections. To date these include:

- An 84% increase over the 2018 base line projection from now until 2026 in electricity consumption in our bottling plants in US mainly due to the addition of blow moulding capability across 5 bottling plants
- A number (not determined yet) of preform manufacturing lines being added in our Chinese mainland bottling plants

Philosophy of this Annual Progress Report

This annual report aims to transparently state where we, SCCL, are within each Scope, each market and within each material emission source on achieving our 2030 SBT.

Also, it is acknowledged that the modelling results are subject to assumptions made in our original model including business portfolio forecasts and the effectiveness of our reduction opportunities. These assumptions depend greatly on our prediction to the future, for instance:

- technology advancement in terms of energy efficiency improvement (e.g., CDE, bottling plants)
- market maturity in purchased renewable electricity and recycled packaging material
- customer's preference and our business growth
- regulation and policy change (e.g., the use of recycled content in PET food-grade packaging)

In addition to our modelling assumptions, the boundary and methodology of our baseline emissions will be adjusted along with our emissions tracking to provide better completeness and accuracy, such as moving our emission factor from a global 'proxy' to a supplier-specific one.

With regards to the above, we are planning to revamp our model every year to provide the updated picture of it.

2. Methodology and Boundary Update in 2020

2.1. Updates in Scope 1 & 2 Emissions Boundary

Our data tracking system keeps evolving to enhance data completeness. Emissions from several operations that were out of scope in the past due to lack of data have now been captured. As a result of the boundary change, emissions reported in this reporting year could hardly be compared with previous years without any adjustment to the baseline. The below table summarize the additional operations included in 2020 and the treatment to our baseline correspondingly.

Additional Operations	% Contribution to Scope 1 & 2 Emissions in 2020	% Contribution to Scope 1 & 2 Emissions in 2018	Treatment to baseline
Packaging production at #Xiamen Luquan Industries Company Limited in Chinese mainland	6%	5%	Include back the actual historical emissions data in 2018 and 2019
Distribution Centres in the United States	3%	3%	Include back the actual historical emissions data in 2018 and 2019 and use a consistent estimation approach for area where actual data were not available
Sales Centres in Taiwan	<0.1%	<0.1%	Estimate the proxy emissions in 2018 and 2019 (Assuming the same energy consumption as in 2020)

Also, please note that the below two data points are Limited Assured by Deloitte's.

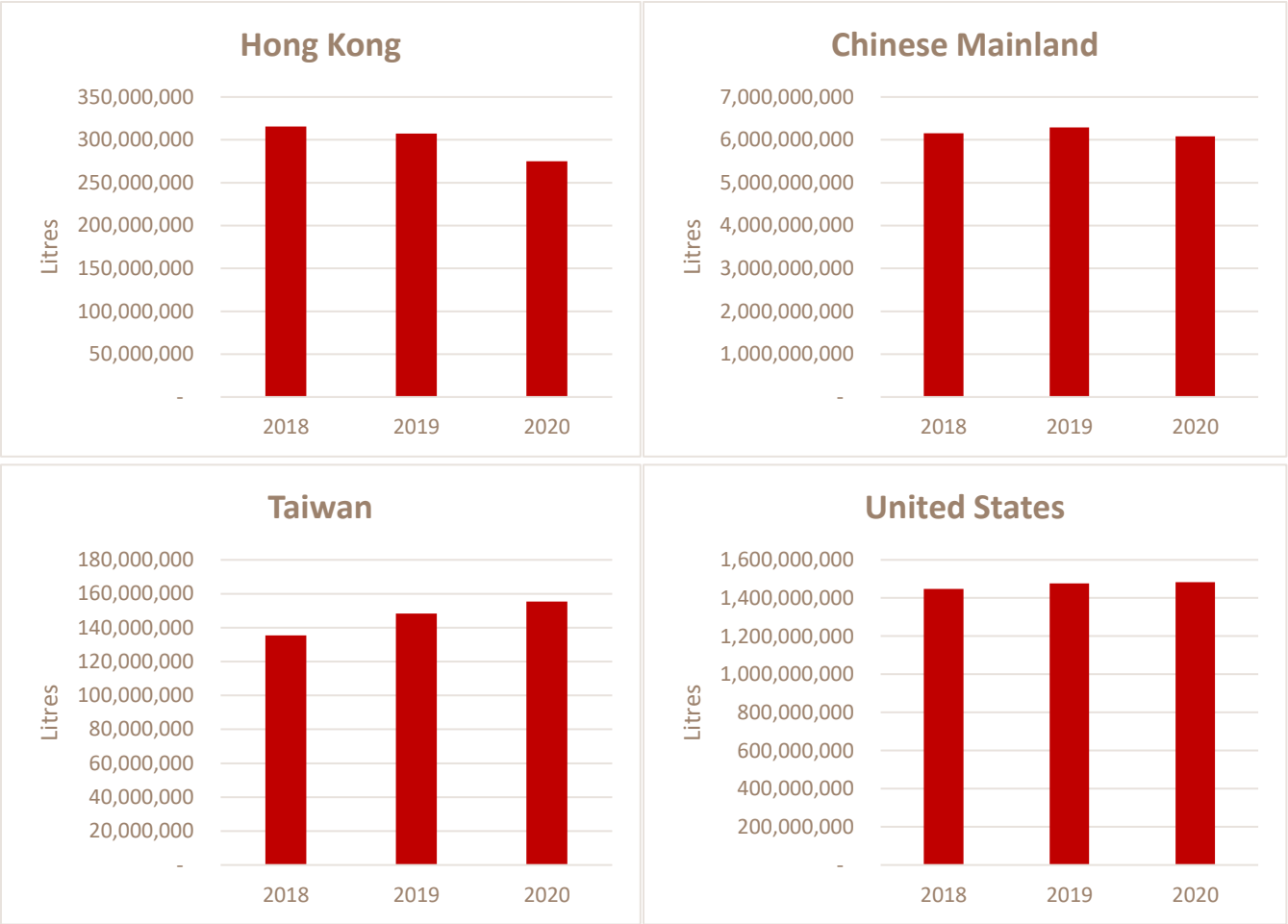
- **Total Energy Consumption**
- **Total Scope 1&2 emissions by weight (CO2e) (excluding emissions from refrigerants)**

#Note: The Xiamen Luquan electricity consumption figures include 3 preform manufacturing lines in the manufacturing plants of Hefei and Guangxi respectively.

2.2. Updates in Scope 3 Emissions Boundary

Last year, a mapping exercise was done to develop a picture of our Scope 3 carbon emissions. To enable on-going tracking and reporting of our Scope 3 emissions in a comprehensive manner, we are in progress to develop the Scope 3 inventory management infrastructure and processes. Once it has been completed, we expect to start reporting our Scope 3 emissions and our reduction efforts quantitatively in next year's Annual Progress Report.

2.3. Production Volume Change by Market

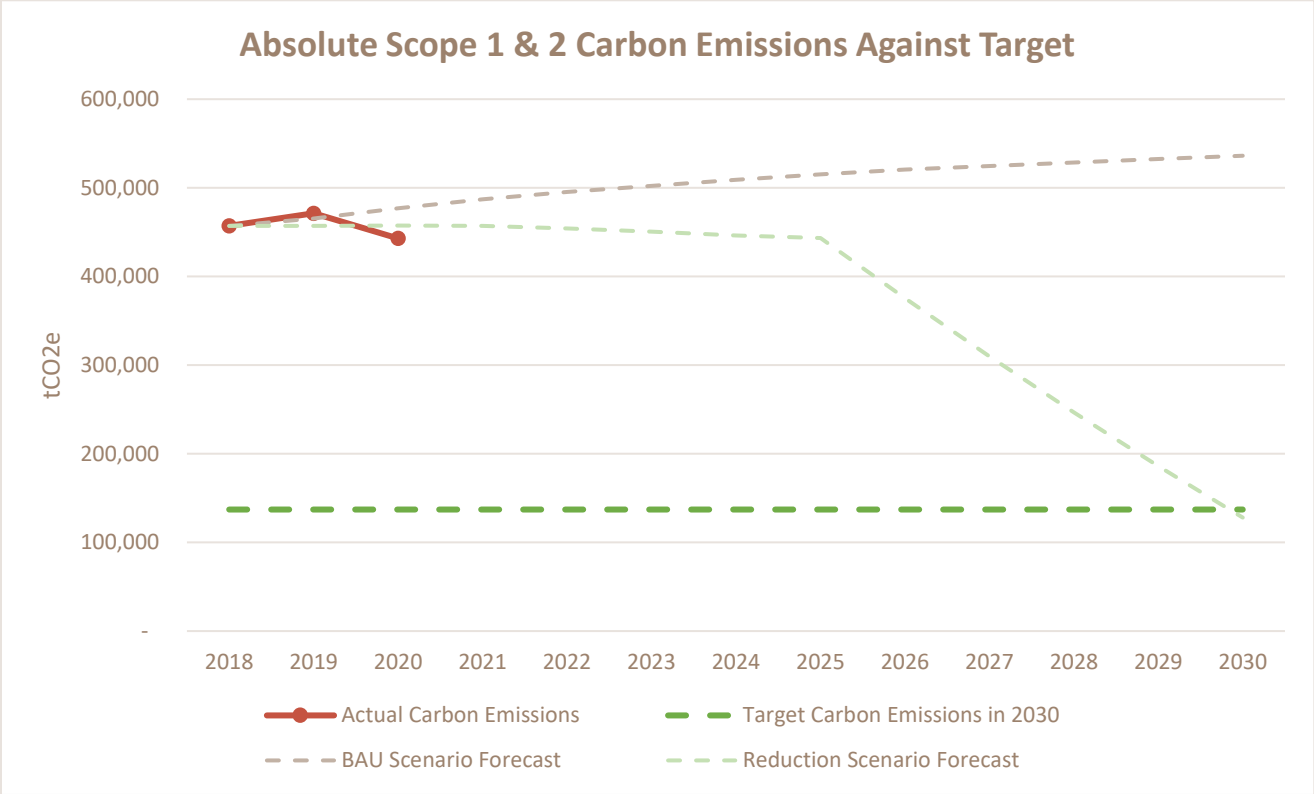


Production volume remains a key overriding metric as our SBT is all about driving absolute emission reductions, so if production volume grows greater than originally forecast, further absolute emission reductions will be required to achieve the 2030 targets.

Production volume remained quite stable in the Chinese mainland and in the United States, with only a reduction of 1% and an increase of 2% in 2020 against 2018, respectively. Within the same timeframe, the production volume in Hong Kong reduced by 13% (pandemic related) while in Taiwan it has increased by 15% (pandemic related). Overall, total production volume reduced by 1% from 2018 to 2020.

3. Performance Overview

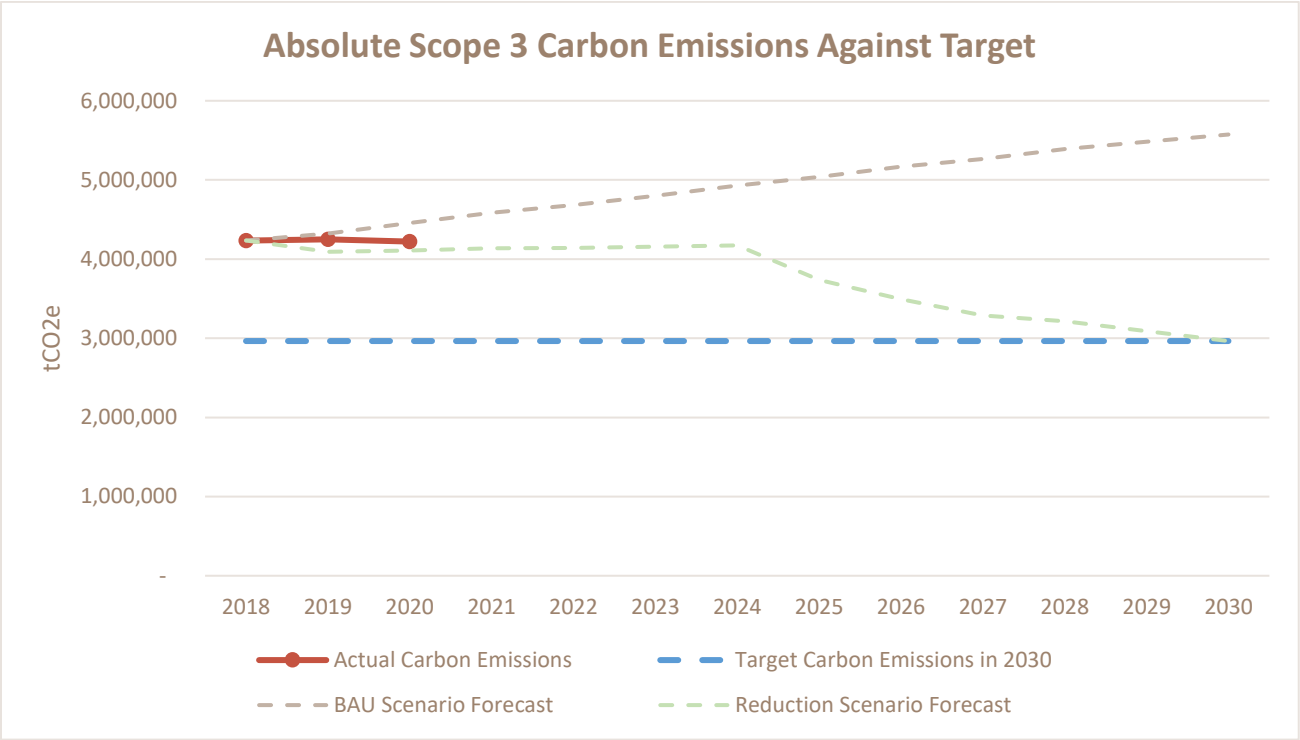
3.1. Absolute Emissions against Targets



Compared to the base line year of 2018, total absolute emissions in 2020 reduced by 3%. The pandemic has had marked effects across the markets, but when averaged, production volumes were not materially affected. When compared to 2019, the emissions reduction is primarily driven by reduction in production volume (see section 2.3) and lower electricity consumption in higher grid-factor regions[1] in Chinese Mainland (given that Chinese Mainland accounts for over 70% of our total Scope 1 and 2 emissions across the 3 years).

In our Scope 1 and 2 Reduction Scenarios, we assume the transition to renewable energy will be well advanced by 2026 causing a deep reduction.

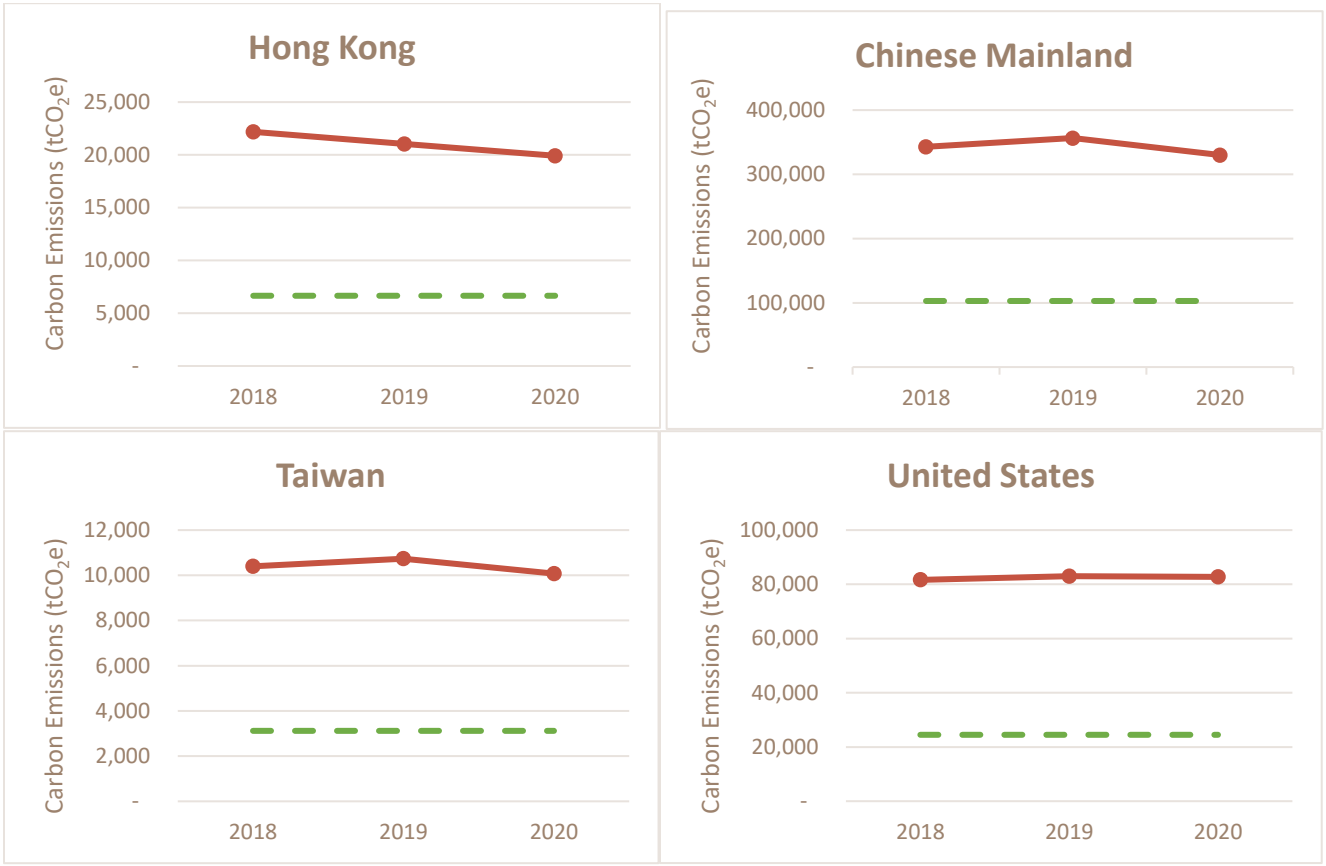
[1] Such as bottling plants in Hubei and Henan



Please note that the actual Scope 3 emissions for 2019 and 2020 are not yet available as mentioned in Section 2.2, and the aggregated Scope 1, 2 & 3 emissions are calculated as a proxy number by assuming the Scope 3 emissions remain the same as in 2018. Since Scope 3 emissions would be the majority of our total emissions, the total absolute Scope 1, 2 & 3 emissions have dropped only by 0.3%.

In our Reduction Scenarios, we have assumed that the regulation allowing recycled PET food-grade packaging in the Chinese mainland will change and recycled content in PET for Chinese mainland market will start to increase in 2024. This with recycled content in our Aluminium cans and a move to much higher energy efficient Cold Drink Equipment, will contribute significant reductions on scope 3 emissions.

3.2. Absolute Scope 1 & 2 Emissions by Market



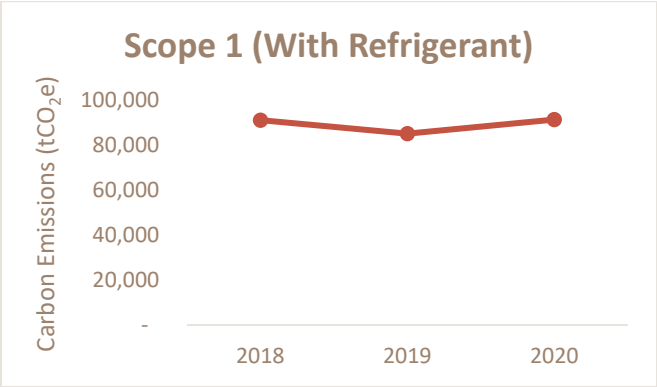
We have demonstrated reductions in Hong Kong, Chinese Mainland, and Taiwan over the past 3 years, with a reduction of 10%, 4% and 3% respectively against 2018. In Hong Kong, the emissions trend followed its reduction in production volume. In the Chinese Mainland, as mentioned in the previous section, emissions reduced along with a small reduction in production volume and lower electricity consumption in higher grid-factor regions. In Taiwan, although its production volume has grown a lot, the impact is offset by the energy efficiency and grid factor improvement. The absolute emissions in the United States have slightly increased by 1% from 2018. It is noted that the Chinese mainland and the United States contributed to 75% and 19% respectively to our total Scope 1 and 2 emissions.

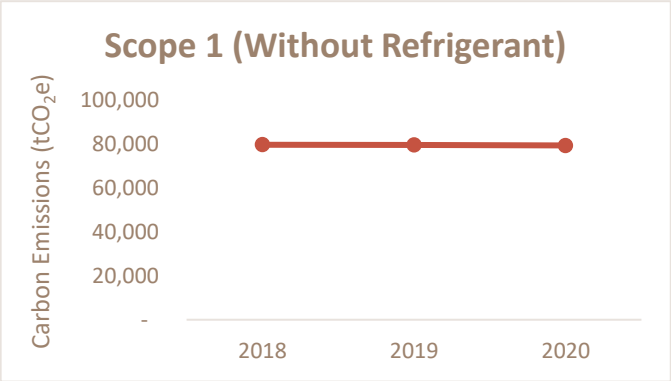
To note is that the United States plan to install blow molding equipment across 5 bottling plants from 2022 to 2026, which will drive absolute electricity consumption up by 85% from 2018 consumption levels. This will be reflected when we run the new BAU scenario in next years report.

3.3. Absolute Scope 1, 2 & 3 Emissions by Market

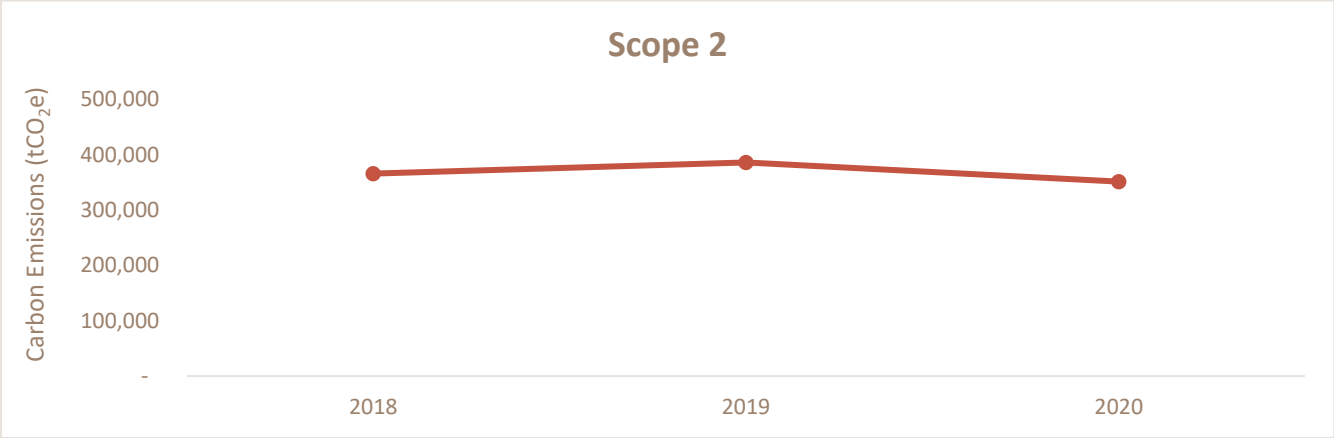
As mentioned above, since Scope 3 emissions are so significant and we assume it remains constant, there is no obvious reduction or increase observed in total emissions by market.

3.4. Absolute Emissions by Emission Scope

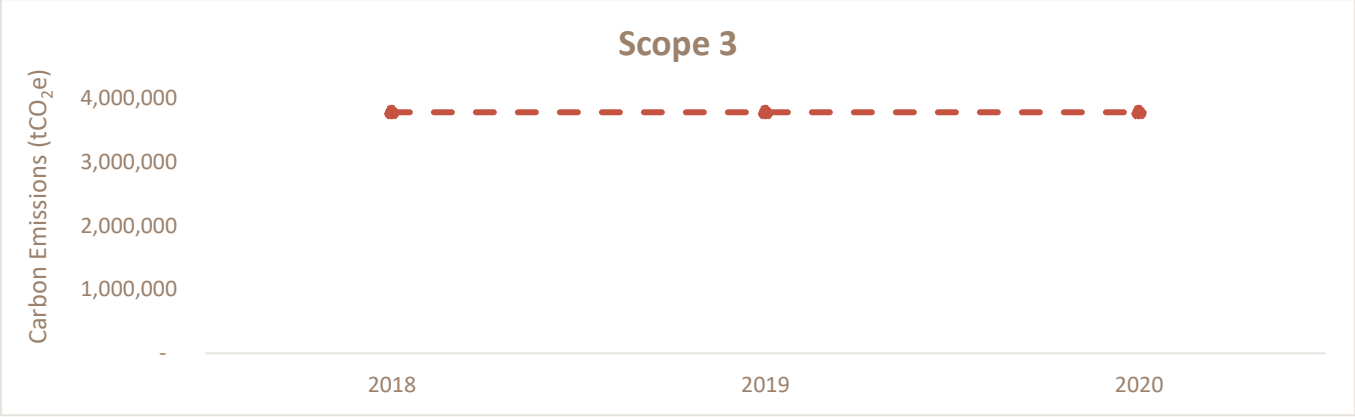




Our total Scope 1 emissions have dropped around 6% in 2019 and increased back to the 2018-level in 2020. This is mainly due to the fluctuation in the refrigerant refilling amount. After taking out the fugitive emissions of refrigerant, it shows that the remaining Scope 1 emissions were stable throughout the past 3 years.

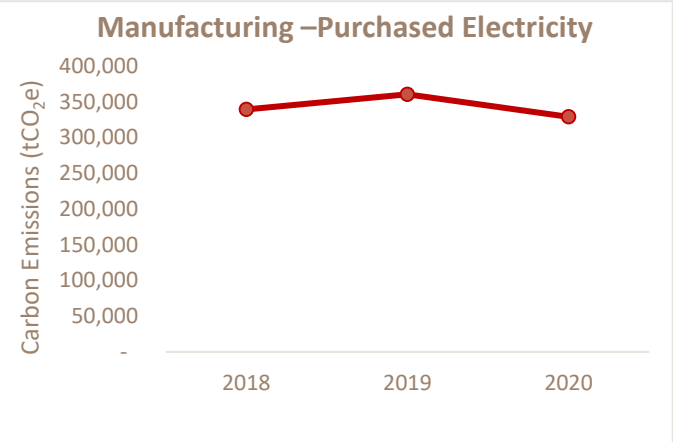


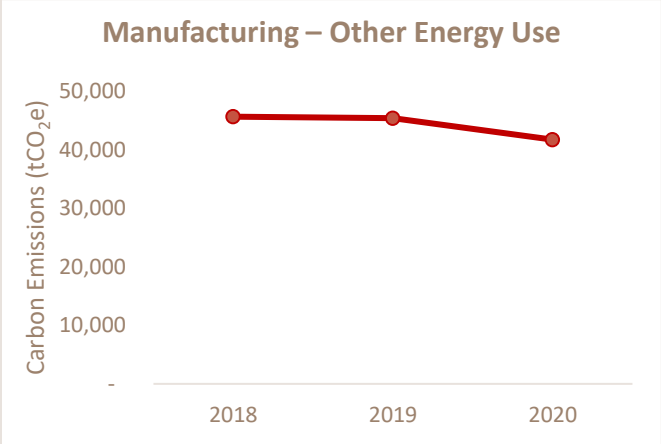
Our Scope 2 emissions have been reduced by 4% in 2020 against 2018. Again, this is mainly driven by the reduction in the Chinese Mainland as explained in earlier sections.

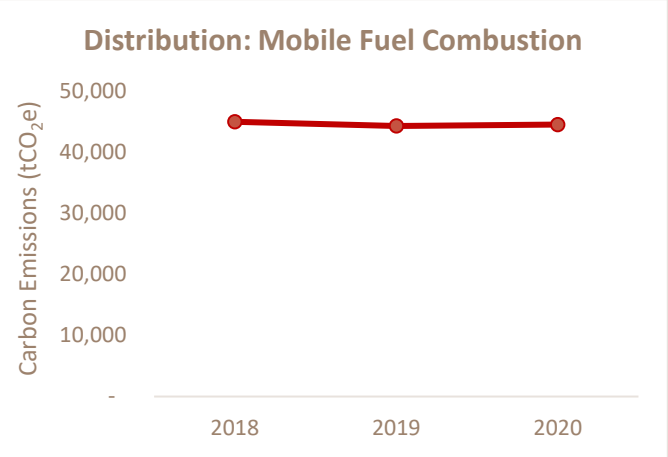


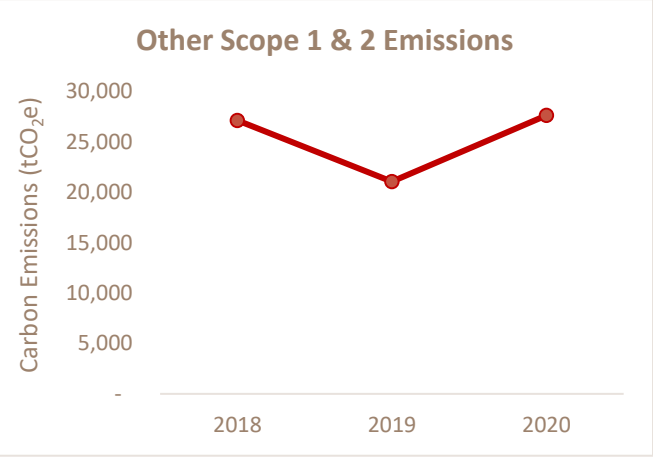
As mentioned in previous sections, our actual Scope 3 emissions were not yet available, and we assume it remains unchanged from 2018.

3.5. Absolute Scope 1 & 2 Emissions by Emission Source









“Manufacturing - Purchased electricity” pillar refers to the emissions associated with energy use in manufacturing plants, which is the major source of our Scope 1 and 2 emissions (84%).

“Manufacturing – Other energy use” pillar refers to the emissions associated with energy use in mainly boilers (and other minor supporting equipment such as forklifts). A key problem area remains in finding alternative no emission power sources for the boilers within the manufacturing plants. At best these are powered from natural gas, and at worst in 8 manufacturing plants in the Chinese mainland we acquire steam (made centrally in industrial zones and piped to us), which is made from the combustion of thermal coal.

“Distribution: Mobile Fuel Combustion” are the emissions from the fuel (gasoline and diesel) consumed by our vehicle fleet.

“Other Scope 1 & 2 Emissions” include the emissions of refrigerant from our Cold Drink Equipment (CDE) and the energy use in distribution centres and sales centres.

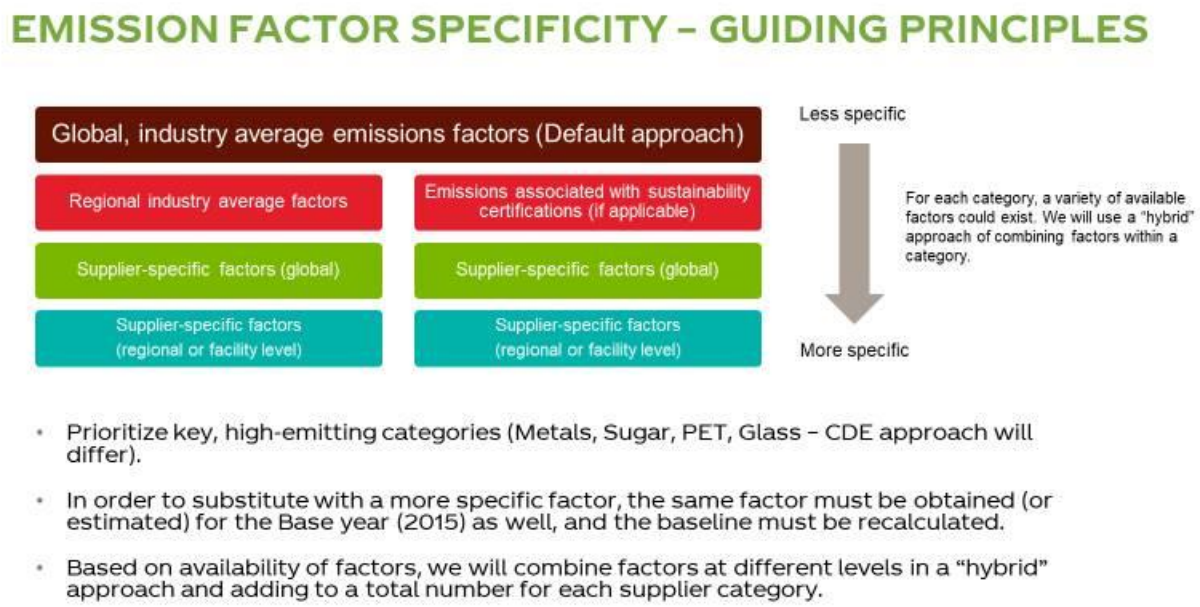
These charts show a similar trend with the previous section where the emissions associated with energy use were steady reducing while the refrigerant emissions were fluctuating.

Scope 3

1] As per the GHG protocols, Scope 3 can be broken down into

Scope 3 Category	Included/Excluded from Target Boundary	Emissions in 2018 (tCO2e)
1. Purchased Goods and Services	Included – Emissions from primary packaging, ingredients, energy use from copackers in Chinese Mainland. Excluded – Emissions from secondary and tertiary packaging, water, energy use from other copackers	Total: 2,919,038 Included: 2,557,667
2. Capital Goods	Excluded – Manufacturing Equipment	252,877
3. Fuel and Energy Related Activities	Included - Well-to-Tank Emissions Associated with Fossil Fuel Consumption (with Transmission and Distribution Losses)	124,420
4. Upstream transportation and distribution	Included – Third party transportation and distribution	172,181
5. Waste generated in operations	Excluded – Waste from our manufacturing sites (solid waste & wastewater)	5,846
6. Business travel	Excluded – All air and rail business travel.	39,549
7. Employee Commuting	Excluded – Employee commuting	20,400
8. Upstream leased assets	Excluded – Leased office	14,558
9. Downstream transportation and distribution	Not Applicable	N/A
10. Processing of sold products	Not Applicable	N/A
11. Use of sold products	Not Applicable	N/A
12. End-of-life treatment of sold products	Excluded - EOL disposal of packaging by the customer	70,098
13. Downstream leased assets	Included – Cold Drinks Equipment electricity use	1,042,805
14. Franchises	Not Applicable	N/A
15. Investments	Not Applicable	N/A

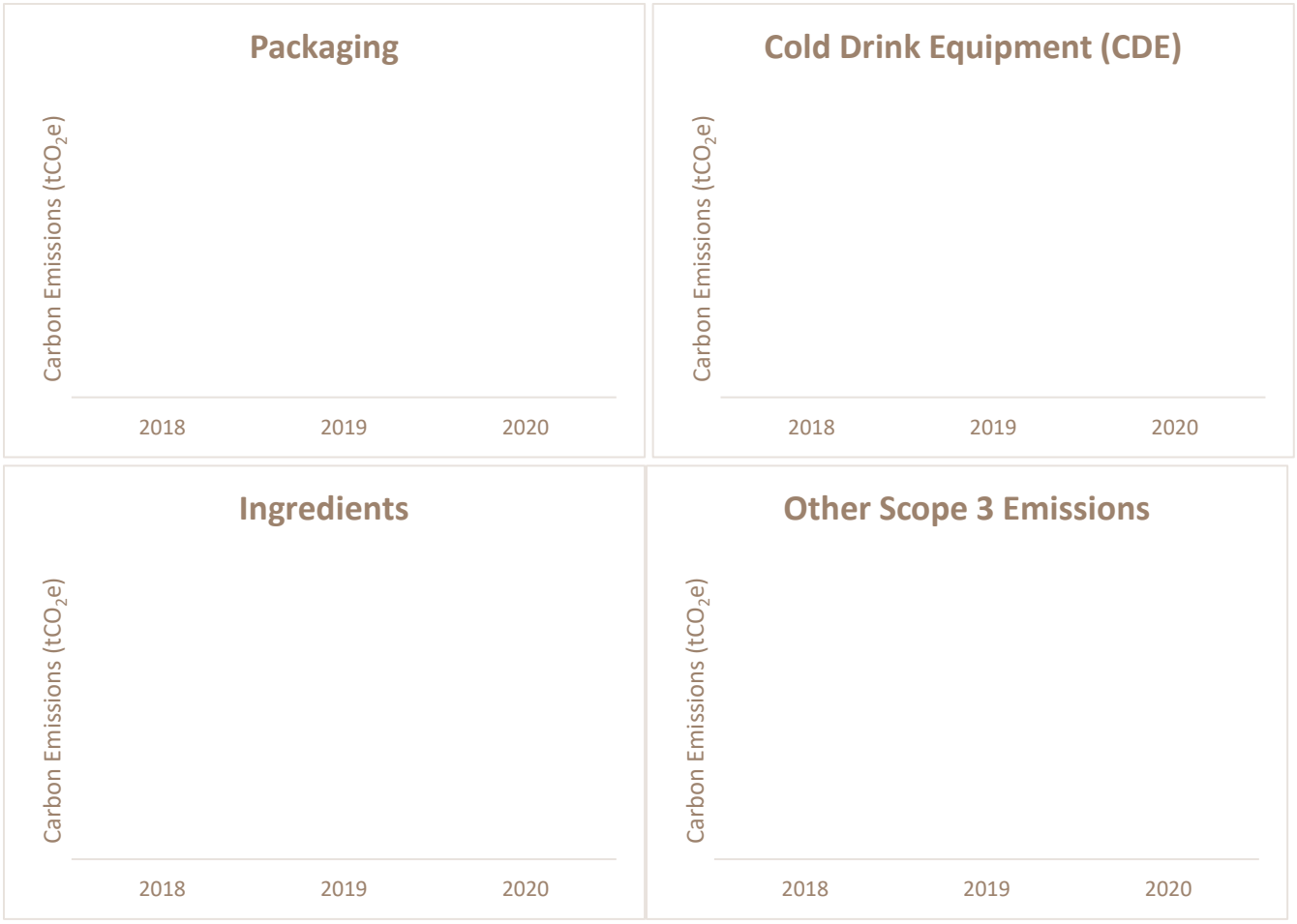
2] Accuracy of data – can be viewed in TCCCs infographic below. Today, SCCL Scope 3 data sits in the top brown line. As our journey matures, we will endeavor to drive our data from 'proxy' global data points to supplier specific data points.



3] Limited assurance on a range of Scope 3 data points. SCCL will work on expanding these limited assured data points from 2021, and will reference this in next year's report.

3.6. Absolute Scope 3 Emissions by Emission Source by materiality

(Created as a placeholder for completeness, will be populated in next year's report)



"Packaging" refers to the emissions from extraction, processing, manufacturing and transportation of primary packaging materials such as PET, aluminium cans and returnable glass bottles.

"Cold Drink Equipment (CDE)" refers to the emissions of the electricity consumption of coolers and vending machines at point-of-sale.

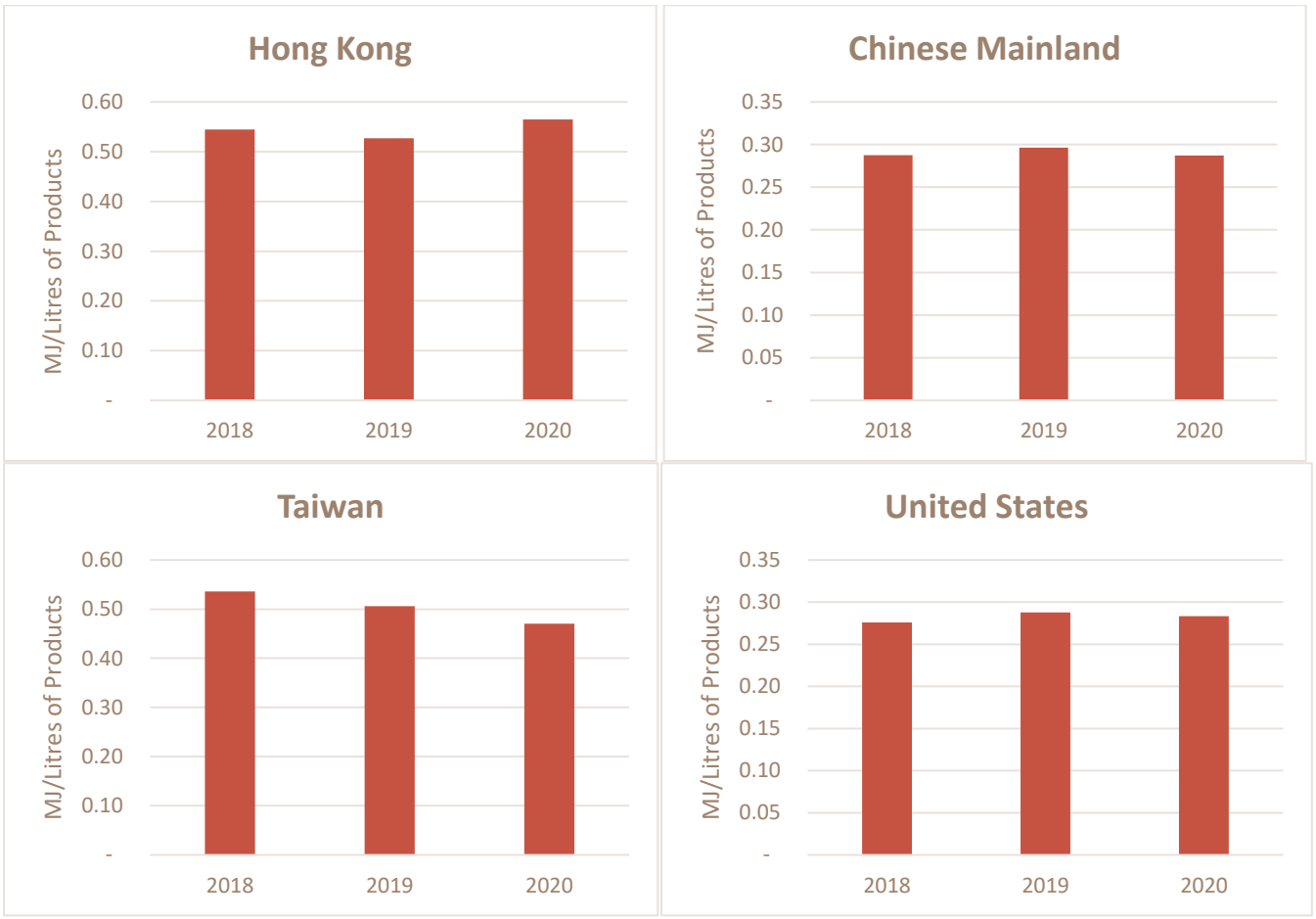
"Ingredients" refers to the emissions from extraction, processing, refining and transportation of raw ingredients such as sugar, HFCS and other concentrates.

"Other Scope 3 Emissions" include upstream emissions of purchased fuels and electricity including transmission and distribution (T&D) losses, emissions associated with copacker energy consumption for manufacturing and third-party vehicle fleets for distribution.

This will be populated in next year's report, but we wanted to show this page for completeness, and to show that this is not omitted.

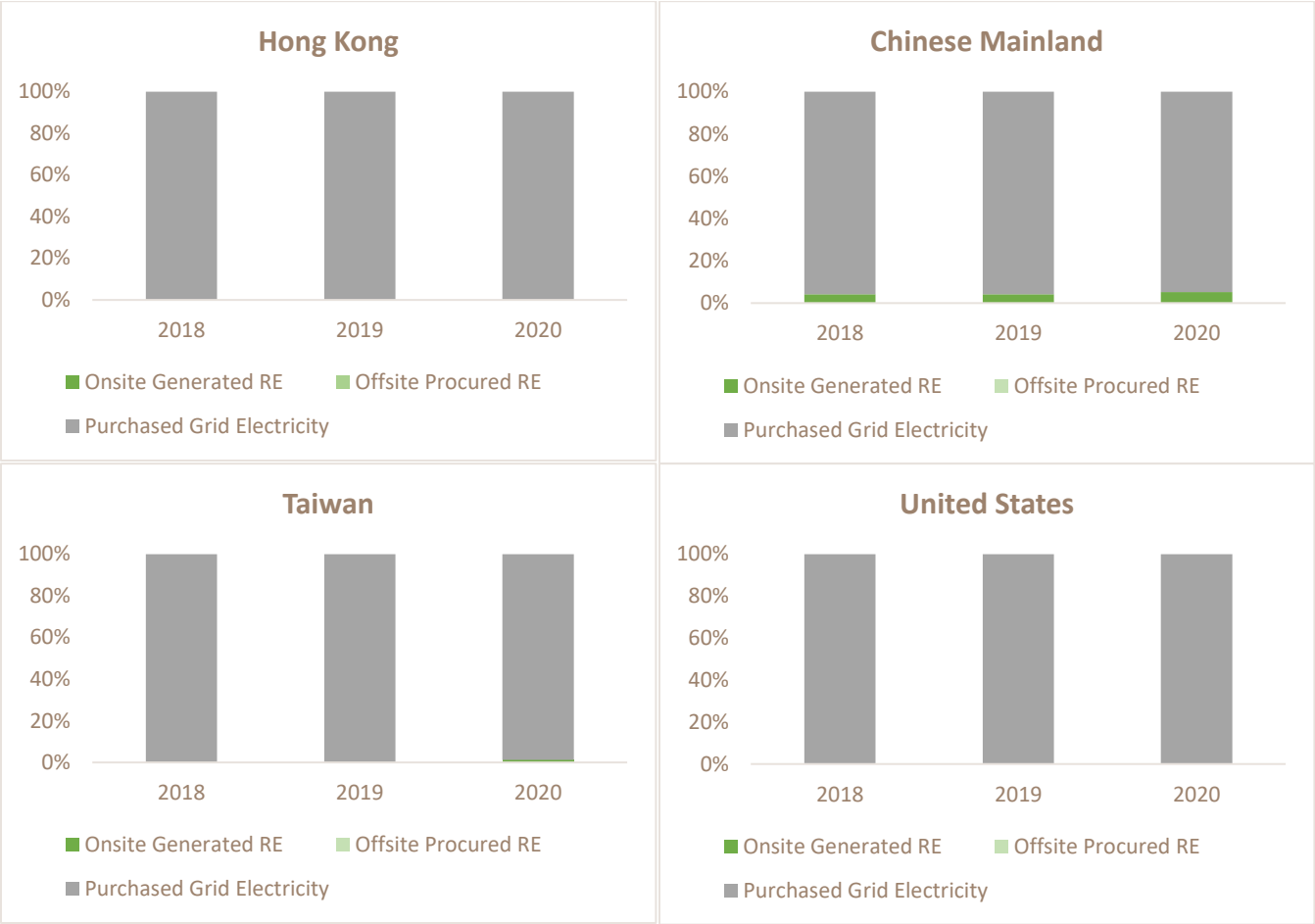
4. Driving Factors Analysis

4.1. Energy Use Ratio (EUR) Improvement by Market (Scope 1 & 2)



The EUR is a metric to track the amount of energy used in manufacturing plants to produce one litre of beverage (i.e. excluding the fuel consumption for distribution). The EUR in Chinese mainland remained stable throughout the past 3 years. The EUR in Hong Kong and the United States slightly increased by 4% and 3% respectively in 2020 against 2018. However, the EUR in Taiwan has dropped quite significantly by 12% in 2020. This was due to the increase in production volume which gave rise to a higher capacity utilization.

4.2. Change in Renewable Energy (RE) % by Market (Scope 2)



A part of electricity consumption in Chinese mainland was generated by onsite photovoltaic panels. The % of total electricity consumption that is sourced from renewable energy in Chinese mainland increased slightly from 4% to 5% in 2020. Other markets were consuming very low or no renewable energy in the past 3 years.

Over 2021 we will progress two key projects: (a) reviewing our strategy on in-house PV installations – leased or owned systems, how we manage these contracts, re-looking at their efficiency, what others we could do and how we mandate green attributes with these installations; and (b) drawing up a clear RE strategy for Greater China.

4.3. Grid Factor ($kgCO_2e/kWh$) Improvement by Market (Scope 2)

Market	Source of Grid Factor in 2020	2018	2019	2020	% Change
Hong Kong	CLP (2019)[2]	0.510	0.510	0.500	-2%
Chinese Mainland (East)	Baseline Emission Factors for Regional Power Grids in China (2017 Edition)	0.811	0.811	0.811	0%
Chinese Mainland (South)		0.896	0.896	0.896	0%
Chinese Mainland (Central)		0.952	0.952	0.952	0%
Chinese Mainland (Weighted average)		0.869	0.863	0.832	-3%
Taiwan	Bureau of Energy Annual Electricity Carbon Emission Factor (2019) [3]	0.590	0.590	0.509	-14%
United States (WECC Northwest)	US EPA eGRID - eGRID 2020 v2 (2018 data)[4]	0.298	0.298	0.292	-2%
United States (WECC Southwest)		0.476	0.476	0.466	-2%
United States (WECC Rockies)		0.625	0.625	0.581	-7%
United States (Weighted average)		0.409	0.410	0.394	-4%

[2] CLP (2019) Sustainability Report - page 86, retrieved from https://www.clpgroup.com/content/dam/clp-group/channels/sustainability/document/sustainability-report/2019/2019_Material_Topics_Standard_Disclosure.pdf.coredownload.pdf

[3] Bureau of Energy, Ministry of Economic Affairs (2019) Energy Statistic Handbook - page 17, retrieved from https://www.moeaboe.gov.tw/ECW_WEBPAGE/FlipBook/2019EnergyStaHandBook/index.html#p=16

[4] US EPA eGRID (2020) – 2018 Data, retrieved from https://www.epa.gov/sites/production/files/2020-01/documents/egrid2018_summary_tables.pdf

Grid factor refers to the emission factor ($kgCO_2e/kWh$) associated with each unit of electricity provided by the regional electricity system.

In the Chinese mainland, the sources of grid factors had no updates in recent years. However, there are reductions in terms of the weighted average due to the variation of energy consumption proportion of each sub-region (e.g., energy consumption from high-grid factor sub regions have demonstrated reduction in electricity consumption).

Besides the situation of the Chinese mainland as mentioned above, all regions have demonstrated improvement in their grid factors, and this trend we expect to see continue.

4.4. Recycled Content, Collection & Recovery Rate for Key Materials (Scope 3)

Recycled Content

(Created as a placeholder for completeness, will be populated in next year's report)

Package Type	Market	2018	2019	2020
PET	Hong Kong			
	Chinese Mainland			
	Taiwan			
	United States			
Aluminium	Hong Kong			
	Chinese Mainland			
	Taiwan			
	United States			
Glass	Hong Kong			
	Chinese Mainland			
	Taiwan			
	United States			

Collection & Recovery Rate

(Created as a placeholder for completeness, will be populated in next year's report)

Package Type	Market	2018	2019	2020
PET	Hong Kong			
	Chinese Mainland			
	Taiwan			
	United States			
Aluminium	Hong Kong			
	Chinese Mainland			
	Taiwan			
	United States			
Glass	Hong Kong			
	Chinese Mainland			
	Taiwan			
	United States			

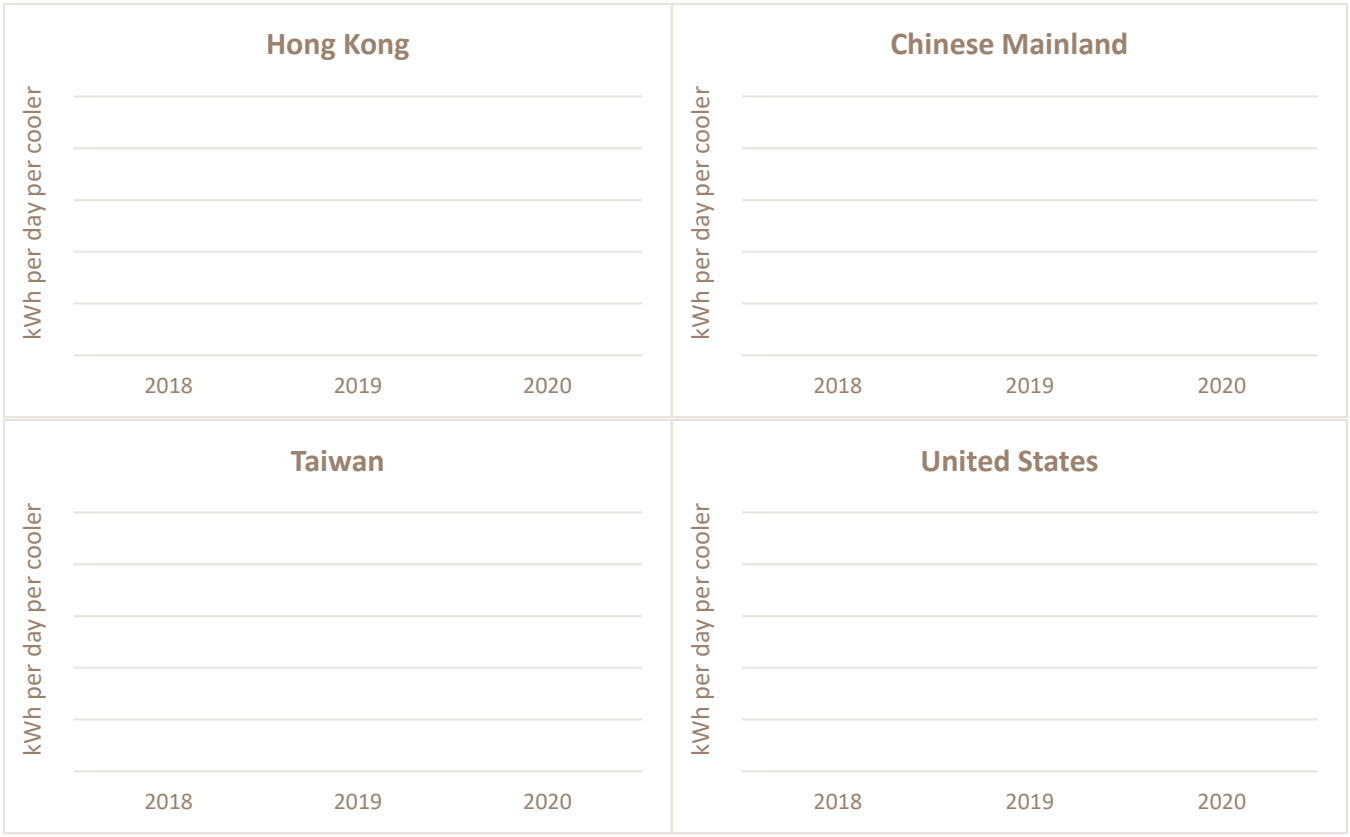
4.5. Material Supplier Emission Intensity (kg CO2e/ kg of Material) (Scope 3)

(Created as a placeholder for completeness, will be populated in next year's report)

Material Type	Market	Source of Emission Factor	2018	2019	2020
PET	Hong Kong				
	Chinese Mainland				
	Taiwan				
	United States				
Aluminium	Hong Kong				
	Chinese Mainland				
	Taiwan				
	United States				
Sugar	Hong Kong				
	Chinese Mainland				
	Taiwan				
	United States				

4.6. Cooler Energy Efficiency (Scope 3)

(Created as a placeholder for completeness, will be populated in next year's report)



4.7. Projects in Priority Order

Scope	Reduction Measures	Progress Updates
Scope 2	100% RE consumption from bottling plants	Projects have commenced for the Chinese mainland and in the US, which we intend to report on in 2021's annual SBT report.
Scope 3	Increasing recycled primary packaging content	In 2020 in the US the recycled content in the Aluminum can bodies was 83% and in the can lids at 47%, bringing an average based on weight to 77%. rPET within the US water packaging (case-pack Niagara) we believe is moving to 100%, which we believe will happen by 2023. In carbonated drinks rPET % should get to 25% by 2021. In HK all water bar the 4.8L and 5L bottles is now in 100% rPET and over 2020, carbonated beverages in <600ml got to 25% rPET. For HK's aluminum cans, it is expected that by the end of 2021 this will move from the current 0% to 10% in the standard can bodies (330ml). In Taiwan it looks as if the laws around recycled content in food-grade packaging's could be about to change and in the Chinese mainland work is being done to build a process around recycled content adoption in food-grade packaging's.
	Increasing primary packaging post-consumer recovery rates	Globally we are hindered in obtaining data that is timely and credible. Work is going on in this space with TCCC and with Industry to try and rectify this situation.
	Improving energy efficiency for CDE	Materially this is very much around how quickly we can transition the older not so energy efficient CDE in the Chinese mainland to split type (or other types) of higher energy efficient models. One smaller cooler (398L) partially transitioned in 2020, and on the coolers which did transition a 39% energy efficient improvement was seen. The aim is to carry on this work across the other cooler sizes

		and marry this with accelerated depreciation rates on the older cooler equipment.
	Supplier engagement on packaging and ingredients	It is envisaged one project will commence in 2021, which we will report on next year. This is seen as a pilot to see whether we can move one supplier from a global emission factor to a supplier and location (plant) specific emission factor. If so, the intention is that we (with TCCC) will look to roll this methodology out across the other key suppliers.

===== THE END ===