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CLIMATE



THE COCA-COLA COMPANY



STRATEGY GUIDEBOOK

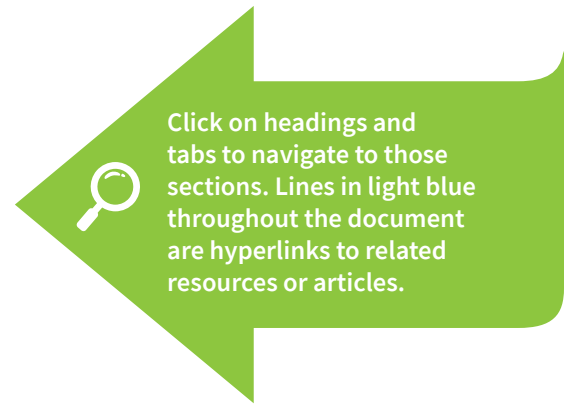


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THE PURPOSE OF THIS DOCUMENT

The purpose of the Climate Strategy Guidebook is to equip Coca-Cola system associates with the tools needed to implement climate plans and programs at a global, regional and local level.

The document shares some of the work that we are already doing across the system to reduce our greenhouse gas (GHG) emissions and make our business more resilient to climate change impacts. Throughout the guidebook, we present the history and methodology for the goals that we have set – and that will continue to drive our response to climate change as a system. In addition, we present case studies of successes that have been achieved across the Coca-Cola system so that local operations may get ideas for things that can be replicated in your organization(s) or geography/ies.

What Is Included in the Guidebook?

This document is divided into three major sections based on the major action areas of our climate plan:

Our Impact on the Climate

Reducing our
impact on the
climate, motivated
by a new science-
based target

The Climate's Impact on Us

Understanding,
evaluating and
responding to the
climate's impact
on us

Collaborating for a Better Climate: Stakeholder Engagement

Working with
others to realize
potential
opportunities
to shape future
action in this area

What Should You Do with the Information in the Guidebook?

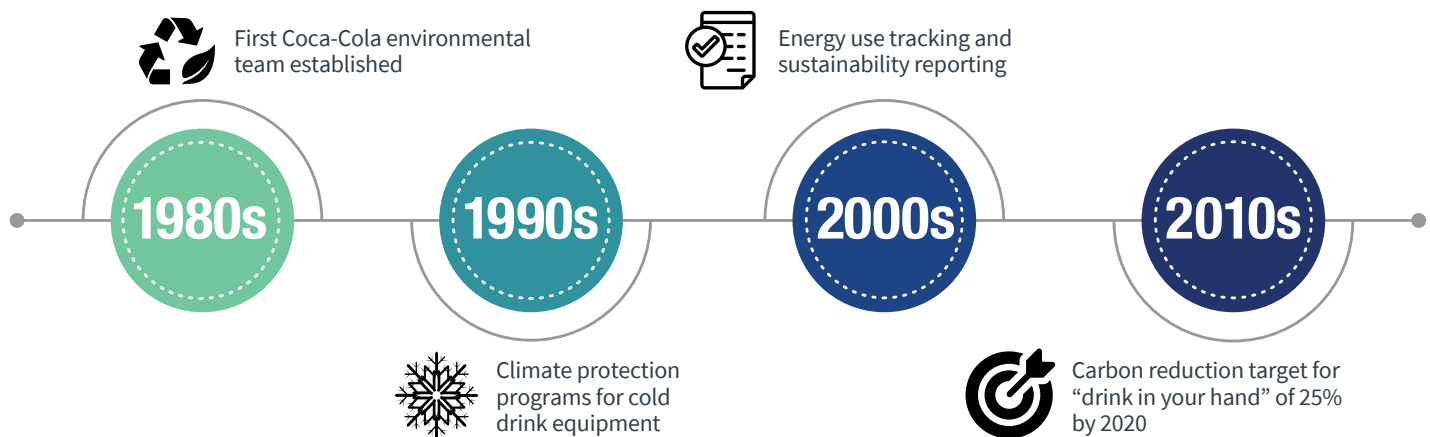
The goal of preparing this guidebook is to provide the information needed to start the creation of local action plans. To achieve the goals that we have set around reducing GHG emissions and increasing our resiliency to climate change requires engagement across our entire business – we need your teams to be part of our solution. (This guidebook is not intended for use with external audiences or media engagements.)

INTRODUCTION

The Coca-Cola system has a legacy of engagement on energy and climate protection. Our first environmental team was formally established in the 1980s as a response to the energy crisis, and since then, energy management programs have been core to our environmental approach. In the 1990s, we launched climate protection programs aimed at reducing the emissions associated with our cold drink equipment, as we and other businesses sought to eliminate Hydrofluorocarbon refrigerants from our supply chain.

In the late 1990s, we began tracking energy usage from our production facilities around the world, which helped form the basis for our reporting in the early 2000s. We established goals and targets for energy usage in production facilities, and later, across our supply chain. In 2013, we established a target to reduce the carbon footprint of the “drink in your hand” by 25% by 2020 vs. a 2010 baseline.

Figure 1. TCCC Climate Engagement Timeline



As of the end of 2019, we had reduced our carbon footprint 23% towards the 25% goal, making great strides in many of these areas. However, there is always room for improvement. When the “drink in your hand” goal was set in 2013, we were ahead of our time, as many companies had yet to set full value chain* targets for carbon footprint reduction. Since then, there has been a significant global shift in the conversation around climate change. One of the major events to catalyze this rise in awareness was the famous Paris Agreement, stewarded by the United Nations Framework Convention on Climate Change (UNFCCC) in 2015.**

* See Figure 2 for more detail on the scope of our full value chain.

** The goals of the Paris Agreement are to reduce carbon emissions to a level that would keep average global temperature increase below 2 degrees C, and to strive for only a 1.5 degree C rise.

Throughout 2018 and 2019, we worked with a group of NGO stakeholders to set a Science-Based Target (SBT) for reducing our carbon footprint, which is now a public goal as of January 2020. The level of reduction outlined in this target is aligned with the climate science adopted in the Paris Agreement and indicates the share that we as a system must reduce, in order to contribute our fair share of GHG emissions reduction to global efforts (more on page 14). As stated, our goal is the following:

“The Coca-Cola Company sets a target to reduce absolute scope 1, 2 and 3 GHG emissions 25% by 2030 from a 2015 base-year.”

(See page 11 for further information)

Achieving these reductions will require us to continue the progress we have made over the last few years, but also to build out new programs. Importantly, the work we are doing through World Without Waste, product reformulations and sustainable agriculture could help us achieve a significant portion of the target. Changes happening to energy utility grids and other general improvements in low-carbon technologies across the world could help with roughly a quarter as well. Therefore, new programs will focus on the remaining amount of reduction needed towards achieving the target. Because up to 90% of the carbon footprint of our business is embedded in the things we buy, we know there will be a major focus in engaging suppliers. Beyond packaging and agricultural procurement, we are planning more robust supplier engagement programs on cold drink equipment and renewable energy.

This new climate plan is not just about our carbon footprint or our impact on the climate. It is also about understanding and responding to the climate’s impact on us. Through a new effort on climate resilience, we will build out programs to assess, quantify, mitigate or adapt to these risks across our supply chain, whether they be in physical infrastructure, water or agricultural supply or vulnerable communities of consumers or farmers. Similar to our work with packaging, we know we can’t achieve these goals alone.

Figure 2. Carbon Footprint Across the Supply Chain

CARBON ACROSS OUR VALUE CHAIN

The efforts to reduce our carbon footprint are focused on five areas of our value chain, including growing our ingredients, producing our packaging, manufacturing, distributing and refrigerating our products. Packaging and refrigeration currently have the highest share of our emissions.



Ingredients
20 - 25%



Packaging
25 - 30%



Manufacturing
10 - 15%



Distribution
5 - 10%

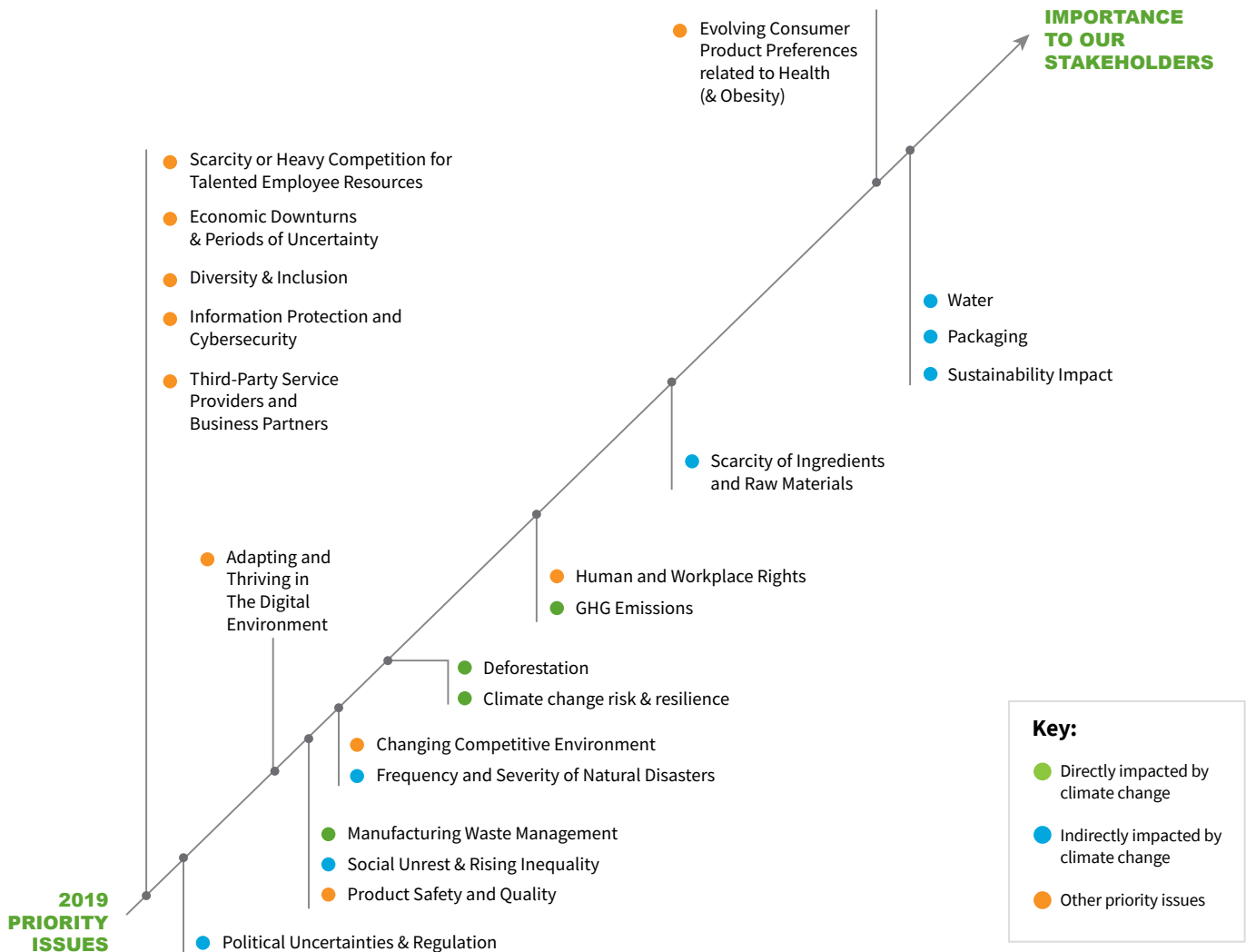


Refrigeration
30 - 35%

We will partner with suppliers, customers, peers and competitors, NGO stakeholders and governments as we hope to shape and influence programs and policy in this area.

Our holistic climate strategy addresses many of the issues that have been identified as the highest-priority environmental, social and governance issues for our business and stakeholders. Our priority issues were identified during analysis conducted in 2019. Figure 3 illustrates how our climate strategy maps across these priority issues.

Figure 3. Climate Strategy Mapped Across Priority Issues



INTRODUCTION

**OUR IMPACT ON
THE CLIMATE**

**THE CLIMATE'S
IMPACT ON US**

**COLLABORATING FOR
A BETTER CLIMATE**

DEFINITIONS

Each section in this document follows a similar structure that includes the following sequence:

ASSESS

What is the starting point?

DISCLOSE/COMMIT

What is our goal?
What are our public commitments?

ENGAGE

What are we doing to achieve our goals?

INNOVATE

What is left to be done?

Within each section, this sequence of content will provide an overview of the approach, key actions you can take to get started and examples of programs already in place in some parts of the system.

Because climate work is not new to the system, we do have some good programs in place already. There are several case studies throughout this document that will give you ideas for how you can tackle improvements in your region.



THE COCA-COLA COMPANY



OUR IMPACT ON THE CLIMATE



KEY MESSAGES

- **Climate change is a profound challenge.** We are partnering with other businesses, civil society organizations and governments to support cooperative action on this critical issue and are taking action in our own operations and supply chain.
- **In 2013, our goal to reduce the carbon footprint** of “the drink in your hand” by 25% across our entire value chain – ingredients, manufacturing, packaging, distribution and refrigeration – was industry-leading.
- **We’ve worked hard to reduce our climate impact** across our value chain by 23% (2019 figure) since 2010 and are on track to meet our goal of 25% reduction by December 2020. We also recognize there is still more to do. And, climate science tells us that even the most rigorous past goals don’t go far enough.
- **So, aligning our efforts and goal-setting with climate science is a natural and necessary next step.** That’s why by 2030 we’ve committed to reduce our total carbon emissions 25% below where they were in 2015. That means no matter how much we grow between now and then, we will emit 25% less carbon in 2030 than we did in 2015.
- **Our 25% carbon reduction goal is a science-based target developed in partnership with third party experts and NGOs.** The 25% isn’t random or arbitrary. It’s the share of carbon we need to reduce as a company to help keep global climate change safely below the 2-degree threshold.

OUR IMPACT ON THE CLIMATE

As a company, we detail our impact on the climate and will be tracking the quantity of greenhouse gases we release through our business operations – our carbon footprint. In this chapter, we discuss Coca-Cola’s carbon footprint and the goals we have set to mitigate, or reduce, our impact.

ASSESS

Coca-Cola emits GHGs across five areas of our supply chain: Ingredients, Packaging, Manufacturing, Distribution and Cold Drink Equipment. Figure 4 describes what activities and contributions to GHG emissions are included in each of the five areas of our value chain.

Figure 4. TCCC System Carbon Footprint Areas of Our Value Chain

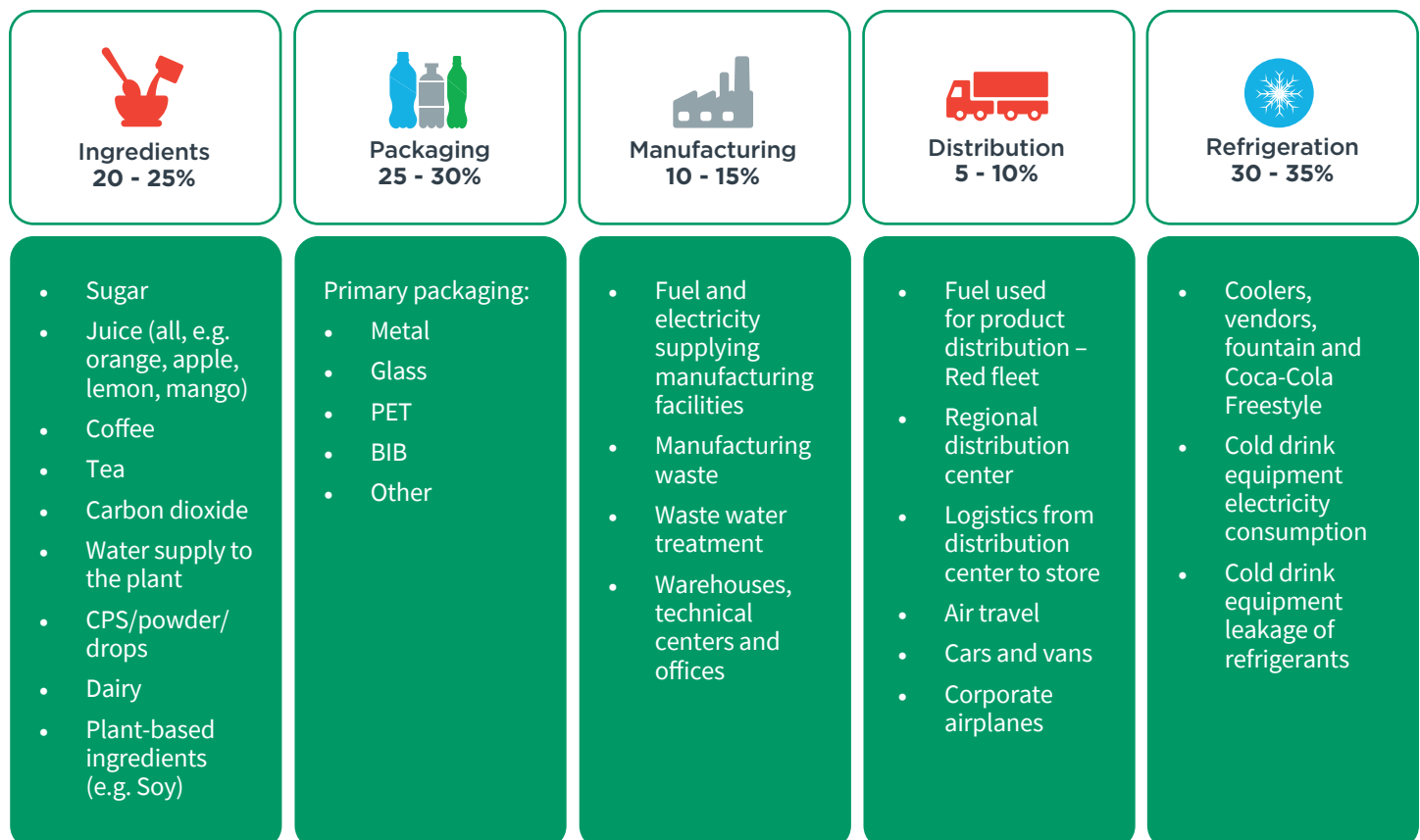
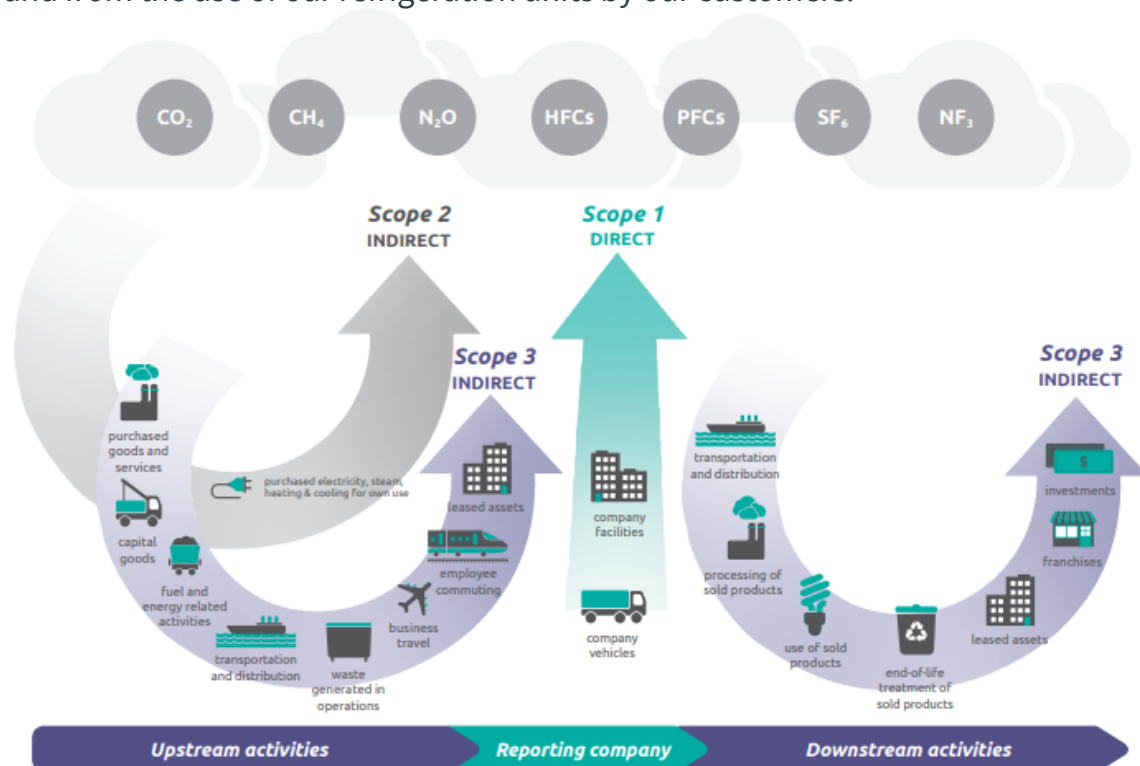


Figure 5. What Is Included in a Carbon Footprint

A carbon footprint quantifies the total GHG emissions produced directly or indirectly from a company's activities. Though it may seem a simple concept – the calculation of a carbon footprint is quite complex, governed by detailed methodology and terminology. We have presented a simplified version of our GHG footprint in this document, but as you start the process of developing your own carbon footprint, there are critical definitions that you will need to know.

- **Scope 1 Emissions (Direct GHG Emissions):** Emissions occurring from sources owned or controlled by the company. For us this includes the combustion of fossil fuels within our buildings and fuel consumption in fleet vehicles.
- **Scope 2 Emissions (Indirect GHG Emissions):** Indirect emissions resulting from the generation of purchased energy. For us this includes the emissions resulting from the generation of electricity, heat and steam purchased by us from a utility provider.
- **Scope 3 Emissions (Other Indirect GHG Emissions):** All other emissions in the value chain, both upstream and downstream. For us this includes emissions from growing and processing the ingredients for our products, from producing and landfilling our packaging and from the use of our refrigeration units by our customers.



Coca-Cola has a long history of tracking our environmental impact across our value chain. Since the late 1990s, we have been tracking energy usage from our production facilities across the world, a subset of our manufacturing impact. In 2013, with the development of our “drink-in-your-hand” target, we established 2010 as our baseline year and calculated our total GHG emissions across areas of our value chain, increasing our understanding of the relative priority across the value chain.

In 2015, the system was responsible for releasing approximately 70 million metric tonnes of carbon dioxide equivalent (mtCO₂e) across all areas of our value chain, including our ingredients, packaging, manufacturing, distribution and coolers. This is comparable to the emissions that would be released by 79 million passenger cars over the course of a year or almost one-third of the total passenger cars registered in the United States.

The calculation of our corporate-level GHG emissions is aligned with GHG Protocol standards ([Corporate Emissions](#) and [Corporate Value Chain, Scope 3 Standard](#)) – the best in practice standard for corporate GHG emissions managed by the World Business Council for Sustainable Development (WBCSD) and the World Resource Institute (WRI). We strongly recommend that any GHG accounting completed at the regional level by partners align with these methodologies, as Swire has done and is presented in the following case study. To learn more and get your project started right, reach out to the Corporate central team.

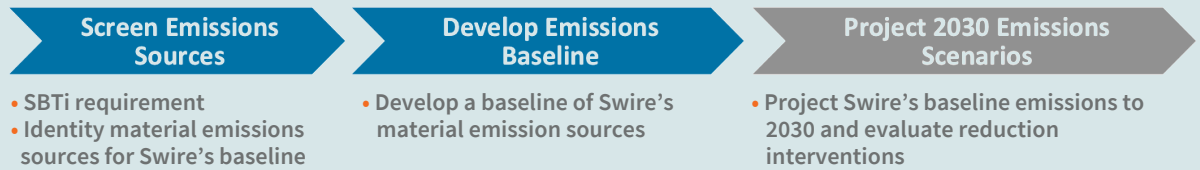


CASE STUDY

Swire Coca-Cola: Developing a Carbon Baseline

Swire is undertaking a pilot study to explore developing a Science-Based Target (SBT) aligned with limiting global warming to 1.5°C. The study aims to develop a comprehensive baseline, identify Swire’s emission hotspots across its entire value chain, and evaluate the interventions necessary to achieve the target without hindering Swire’s business growth plans—specifically as the portfolio expands in Mainland China. Swire’s scope 1 and 2 emissions are already calculated annually, but Swire has not yet calculated scope 3 emissions. As such, the first step was to understand Swire’s scope 3 emissions. To meet the criteria set out by the Science-Based Targets initiative (SBTi), a screening step was completed to determine the applicability of the scope 3 categories¹ to Swire’s baseline. This scanning ensured that the target when set, would cover at least two-thirds of total scope 3 emissions, as required by the SBTi.

Figure 6. Process for Swire's Carbon Baseline Exercise

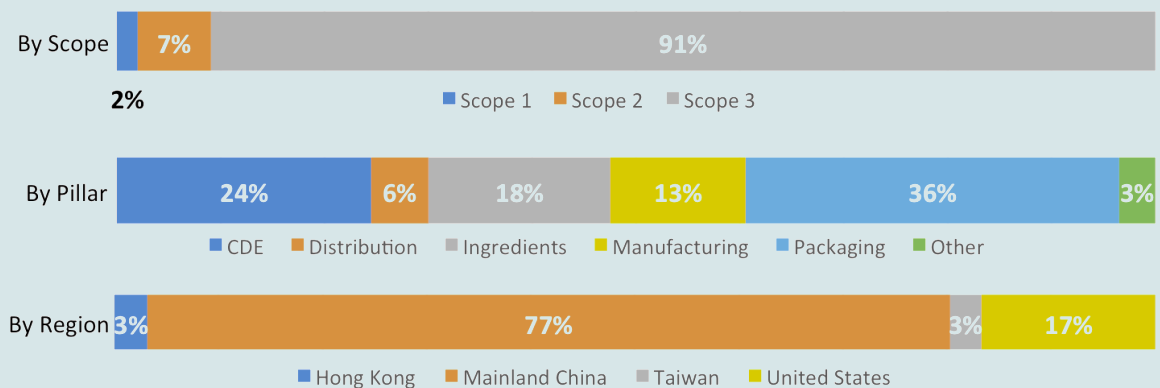


High-level Findings

The screening and baseline exercise confirmed Swire's initial expectations of GHG emissions hotspots, illustrated in Figure 7:

- Scope 3 represents the vast majority (>90%) of Swire's overall emissions
- Mainland China is significant (>70%) of Swire's overall emissions
- Two of the five areas of our value chain make up 60% of Swire's overall emissions: Packaging and Cold Drink Equipment

Figure 7. Swire's Breakdown of 2018 Emissions



¹Based on the Greenhouse Gas Protocol Corporate Value Chain Accounting and Reporting Standard

Critical Success Factors for the Rest of the TCCC System

Scope 3 emission inventories: This can get complex quickly, so it is critical to utilize available tools to efficiently deliver a baseline relevant that is relevant to emissions reduction efforts.

Don't re-invent the wheel: Leverage TCCC's vast knowledge base around Science-Based Targets and climate impact reductions in the supply chain. Communication between TCCC and Swire was key to Swire developing a full scope 3 baseline with significant primary data in less than six months. In particular, the references available from studies completed by TCCC on lifecycle emission factors were critical to success.

Avoid getting into more detail than you can manage: Identify and rule out emission sources that are not material to your emissions reduction efforts early on. For Swire, several criteria were considered to identify material emission sources aligned with the GHG Protocol Corporate Value Chain Standard:

- The emission source is a priority issue for Swire or TCCC
- The size of the emission impact is significant
- Swire has influence over the emission source
- Actual data was available

Key Learnings from Swire's Process



Overall Swire had limited data consolidation, coordination and review at the group-level. Regional operations (e.g. TCCC ecosystem of CCNA and co-packers in the US), organizational/team structures, and data systems across Swire vary significantly and as a result data is tracked using different methodologies. On a positive note, most of the information requested appeared to be captured within Swire or the TCCC system even if it could not be extracted in the way the baselining exercise required. Enhancements from Swire's existing tracking methodology, data systems and consolidation approach can be made to align with what is needed to baseline and track carbon reduction ambitions moving forward.

“It was critical to the success of this project to align methodologies and maintain a close channel of communication with TCCC team. As a bottling operation with challenges specific to our geography, making sure we align with the global methodology helps ensure that the targets we set locally are relevant to the global goal as well.”

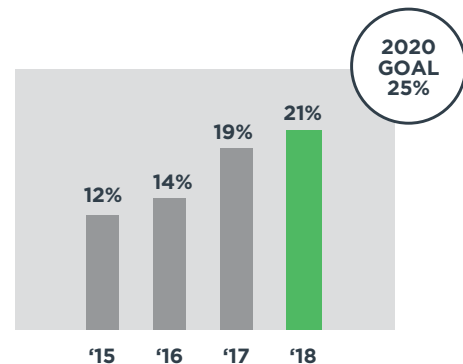
- William Davies, General Manager of Sustainability, Swire Coca-Cola

DISCLOSE/COMMIT

As we transition from tracking progress against the “drink-in-your-hand” goal to the methodology for the SBT to align with current climate science. The Science Based Targets Initiative (SBTi) recommends this approach of aligning with officially recognized climate science for target-setting. These SBTs are now the widely accepted best practice for company carbon mitigation goals, and as of December 2019 over 740 companies have committed to setting SBTs (and over 310 companies have approved targets set through the initiative).

Our SBT is to reduce GHG emissions 25% across the entire value chain by 2030 as compared to a 2015 baseline. The SBT differs from our existing “drink-in-your-hand” target, because instead of a relative target (to reduce emissions per volume) it is an absolute target to reduce our total GHG emissions by 25%, regardless of our volume growth. This change is aligned with current industry best practice, but it reflects an ambitious decoupling of our GHG emissions from our sales growth.

Since 2013, the system has reduced our GHG emissions in line with goal to reduce the carbon footprint of each “drink in your hand” 25% by 2020. By 2018, it is estimated that we achieved a carbon footprint reduction of 21%, well on our way to meeting our 2020 target.

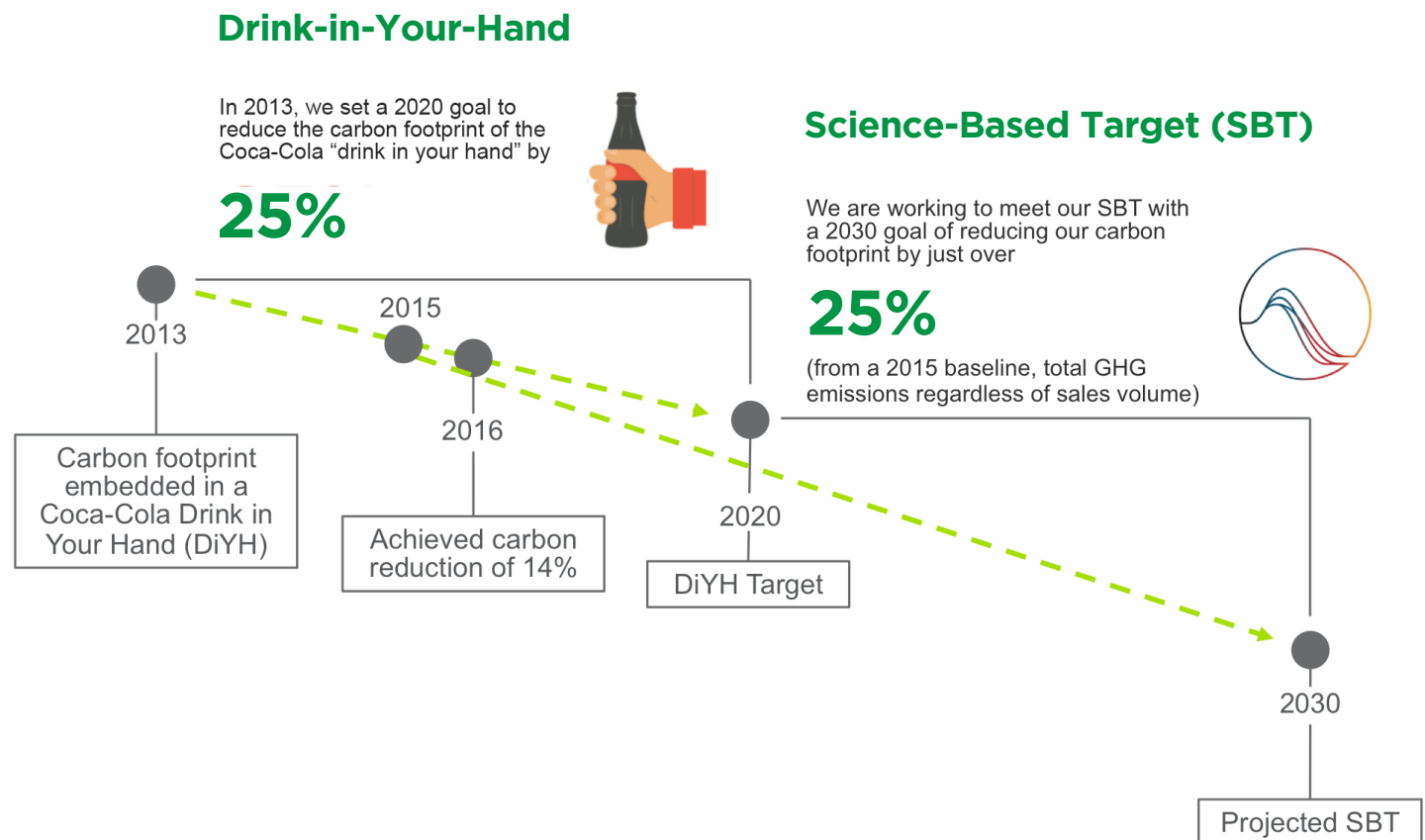


Meeting the SBT goal will not be easy – our estimates indicate that we must double the reduction rate that we have achieved since 2013. But achieving this SBT is something we must do to play our part in helping to solve the challenge of climate change and to ensure that our brands are aligned with consumers’ values and as a partner to governments trying to address the climate challenge. There is clear consensus within the scientific community that we collectively must make significant changes to help solve this challenge.

“Limiting global warming...will entail rapid and far-reaching transitions in land use, energy, industry, buildings, transport, and cities.”

Source: IPCC Summary for Policy Makers ([Click to learn more](#))

Figure 8. Drink-in-Your-Hand vs. Science-Based Target



Remember, the SBT is a global target – we expect significant variation in the achievements and actions on a local level. Today, we have some business units and bottlers that have already advanced GHG mitigation strategies and others that are just beginning their journey. Through this process, we will need to learn from one another and support every one of our businesses units and bottlers to take the next step in their journey to reduce their impact.

Does It Count? Guidelines Around Offsetting

In achieving our target, our priority is to reduce the total GHG emissions that are produced by our business. As such, we have taken a strict approach in the past to include offsetting only in very rare occasions. As we continue to make progress, there are standard business operations where the only option to reduce GHG emissions would be offsetting. When these situations arise, we encourage our teams to look at these options.

A prime example of a potential opportunity to consider offsetting GHG emissions is in air travel. Flying has a relatively high GHG impact, and yet there are times where we just need to be together as a business – but as it stands today, there is no commercial option for no/low-carbon air travel without considering offsets.

In fact, some of our teams have already explored these options. This year WEBU worked with a partner, EcoAct, to support them in offsetting the carbon impact of the Western Europe All Hands meeting, bringing 800 associates together from across Western Europe. In this case, it was estimated that the impact of traveling to Monaco would be 600 tonnes of carbon. This was offset by supporting the Clean Water Project, which supplies communities in Eritrea with clean water, allowing families to avoid burning wood to boil their water and prevent carbon emissions. If you would like to institute a similar initiative in your team or organization, get in touch with the contacts listed at the end of this document.

SETTING SBTs: WHO HAS A TARGET?

TCCC and three of our bottling partners (Coca-Cola European Partners, Coca-Cola Hellenic Bottling Company, Coca-Cola FEMSA) are included in the list of companies who either have or have committed to setting a SBT. Figure 9 provides a snapshot of some of our peers in the Food and Beverage arena who are setting SBTs.

We will also explore methodologies for identifying and integrating the carbon-related co-benefits of our watershed protection (Replenish) programs into our value chain GHG emissions numbers.

Figure 9. Our Peers Have Already Set SBTs



Bolded companies have approved science-based targets

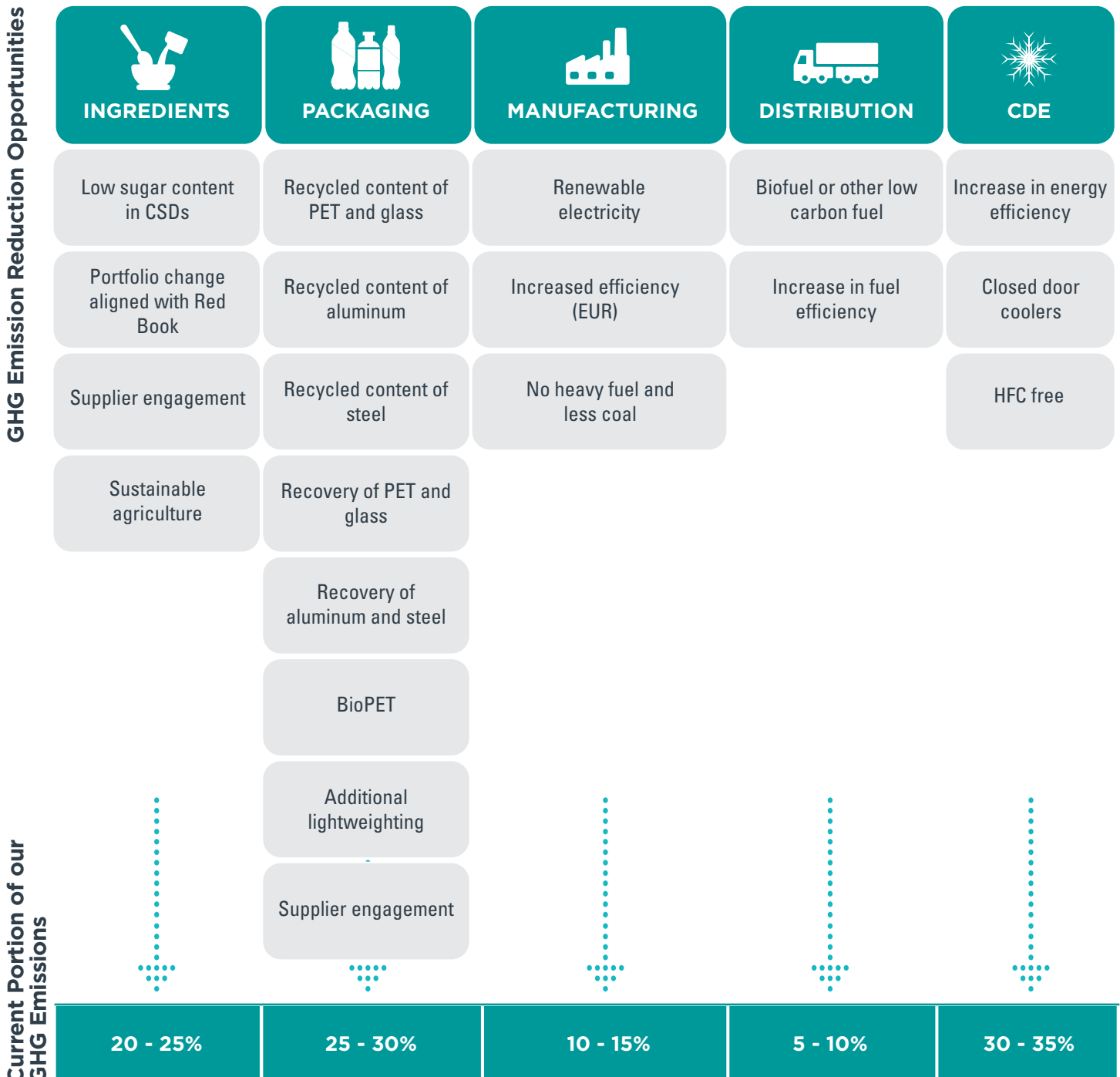
ENGAGE

A comprehensive strategy will be required to deliver on our SBT. This will require input, action and measurement by BUs and bottlers across the system. As a company, we are pursuing a strategy that focused on substantial reduction in our real emissions, by reducing our use of GHG intense sources, increasing our use of renewable energy, reducing the carbon intensity of our packaging and responsibly sourcing our ingredients.

Figure 10 presents a variety of the significant carbon footprint reduction opportunities that will need to pursue to meet the SBT, mapped across the five areas of our value chain.

Figure 10. The Reduction Opportunities

Throughout the remainder of this section, we share more details of the opportunities available across each of the five areas and share case studies highlighting the innovative work that is already reducing GHG emissions across the Coca-Cola system.





INGREDIENTS

Since 2013, we have engaged suppliers on the sustainability of our ingredients through our sustainable agriculture program, which is rooted in our supplier guiding principles. Improvements in agriculture have generated environmental benefits including carbon mitigation, but we have not tracked these benefits comprehensively.

Local business units and bottlers should understand the sourcing process and origin of key agricultural ingredients used. Through working with Procurement colleagues and the Cross-Enterprise Procurement Group, we can improve the understanding of sustainable agriculture practices, and track benefits of changes in how our ingredients are grown.

We are exploring the methodologies for calculating and accounting for these benefits. Our sugar reduction efforts throughout our portfolio provide carbon benefits – as sugar has a higher carbon footprint than many other agricultural ingredients, and there can be significant impact when we change ingredient formulations.

Financial Impact Scale Key for Case Studies

Financial impact scale on case studies are a broad estimate of the level of overall financial commitment required to implement the programs described in the case study. They are not meant to provide granular detail, but only to provide directional guidance on the level of investment required.



25k – 100k



> 100k – 500k



> 500k



CASE STUDY

Supporting Sustainable Agricultural Practices

We are committed to supporting sustainable agricultural practices across our supply chain, including encouraging low carbon agricultural practices. We are invested in these practices across our ingredient portfolio, but here we discuss two of our most critical ingredients: sugar and corn.



Sugar: We work with Bonsucro and other organizations to improve the sustainability of sugarcane supply. Fifteen of our top bottlers, representing approximately 85 percent of the system's sugar purchases, have committed to regional plans to reach our sustainable sourcing goals. There are a variety of sugar stakeholder management, engagement and procurement activities underway across our geographies. Efforts include supporting pilot suppliers in Mexico to assess Bonsucro readiness; collaborating with Bonsucro to certify suppliers in Brazil; sourcing 100% Bonsucro-certified sugar through Azunosa in Honduras; recognizing the Smartcane standard in Australia and encouraging suppliers there to achieve Bonsucro certification; and working with suppliers in Africa to ensure global recognition of local programs.

Key External Partners: Suppliers, Third Parties



Corn: We advance our sustainable sourcing through membership in Field to Market: The Alliance for Sustainable Agriculture, which works to develop more sustainable corn production in the United States. With our four biggest corn suppliers, we have worked to expand the application of Field to Market's Fieldprint® Platform, a data-driven tool that quantifies water use, energy use, GHG emissions and other measures of sustainability performance. As a result of work like this, we have increased our global percentage of sustainably sourced corn into the range of 51%-75%, when we were only sourcing less than 25% from sustainable sources in 2016 and 2017.

Key External Partners: Suppliers, Third Parties



PACKAGING

Packaging currently contributes significantly to our total GHG emissions footprint – around one-third of our total emissions, so there are significant reduction opportunities. The majority of GHG emission reduction opportunities in packaging are focused around packaging collection and use of recycled content. The work we are doing to advance our World Without Waste program—which includes targets for using 50% recycled material across our primary packaging types and collecting / recycling a package for every bottle that we sell by 2030—will contribute significantly to our GHG emissions reduction goals within this area and should be used as a guideline and starting point.



However, there are significant opportunities for further reducing the material we use in packaging, through further light weighting or by ramping up refill and reuse business models. Engaging suppliers more directly beyond our circular economy and packaging goals may bring additional benefit, as we work to support them in reducing the GHG emissions associated with the packaging of materials they supply to us.

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Case Study

Investing in Waste Reduction and the Circular Economy

Understanding our role in the consumer goods market, we have invested heavily in waste reduction and circular economy strategies, including:

- In 2018, we committed \$15 million to invest in Circulate Capital, an investment management firm dedicated to incubating and financing companies and infrastructure that prevent the flow of plastic waste into the world's oceans, particularly in South Asia & Southeast Asia.



- Our Research & Development team is evaluating new recycling technologies on an ongoing basis, and we are part of the Industrial Advisory Board for DEMTO (developers of the gr3n technology for chemical recycling).
- In Mexico, our bottled water brand, Ciel, is now available in a 100% recycled PET bottle, which uses material recycled through collection and conversion infrastructure financed by our company and bottlers.
- In Australia, our Mount Franklin water brand is also available in 100% rPET, and other water brands are either in plan or have launched 100% rPET bottles, including Hong Kong.
- In terms of greater innovation, we are continuing to expand our Freestyle technology, offering a “package-less” delivery model for our beverages. As of 2018, we have now installed more than 50,000 machines serving 14 million drinks daily and continue to expand in Europe and Latin America.

Key External Partners: Suppliers, Third Parties, Industry Partners

“At Coca-Cola Hellenic, we saw the critical linkage between packaging and climate when we set our science-based target. Moving forward to drive global improvements across the Coca-Cola System, we will need to build on World Without Waste (recycling more, using more recycled materials) to make further improvements to reduce our carbon footprint, like more renewable materials, lightweighting and renewable energy in packaging supply.”

- Zoltan Syposs, Vice-President, Quality, Safety & Environment,
The Coca-Cola Company



MANUFACTURING

This area contains the GHG emissions related to operating our global network of manufacturing and bottling facilities. The largest opportunity to reduce our GHG emissions within this area is to source renewable electricity to power our facilities. We have already engaged in the development or sourcing of renewable electricity throughout the world, but we are at less than 20% renewable energy globally. There is a lot more that we can do. Business units and bottling partners should proactively consider renewable electricity options in your decision-making processes.



Implementing energy efficiency strategies in manufacturing has been a long-term priority, and there are further opportunities to reduce our manufacturing GHG emissions. This includes installing energy efficient equipment and optimizing systems and processes at each facility.

Further opportunities include substituting carbon-intensive fuels with lower intensity solutions, including investing in co-generation equipment, reducing, if not eliminating coal or heavy fuel use where possible, and considering the use of low-carbon sources, like biofuels where applicable.

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Case Study

Expanding the Use of Renewable Energy Across the Value Chain

Many of our bottling partners have implemented ambitious renewable electricity or energy goals and many have achieved significant percentages to date. For example, Coca-Cola European Partners achieved 100% renewable electricity for their operations in 2018.

In addition, Coca-Cola Femsa achieved 100% clean energy use in their Brazilian operations in 2017. Hindustan Coca-Cola has also made significant investments in on and off-site solar energy to drive towards an ambitious renewable energy target.



In India and Pakistan, our concentrate business, Commercial Products Supply (CPS) has developed onsite solar generation projects, leveraging tax-incentive investment policies.

Coca-Cola Amatil in Fiji installed 3,860 solar panels (1.1MW) on the roof of its Suva manufacturing facility, generating around 40% of the total energy requirements for this facility from these solar panels. This system produces approximately 1,408,000 kWh annually, saving 974 tons of CO₂ on an annual basis. This is equivalent to avoiding the use of 414,722 liters of diesel per year or planting 24,964 trees. When the second stage of the project is complete, it is anticipated 80% of the site's energy needs will be solar powered.

Key External Partners: Suppliers, Industry Partners



Case Study

Hindustan Sending Waste Sludge and Spent Carbon to Displace Fossil Coal



During 2019, HCCB embarked on a unique circular waste initiative of using spent carbon and effluent treatment plant sludge. Cement plants in India use huge quantities of sub-bituminous coal as a source of heat and HCCB saw the synergy of sending waste spent carbon and sludge to replace coal. By sending a total of 9,150 MT of spent carbon and sludge for co-processing at cement plants, they helped avoid 4256 tonnes of coal and mitigated 7396 tonnes of CO₂e emissions. Earlier, the spent carbon and sludge would go to hazardous waste facilities for landfilling and disposal. Encouraged by the success of this symbiosis of avoiding emissions and landfilling, HCCB is now planning to use methane emissions from anaerobic treatment processes to pre-heat boiler feed water and save in fossil fuel oils as another circular waste and energy project.

Key External Partners: Industry Partners



DISTRIBUTION

While it is often a very visible emissions source, the GHG emissions associated with the distribution of our products is a relatively small portion of our total GHG emissions. However, many consumers associate our Coca-Cola branded vehicles with our emissions – making this area a key GHG reduction opportunity from a brand awareness perspective.



Reducing the GHG emissions associated with our distribution will require reducing the carbon intensity of the used fuels by transitioning to lower-intensity sources such as biofuels or through electric vehicles. We have already made significant reductions by optimizing distribution routes to reduce mileage, and we can continue to refine these process improvements. Logistics providers can reduce their GHG emissions by increasing the fuel efficiency of their fleets by considering aerodynamic improvements, lightweighting trailers, and using auxiliary power units.

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Case Study

Accelerating Innovation in Autonomous Electric Transport Systems

In late 2019, Coca-Cola European Partners (CCEP) announced an innovative pilot project aimed at reducing distribution-related emissions through a partnership with Einride, a technology company that has developed self-driving electric trucks capable of transporting freight. Einride's trucks, dubbed by the company as "Pods," could serve as a critical technology for reducing carbon emissions from distribution. Through electrification and increased efficiency from digitalization and automation, the Pods have the potential to reduce CCEP's distribution-related emissions by up to 90%.



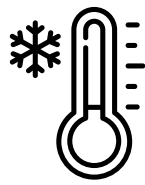
CCEP will be deploying the technology to serve part of its Swedish distribution network in 2020. The pilot project will make CCEP the first beverage company in the world to test an electric, autonomous solution to cargo transport on public roads. The Einride Pods will initially transport beverages and returnable materials (e.g., empty pallets and trays) between warehouses in Jordbro, Sweden to allow CCEP and Einride to study the sustainability, safety and efficiency benefits of the technology. Over time, CCEP plans to scale up the number of deliveries between warehouses and expand the footprint of the pilot to other locations.

Key External Partners: Suppliers



COLD DRINK EQUIPMENT (CDE)

Though it varies by geography, Cold Drink Equipment generally represents the largest slice of our GHG emissions and the largest opportunity for emission reductions. Emissions from Cold Drink Equipment primarily result from the energy consumption of the equipment and the leakage of refrigerant into the atmosphere during the equipment's lifecycle. We can reduce electricity consumption and the associated emissions by transitioning towards more energy efficient cold drink equipment in new purchases. Additionally, in many parts of the world we have reduced GHG emissions by adding doors to existing equipment, automating energy management systems, etc.



In addition, we will continue to contribute to innovation around more efficient cooling equipment to support further reductions in this area. The central procurement team has been exploring many exciting innovations in this space with our suppliers, both on components and refrigerant design. They also work with our suppliers to raise their sustainability performance through the use of platforms such as Ecovadis. Please ensure that your local BU or Bottler procurement leads are connected to these efforts.

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Case Study

Moving Towards Sustainable Refrigeration Systems

A major focus for us in reducing our GHG emissions associated with cold drink equipment has been phasing out hydrofluorocarbon (HFCs) refrigerants by using natural refrigerant fluids. In 2018, TCCC and its bottlers introduced 886,693 units of HFC-free refrigeration equipment, bringing us to a total of around 4 million HFC-free coolers and vending machines that we have introduced into the marketplace. Going forward, we will move towards procuring only high-efficiency, HFC-free coolers. In addition, we have more than 5.6 million intelligent energy management devices in use on our refrigeration equipment, which reduces the electricity consumption of our customers and saves them an estimated \$400 million annually.



These intelligent energy management systems contribute to emissions reductions of approximately 3.1 million metric tons of carbon dioxide equivalent per year. In total, the system has invested more than \$100 million to make our coolers more environmentally responsible, including setting standards to help our customers make choices when they are purchasing equipment. We have certified 280 cooler models as meeting our performance standards. More than three-quarters of these certified models are more energy-efficient than legacy models, and 60% have a higher cooling capacity. Nearly 40% are certified to perform in hot or humid conditions.

Key External Partners: Suppliers, Customers



Case Study

Innovation in Cold Drink Equipment: “Peak Shift” Model



In the wake of the March 2011 Tohoku earthquake and tsunami, Japan experienced scheduled blackouts. These blackouts affected Coca-Cola’s nearly 1 million vending machines installed in the country, affecting the ability to provide cold drinks to customers. In response, Coca-Cola’s Tokyo R&D division set out to design a machine that could dispense cold drinks after being shut down for up to 16 consecutive hours. The result was the “Peak Shift” vending machine. This machine is designed to only use power for cooling at night when electricity demand is lower and electricity systems experience fewer demand issues. The machines keep drinks cold while reducing daytime energy use by 95% and consuming 10% less energy overall than an average machine. Much of the fleet of vending machines installed in Japan have now been transitioned to this more efficient technology.

Key External Partners: Suppliers, Customers

Call to Action

The goals that we have set around GHG emission reductions will require the input and engagement of our entire system. There are several key steps that our local and regional system partners can take to plan for and implement practices to support achievement of these global goals.

- ✔ **Measure your impact.** If you don't already have a clear impact of your baseline emissions, start there. Developing a clear understanding of your carbon footprint can help to identify the opportunities for mitigation in your business.
- ✔ **Set your goals.** Each business unit and bottler will have different goals based on the opportunities that are available. Consider the options that are available to your business and set short-term goals to prove out your strategy.
- ✔ **Continue to work closely with key Coca-Cola contacts at the corporate level.** Coca-Cola's corporate team can help to answer questions about methodology and ensure your actions are planned and progressing appropriately.
- ✔ **Share your successes.** Keep the corporate team and your business partners apprised of your progress. This allows us to learn from each other and build on the successes of our team.

INNOVATE

Innovation in over and above programs will be a critical component to achieving our SBT. We estimate that approximately 75% of the GHG reductions that are necessary to achieve the SBT could be achieved through market changes (more efficient vehicles and lower-emissions energy supplies) and programs already embedded in our business, like World without Waste. However, that leaves us with a gap of approximately 25% of the carbon footprint reduction goal.

We are prioritizing some of the emissions sources that will need to be targeted by these innovative programs, including:

- Developing renewable energy purchase programs through our entire supply chain, i.e. supplier/customer green power programs.
- Increased investment in cold drink equipment innovation, including education and programs to encourage customers in making more efficient purchases.
- Increased focus on supplier engagement programs, to reduce packaging and waste, encourage low-carbon production strategies and develop circular economy thinking.

As you continue to innovate and engage, don't let GHG accounting challenges get in the way of implementing a good idea. For example, HCCB has been sending activated carbon and wastewater treatment sludge, both with significant calorific value to cement plants to replace coal. The exact GHG emissions benefit of this opportunity is not yet clear, but it still provides value as part of our global suite of solutions. We need every idea from our business partners and will support you in quantifying your impact and sharing your success with others, so that we can learn across our system.

Some of these examples will apply only to our bottling partners, and some may apply to both our BU teams and bottling partners.



Case Study

Green Power for Cold Drink Equipment (DyDo DRINCO)



In 2002, DyDo DRINCO became the first beverage industry company to participate in a Green Power Certification System. Through this program, energy generation is outsourced for a cost, and in return a certificate is issued, and the customer is recognized for using green energy.

Windmills commissioned by DyDo DRINCO have continued operating since the initial participation in the system, generating approximately 1 million kWh of clean energy annually. DyDo DRINCO increases customer awareness of this program and the importance of renewable energy by placing stickers on all vending machines.



Case Study

Supplier Clean Energy Program (Apple)



In October 2015, Apple launched a supplier clean energy program. The aim of this program is to reduce the carbon footprint of manufacturing by helping their partners transition to 100% clean energy. As part of the clean energy program, Apple and its suppliers will generate and source more than 4 gigawatts of new clean energy worldwide by 2020. The impact of this clean energy program includes bold commitments by manufacturing partners to power all Apple production with 100% renewable energy. Apple has installed 485 megawatts of wind and solar projects across six provinces of China to address upstream emissions that are beyond the influence of their direct suppliers. Altogether, clean energy from supplier projects helped Apple avoid emitting over 1.5 million metric tons of GHG in 2017—this is equivalent of taking more than 300,000 cars off the road. As of April 2019, 44 suppliers had committed globally to producing Apple products with 100% clean energy. Suppliers engage in the program through an online platform that Apple developed to help identify commercially viable renewable energy solutions in regions around the world.



Case Study

Distribution Fleet Vehicles



Medium duty fleet vehicles that make frequent stops throughout the day offer an optimal solution to curb near term GHG emissions through electric adoption. Electric delivery vehicles can be used during the day and charged at night, with no interruption to driving patterns. With nighttime charging comes the potential to use wind energy to charge the vehicles, further reducing the emissions from the transportation sector and integrating renewables. According to one study, the average cost of gasoline over 300,000 miles at \$3.00/gallon comes out to \$150,000, while driving 300,000 miles on \$0.12/kWh electricity would cost only \$42,000.

Recent announcements indicate a larger variety of medium duty vehicles in the U.S. market in the next 5 years, and companies are already making their electrification intentions known.

- In January 2018, Volvo announced it will sell battery electric delivery trucks in North America in 2020, following introduction in Europe in 2019.
- In December 2017, UPS preordered 125 electric semis from Tesla, the largest publicly announced reservation of the vehicles to that date.
- In September 2019, Amazon placed an order for 100,000 electric delivery vans from Rivian, a Michigan-based start-up company.



THE COCA-COLA COMPANY



THE CLIMATE'S IMPACT ON US



KEY MESSAGES

- **We recognize that climate change could have long-term direct and indirect implications** for our business, supply chain and the communities we serve. We have already seen some impacts on our operations and ingredient supplies, as well as its critical link to water resources.
- **We continue to integrate climate and other sustainability risks** into our overall risk management and planning as an organization.
- **We're looking for new ways to proactively address water shortages in vulnerable parts of the world**, so we can help prevent shortages before they even begin. We do this, in part, by understanding how climate change is harming communities and working to stabilize local water access.
- **Science is telling us to expect stronger storms, hotter weather and rising evaporation rates as a result of climate change.** We also know that certain parts of the world, and women in particular, are disproportionately affected by climate change. That's why we're on the ground working with vulnerable communities to better prepare for climate-related changes to the weather and world around us.
- **We understand that the impacts of climate change could affect our business in a number of ways.** We have been working to understand the risks, both to our business and our communities, and we will continue to move forward on developing actions, as well as reporting these issues transparently in our Business and Sustainability Report.

THE CLIMATE'S IMPACT ON US

We operate in an increasingly volatile global climate system. Rising global average temperatures are causing disruptions in weather patterns around the globe, creating more frequent and severe natural disasters, including fires, storms and floods. We have already seen these impacts on our business, from water shortages in key markets to supply chain disruptions from hurricanes and floods around the world. These climate impacts require our system to adapt and build resilience into our value chain.

Climate disclosure is, of course, a company-wide action, championed either at TCCC global level or across a bottling company. Many resilience activities can be put in place at a local level by the BU or bottler.

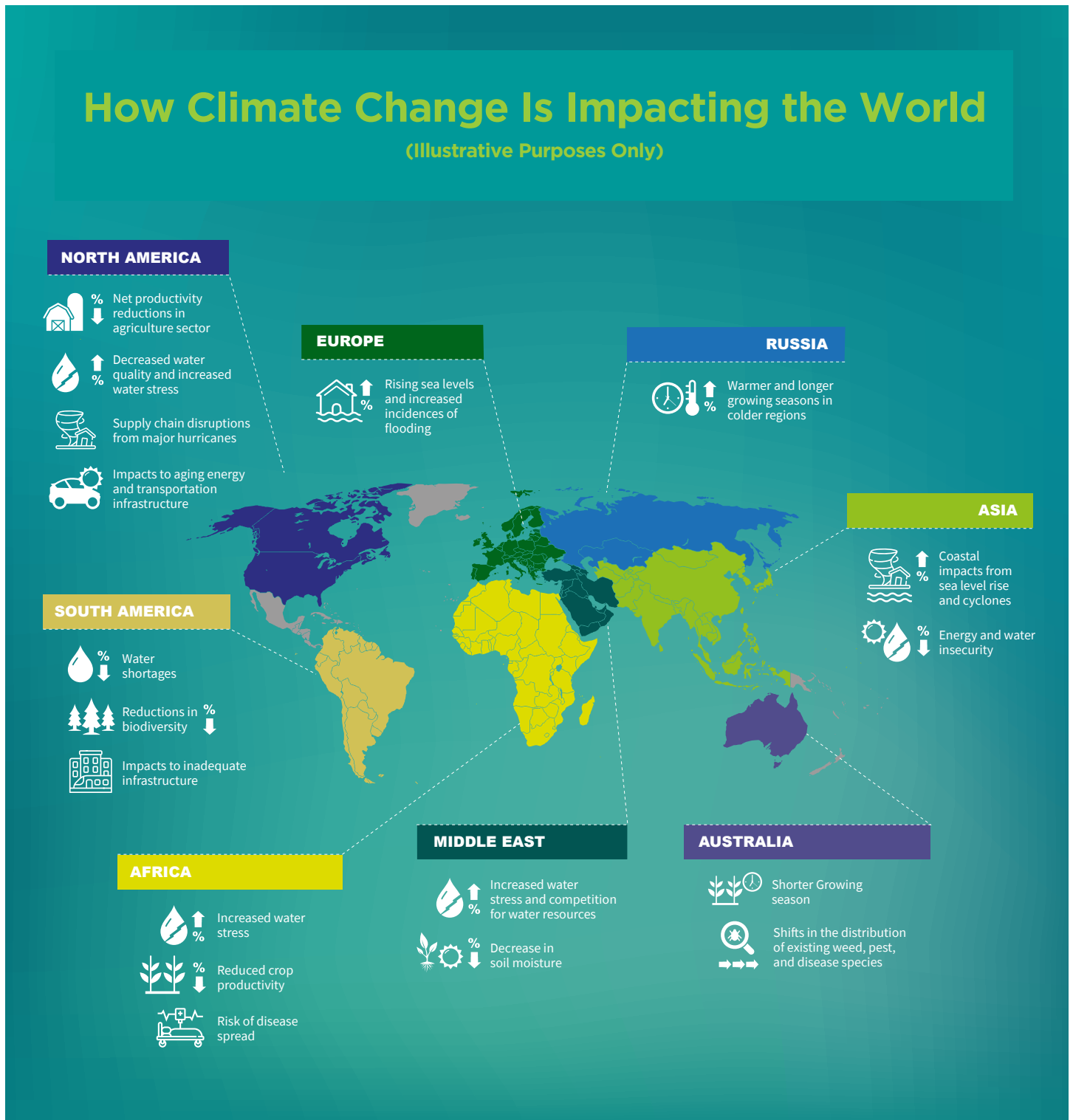
Risks take many forms, impacting our business from ingredient supply to product distribution, as well as creating water stress in many places. We recognize this: managing these risks is a priority, and we have been reporting on climate-related risks since 2008.

Through greater adaptation to climate change impacts, we aim to become a more climate resilient business. Adaptation is the term often used to describe how we can anticipate and plan for climate impacts. Adaptation for Coca-Cola includes anticipating, avoiding, accommodating and recovering from the impacts of climate change to reduce the negative consequences inside our operations, across our supply chains and within the communities on which our business depends. Building adaptive capacity and climate resilience is a key area of our overall climate strategy to help our company and partners navigate an evolving landscape of climate-related risk.

ASSESS

Depending on your location in the world, the impacts of a changing climate can take very different forms. With our global footprint, our system must be prepared to face a variety of evolving climate risks. We must all be aware of the climate change impacts that pose the most likely risks for our regions and areas of responsibility so that we as a team can develop a comprehensive resilience strategy.

Figure 11. Some Examples of How Climate Change Impacts Us Around the World

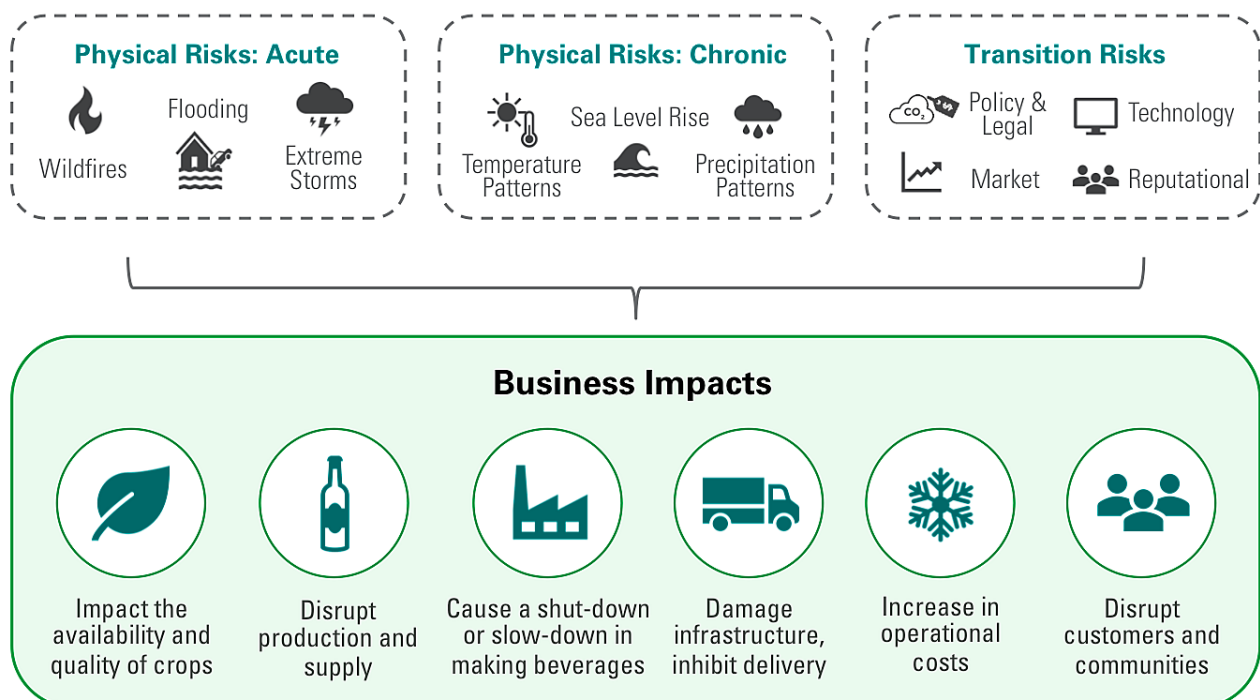


Climate change risks will affect all parts of the Coca-Cola system – from ingredient sourcing to product sales. The risks we face can be broadly categorized into three risk types, following the convention laid out by the Task Force on Climate-Related Financial Disclosures (TCFD), which will be described in greater detail in the next section:

- **Acute physical risks:** Severe or intense climate-related events, such as wildfires, floods and hurricanes, that have the potential to cause significant damage in a short period of time.
- **Chronic physical risks:** Slow-moving or long-term risks typically tied to larger shifts in climate patterns, such as temperature or precipitation trends and sea level rise.
- **Transition risks:** Risks associated with policy, legal or market changes as a result of climate change, such as increased cost of raw materials or increased regulation.

These climate change risks will result in business impacts for our system – some of these key potential impacts are outlined in Figure 12.

Figure 12. Potential Business Impacts from Climate Risks



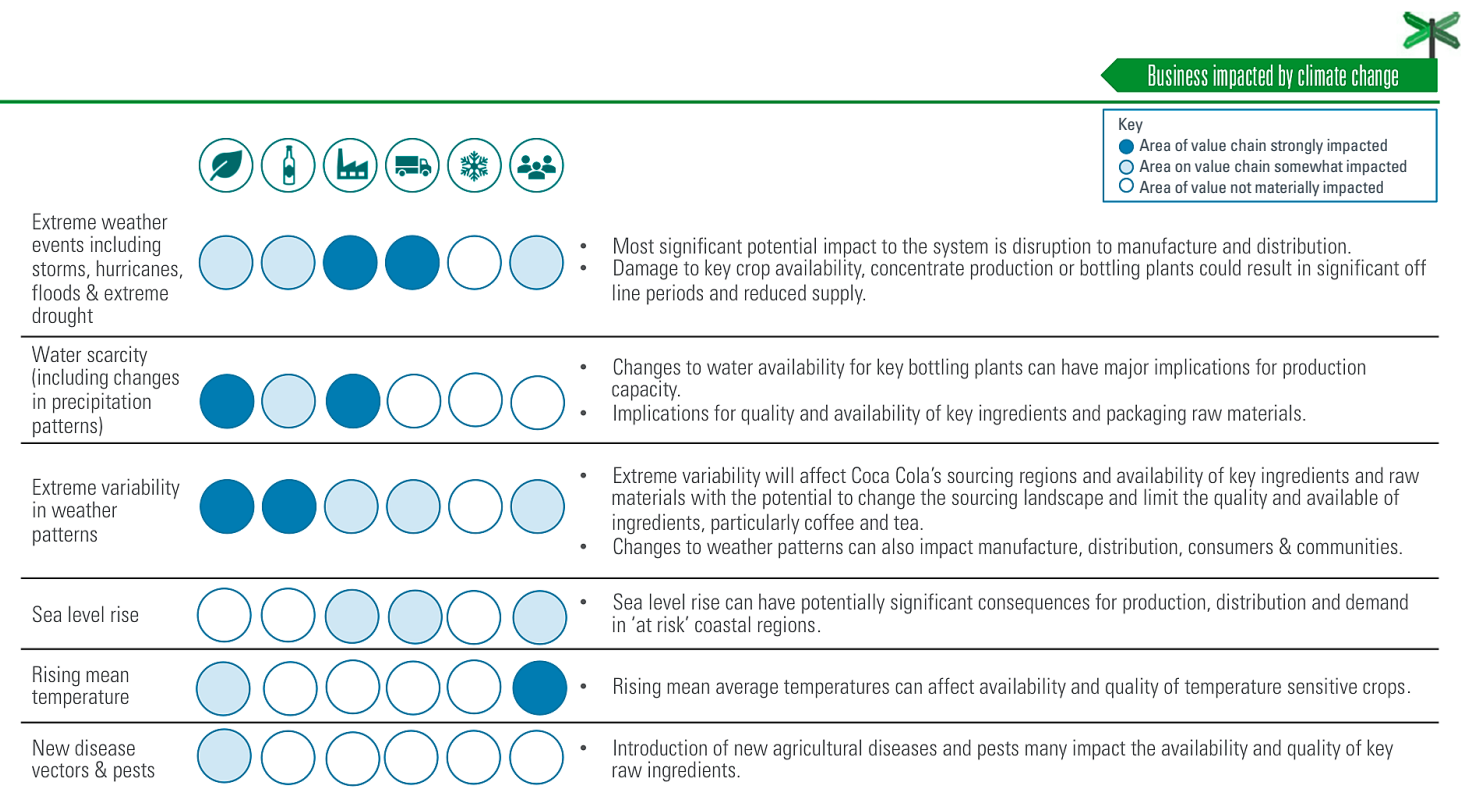
At a global level, we are assessing which climate-related risks are most likely to impact our system. We started by mapping acute physical, chronic physical and transitional risks against our value chain. We then prioritized the risks by gauging potential impacts through assessments with a cross-functional team, in partnership with our Enterprise Risk Management function, as well as our bottling partner Coca-Cola European Partners.

TO LEARN MORE

Coca-Cola European Partners has published a TCFD disclosure based on the work completed as part of the assessment. [You can review that disclosure in this PDF.](#)

Some of the highlights from our initial risk assessment are outlined in Figure 13. This summary of findings provides a sample of what we have assessed to date. The risks will change over time and by geography – this is not yet meant to be an exhaustive list of the risks that will affect the company.

Figure 13. Summary of Findings: How Is the Coca-Cola System Impacted by the Physical Effects of Climate Change



DISCLOSE/COMMIT

The urgency of climate change requires us to plan for the future of our company and our customers with its impact in mind. Climate change might push us to develop new business models, create new partnerships and design new solutions for a more resilient Coca-Cola system. As a company, we are using the framework developed by the Task Force on Climate-Related Financial Disclosures (TCFD) as a foundation to identify key climate risks and potential opportunities across our business. The Coca-Cola Company, as well as some of our leading bottlers are actively starting to disclose the results of these assessments to our stakeholders, shareholders and customers. For bottling organizations that have not already done so, we recommend following the TCFD recommended guidelines to begin.

Figure 14. What Is the Task Force on Climate-Related Financial Disclosures?

What is the Task Force on Climate-Related Financial Disclosures?

The Task Force on Climate-Related Financial Disclosures ("TCFD") was convened in 2015 by the Financial Stability Board, an international body that monitors and makes recommendations about the global financial system.

The TCFD's main aim was to develop guidance around financial disclosures that would allow for investment, credit, and insurance underwriting decisions informed by climate data.

TCFD's disclosure recommendations center around the following climate-related challenges facing companies, banks, and investors:



Governance: Board and management's roles in addressing climate risks and opportunities.



Strategy: Climate impacts on an organization's businesses, strategy, and financial planning.



Risk Management: Processes for identifying, assessing, and managing climate-related risks.



Metrics and Targets: KPIs used to measure climate risks and opportunities and corporate performance against targets.

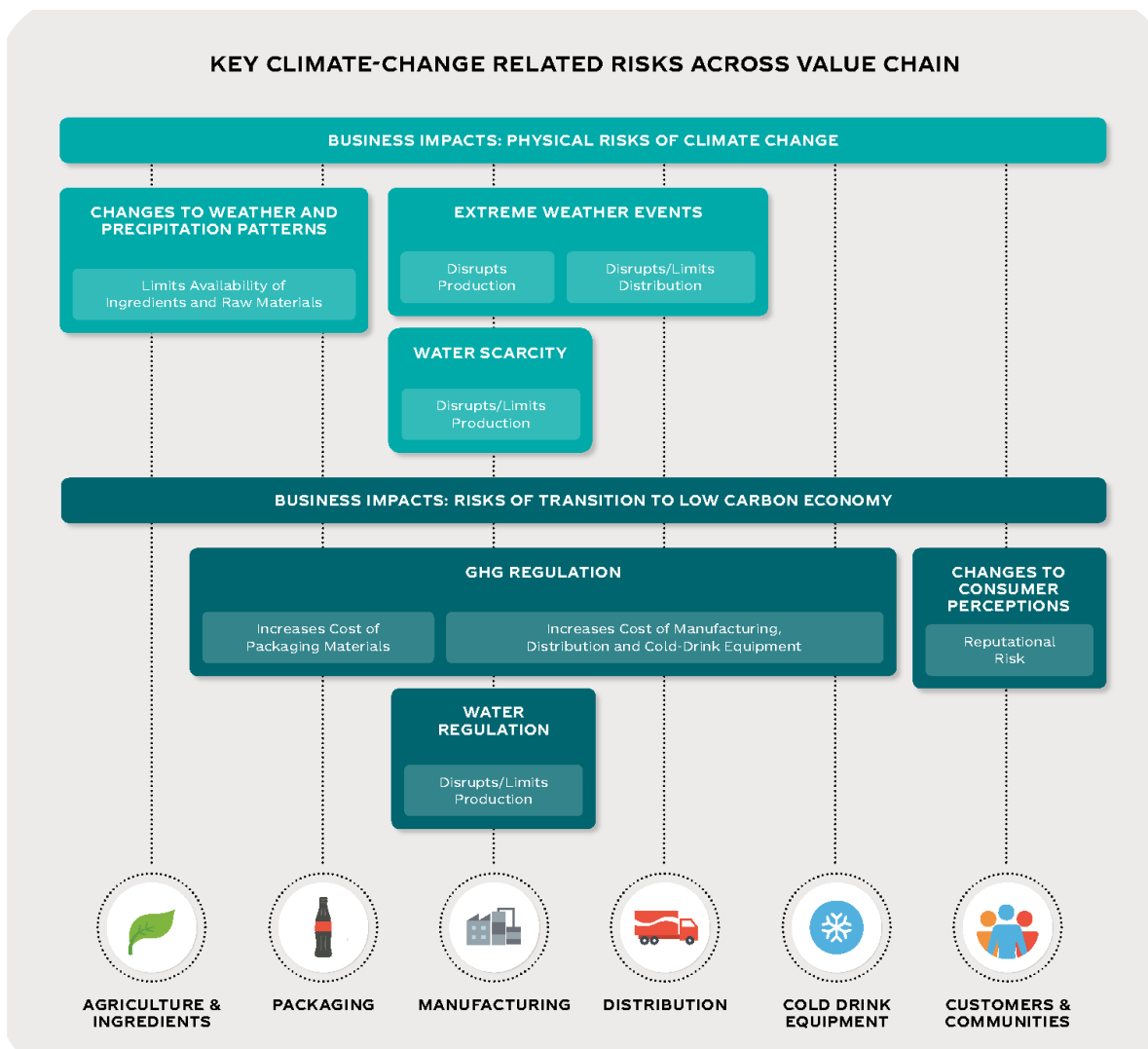
For more information on TCFD, visit the knowledge Hub: <https://www.tcfdhub.org>

Using the TCFD framework, TCCC reports on our work across the system to build a more climate-resilient business through our [Business and Sustainability Report](#), as well as our [Carbon Disclosure Project \(CDP\) response](#).

Our Vision for a Climate-Resilient Coca-Cola

A climate-resilient Coca-Cola system will confidently source responsibly cultivated ingredients, withstand or promptly recover from climate-related impacts, identify and reduce climate risks, and—most importantly—contribute to building value chain and community resilience where Coca-Cola is produced and sold. The climate risk assessment process described in this chapter, as well as assessments undertaken by each BU or bottler, will continue building the adaptive capacity we need to become an even more resilient system. Figure 15 identifies the potential business impacts that we have identified as global priorities, based on climate-change related risks.

Figure 15. Key Climate-Change Related Risks Across the Value Chain



Some of our leading bottling partners are already assessing potential risks and opportunities from climate change including: Coca-Cola European Partners, whom we partnered with for the global work; Coca-Cola Hellenic Bottling Company; and Coca-Cola Amatil.



Case Study

Identifying Climate Risks and Opportunities to Align with TCFD



Coca-Cola Hellenic Bottling Company (CCHBC) was the first bottler and one of the first 30 companies globally to sign the CFO Statement of Support for the TCFD recommendations.

[Coca Cola HBC among the first to sign A4S CFO statement of support for TCFD](#)

CCHBC began working and disclosing in alignment with the TCFD framework in 2018 by creating a cross-functional task force to design and implement the core elements of the TCFD's four pillars of governance, strategy, risk management, and metrics and targets. A summary of their initial work can be found in the risk section of their [2018 Integrated Annual Report \(page 78\)](#).

Tips and tricks CCHBC learned along the way:

- **Build on existing work:** Because CCHBC had already completed work on risk management, mitigation, sustainability and the environment, there was already quite a lot of internal knowledge to start from.
- **Get leadership involved early:** It is very important that this work doesn't stay within the sustainability space. Having leadership understand this work as a business exercise in risk adds significant value.

- **Work across the business:** A complete and usable assessment requires input from all business functions and integration of these findings into the overall risk management process. For CCHBC this meant that the Group Risk Forum, business units, core functions and the TCFD work group were actively working together to evaluate risks and opportunities.
- **Start with what you know:** CCHBC started by using their own evaluations of climate change impacts to their business. These impacts were prioritized in a qualitative manner on a low/medium/high scale. Detailed estimates can happen at a later stage – it is important to start somewhere.

“We need to better understand the impact that climate change has on our business. We also have to assess the related changing dynamics. Our risks evaluation process is the basis for this strategy; we mitigate risks on the one hand and leverage opportunities on the other.”

– Gerold Knight, Chief Risk Officer, CCHBC

Figure 16. Some Examples of How We Are Building Resilience Across the System



ENGAGE

Building resilience means investing in research, education, technology and stakeholder programs to help our system identify vulnerabilities, minimize risks and create new opportunities as we implement adaptation solutions.

Through our climate-risk assessment process, we understand that in most cases potential climate change impacts will multiply or exacerbate existing business risks. For example, climate change impacts may increase disruptions in agricultural ingredient sourcing or increase the number and severity of droughts that limit our ability to produce our products.

As a global system in operation for more than 130 years, we already have significant adaptive capacity and resilience as a business. Some of the work we have done is highlighted as case studies throughout this section. As we continue to develop new strategies in areas of our business that face clear climate-related risks, we are working to integrate and embed consideration of climate change as a foundational element.

As the world's understanding evolves on the issue of climate change impacts, we continue to work cross-functionally at a corporate level to stay ahead of potential risks and embed appropriate processes, working with our Enterprise Risk Management, Finance, Product Integrity, Procurement, and many other teams. Given the level of uncertainty around future impacts, we recognize the need for organizational agility to remain resilient to climate change impacts and achieve our many business and societal goals.

How can resilience be integrated into our business practices? Here are some case studies to highlight the work we have done, which also include details on some of the examples mentioned in Figure 16.



Case Study

Bouncing Back from Extreme Weather Events



Several production facilities across our global system have been affected by extreme weather events, disrupting production and the distribution of goods. In 2018 a production facility in Japan experienced a flood, and in years previous, facilities in Puerto Rico and Houston suffered severe disruption from hurricanes. In all cases, impact to the business included damage to assets; lost production and revenue; and activation of alternative, more costly emergency supply routes.

The strength of our global presence and operational networks has shown an ability to remain resilient in the face of these events, and even leverage these as opportunities to give back to the communities in which we operate. For example, in Puerto Rico, repairing the water treatment system was prioritized to help deliver water to those in need. Once the system was operational – two weeks post-hurricane – beyond providing water to employees, the company began supplying approximately 20,000 gallons (70,000 liters) of potable water per day to the city of Cidra for distribution to community residents through the FEMA relief center. After the storm, the CPS Cidra plant and the local bottler activated detailed Business Continuity Plans, receiving concentrate from other locations.

In partnership with local military, FEMA and others, local bottling partner CCPRB initiated a program referred to as “Caravana Coca-Cola”: a caravan of Coca-Cola trucks distributed emergency food packets and beverages to more than 10,000 households. The bottler and the local Coca-Cola North America office issued a special edition Coca-Cola can (#FuerzaPR or #StrengthPR) and were able to produce a variety of beverages daily, including water, due to the installation of 13 generators between both plants. In addition, The Coca-Cola Company donated 34,000 bottles of water in support of New York Governor Cuomo’s Hurricane Maria relief mission to Puerto Rico.

Carlos Pagoaga

Group Director, Community Partnerships (The Coca-Cola Foundation)



Case study

Increasing Sustainable Corn Production through the Alliance for Sustainable Agriculture (United States)



Through our sustainability work in the agricultural space we achieve both resilience and GHG mitigation outcomes. This case study is presented in both the mitigation and resilience chapters because it supports achievement of our goals in both areas. And while we call out the agricultural space as a key place for this overlap it is an opportunity in many of our other sustainability projects as well. With corn, we advance our sustainable sourcing through membership in Field to Market: The Alliance for Sustainable Agriculture. Through this partnership we work on more sustainable corn production in the United States. With our four biggest corn suppliers, we are aiming to fulfill a 2014 commitment to expand the application of Field to Market's Fieldprint® Platform, a data-driven tool that quantifies water use, energy use, GHG emissions and other measures of sustainability performance.

Key External Partners: Suppliers, Third Parties



Case Study

Empowering Women Farmers Through Capacity Building and Training (Africa)



Coca-Cola Morocco and UN Women (The United Nations Entity for Gender Equality and the Empowerment of Women), with support from The Coca-Cola Foundation, are aiming to build capacity and technical knowledge among women farmers, especially in terms of agro-ecological, climate change resilient practices and training women farmers to manage their cooperatives and income-generating activities. The initiative, Addressing Climate Change through Sustainable Agriculture and Women Empowerment, champions sustainable agriculture and women empowerment to address climate change impacts.

Launched in 1-7, the program is initially supporting and strengthening several groups of women farmer leaders in the regions of Ouarzazate in south-central Morocco and Essaouira on Morocco's Atlantic coast, with guidance, training, skills and the provision of essential equipment, to overcome barriers hindering economic growth and to build resilience to climate impacts.

Key External Partners: Third Parties, Suppliers



\$\$

Case Study

Strengthening Water Resilience Through River Basin and Watershed Management



In Brazil, we are engaged in a number of water funds that operate on a catchment level. On the Danube river basin in Europe, we work jointly with WWF and ICPDR, the International Commission for the Protection of the Danube river on a multi-year program of protection and restoring wetlands, in line with river basin management plans. In China, we work with WWF and other partners, including the river basin management authorities on various watershed protection projects and engage to strengthen underlying water governance in the catchment.

Management of river basins and watersheds helps build the resilience of these ecosystems and communities in the face of potential climate-change related impacts. Additionally, many of these programs have the added benefit of removing carbon dioxide from the atmosphere.

Key External Partners: Third Parties, Suppliers



Case Study

Improving Water Efficiency and Management Practices in Farms (Global)



We know that better water management practices not only improve farmers' ability to do more with less, but also allows them and their surrounding communities to withstand or adapt to the impacts of climate change more effectively.

We worked with our smoothie business Innocent and the supplier SVZ to advance water efficient berry farming in Spain's Huelva region. We also worked with our Spanish Fanta business and the supplier Frusa to improve water efficiency in orange farming in the Valencia region. In India, our business runs a series of sustainable agriculture projects with its cane sugar suppliers and smallholder farmers to improve access to and management of water in Uttar Pradesh.

Key External Partners: Third Parties, Suppliers



Case Study

Working with NGOs and Communities to Increase Water Sources and Accessibility (India)



In Betul district in Madhya Pradesh, the villagers approached the NGO, Advancement for Social Action (ASA), which sought the help of HCCB. Launched in 2015, today, over 5000 families are served by an integrated watershed management project, across 38 villages.

Within two years after the program was launched, 25 farm ponds, 35 masonry stop dams and other water bodies have been developed. This is helping achieve the key target of improving availability of water for drinking, agriculture and other purposes. The five-year target for the project is to increase the farm-based income for the local population and also improve the ground water situation, among several others.

At Mehandiganj plant in Varanasi district of Uttar Pradesh, local NGOs and Hindustan Coca-Cola Beverages installed the first rainwater harvesting project nearly 15 years ago. Since then, the local community has got the support of Hindustan Coca-Cola to commission 38 rainwater harvesting structures helping recharge the ground water.

Based on the findings of our priority climate risk assessment, shown in Figure 15, we understand multiple of our climate-related risks to have a strong link to our system's use of water. As a result, we are establishing a clear link between the issue of climate-related impacts and the actions we take in our system on water. The following case study outlines how our post-2020 Global Water Strategy integrates climate considerations as a key driver of the program.

Key External Partners: Third Parties



Case Study

Our 2030 Water Strategy



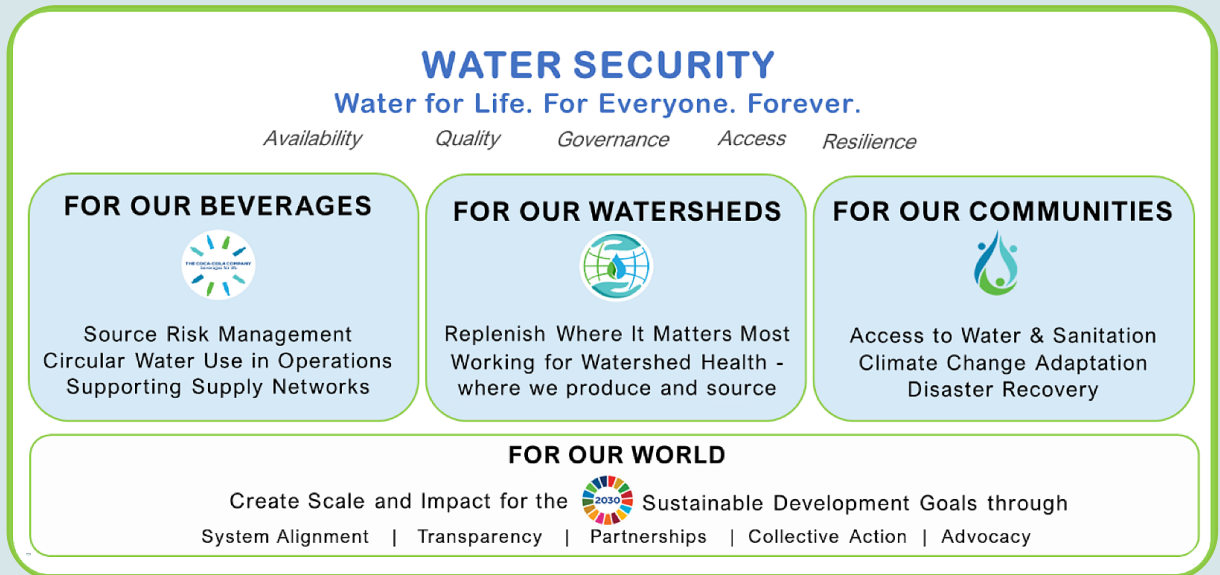
While you can't make more water, you can make more water available where it's needed. Today, as demand for water is increasing, a lot of water we could use is being polluted or washes away because the ecosystems holding it back have been destroyed. Science is telling us to expect stronger storms, longer droughts, hotter weather and rising evaporation rates as a result of climate change, making working with nature for freshwater even more important.

As we evolve our global water strategy, together with our bottlers and stakeholders, we are now developing a deeper understanding of which parts of the world are likely to be affected, and we are integrating the tools to help the business prepare for and adapt to those effects in our global Water Strategy Framework.

The updated water strategy framework aims to create greater alignment with our business growth agenda and aspires to increase our impact and value across the value chain, through a vision for a more water-secure world. Climate adaptation and resilience are identified as key drivers for water security, alongside water availability, water quality, governance and access to clean drinking water.

- In the production of our beverages, we will begin to assess and plan for the impacts of climate change through our Source Vulnerability Assessments and Water Management Plans.
- In our work with watersheds, we will actively begin incorporating adaptation and climate benefits into replenishment and engage more holistically for watersheds health and sustainable supply chains.
- In our work with communities, we will collaborate with global and local initiatives to enhance climate change adaption and resilience of vulnerable communities, particularly those where we operate or source our ingredients.

Figure 17. Water Strategy Framework



“The former co-chair of the IPCC, James Bruce, said: ‘If climate change is a shark, water resources are its teeth’ to illustrate the role of freshwater ecosystems in climate change. Reducing carbon emissions swiftly and aggressively to avoid the worst forms of climate change goes hand in hand with adapting to the already rising temperatures through strategic and ambitious water security stewardship.”

- Ulrike Sapiro, Senior Director of Water Stewardship & Sustainable Agriculture

Call to Action

Every associate has an important role to play in helping identify and prepare for climate risk. Working together, we can develop our climate risk and opportunity assessment and disclosure efforts so that we can create a more climate-resilient system. At a BU and bottler level, our first steps should include:

- 
Understand what risks and opportunities the impacts of climate change bring to your geographies:
 - **Bottlers:** Use the TCFD guidelines to develop your own opportunity and risk assessments, taking into account future climate change over a range of different climate scenarios. Reference case studies of other bottlers that have completed the process. Contact your BU lead if you have any questions.
 - **Business Units:** Support the risk and opportunity assessments undertaken by bottling partners or others in the system by providing information gathered from the first global risk assessment outlined above. Where appropriate, introduce key stakeholders that we are working with across the region, as well as globally via the Corporate team.
- 
Develop a locally relevant Resilience Action Plan informed by the Coca-Cola system Water Strategy and ERM processes. Engage your local water strategy and ERM leads in this process.
- 
Publicly disclose climate risks through relevant third-party entities, such as TCFD and CDP, where appropriate.
- 
Take the lessons learned from local projects and partnerships and explore opportunities to increase the scale and impact of these initiatives.







INNOVATE

Innovation is a critical part of adapting to climate change impacts and building a more climate-resilient system. It can take many forms, such as innovation in products, raw materials, systems, as well as unique collaborations.

At the same time that we build our processes and organizations in a way that helps us respond to and learn from potential effects effectively, there are opportunities to test and develop new approaches, technologies and projects together with our stakeholders at a local level so that we can accelerate existing activities and take action towards a more climate-resilient future.

Some examples of exciting innovations in this space are listed in Figure 18. These are not specific to our system, but they are examples that we list for a fresh perspective on what is possible and what we could begin thinking about. We will be developing materials on these as we move forward.

Figure 18. Opportunities for Innovation in Climate Resilience Across Our Business

	 Agriculture and ingredients	 Packaging	 Manufacturing	 Distribution	 Cold Drink Equipment	 Customers and Communities
Extreme weather events:	Supply chain engagement (R&D, growing underground / controlled conditions)	Resilient infrastructure (biomimicry in building design & retrofit)	Resilient infrastructure (self-healing concrete)	Real-time hazard mapping technology (social media partnerships)	Resilient infrastructure (biomimicry in design)	External outreach (serious gaming)
Changes in climate:	Sustainable farming practices (prairies, R&D crops)	Water efficient systems, technologies, collaborations	Water collection technologies (fog collecting roofing)	Supply chain engagement (serious gaming)	Water efficient systems and technologies	Biomimicry & nature-based solutions



THE COCA-COLA COMPANY



COLLABORATING FOR A BETTER CLIMATE: STAKEHOLDER ENGAGEMENT



KEY MESSAGES

- **Climate change is happening, and it's a global problem.** To combat it, we need collaboration and coordination from companies like ours, NGOs and governments across the world. This planet is the only one we have, so we must all work to protect it for ourselves and future generations.
- **Partnership across business, government and civil society will be critical for reaching climate targets.** We are committed to engaging proactively to help drive collective action.
- **We are inspired by the youth mobilizing to drive action on climate change.** Climate change is an issue that requires all of us to do our part and take action – as individuals, businesses and collectively. We support the youth who remind us and inspire us to take ambitious action.
- **Collaboration is essential.** We are part of a connected system. We need to understand system impact and build resilience as a system. Multiple sources of information are important to developing any interventions.
- **Market-based carbon pricing mechanisms have been an important part of driving the climate change debate forward, as well as catalyzing action.** Much more needs to be done for the world to achieve the level of GHG emissions reductions called for in the Paris Agreement, and we are supportive of effective and well-designed policies and mechanisms that would help make this happen.

COLLABORATING FOR A BETTER CLIMATE: STAKEHOLDER ENGAGEMENT

Throughout this document, we have discussed goals, activities and investments that are part of our climate strategy. However, we know that we will only achieve our climate goals if we work in partnership with others – our entire supply chain, supporting organizations and even our competitors. The work that we are facing is nothing less than a full transition of our industry and economy and will require our engagement with a broad range of partners.

ASSESS

Through our existing relationships with global, regional and local partners, we've made significant strides in advancing our climate work worldwide. We strive to engage with stakeholders who are tackling the same environmental issues and are focused on achieving common climate change-related objectives. Our partnerships are strategic and aligned with our internal climate goals, allowing us to pursue projects benefiting local communities, non-profit partners, and our business units and bottlers.

We engage with stakeholders when we are aligned around a common objective and can amplify our efforts.

DISCLOSE/COMMIT

We work with a wide range of partners across the world – combining their skillsets with ours to deliver greater impact. Our partnerships deliver on both our mitigation and resilience strategies working at the global and local levels.

ENGAGE

We encourage you to look beyond the Coca-Cola system to determine if you can amplify your impact by working with stakeholder partners. The goals that we have set for ourselves are significant and will require support from all types of partners. To better understand what types of projects we have already completed with partners, a range of examples are provided in Figure 19.

Figure 19. Climate Partner Engagement Summary

ORGANIZATION	MAJOR THRUST	KEY PROJECTS	KEY CONTACT(S)
Business for Social Responsibility (BSR)	Engage in a network of business leaders on sustainability and corporate social responsibility issues.	Coca-Cola's engaged in the BSR Value Chain Risk to Resilience Platform with the aims of increasing understanding of climate risks and advancing resiliency measures to address risks across the value chain.	Christine Black
Carbon Disclosure Project (CDP)	Promote transparency in Coca-Cola's climate change and water performance.	CDP's Climate Change and Water disclosure programs push companies to measure and disclose key environmental governance and performance information to promote transparency and spur corporate action.	Yui Kamikawa
World Wildlife Fund (WWF)	Collaborate at the local level to advance water security across the globe.	Coca-Cola has partnered with the World Wildlife Fund to engage and empower women of riverside communities in the Big Bend region along the U.S.-Mexico border through river restoration and replenishment projects.	Ben R. Jordan
We Mean Business Coalition	Commit to corporate actions that facilitate the transition to a zero-carbon economy.	As part of the We Mean Business Coalition, Coca-Cola has committed to adopting a science-based emissions reduction target, carbon pricing, corporate engagement on climate change, and disclosure of climate change governance and performance.	Ben R. Jordan
Ellen MacArthur Foundation	Work with a network of businesses, government, and academia to advance the circular economy.	Through the Circular Economy 100 network and the New Plastics Economy initiative, Coca-Cola has collaborated with the Ellen MacArthur Foundation to improve recycling performance and publicly disclose annual plastic packaging volumes.	Yui Kamikawa
The Nature Conservancy	Support the Nature Conservancy's water stewardship and replenishment efforts around the world.	Coca-Cola has engaged with experts at the Nature Conservancy to quantify the water footprint of Coca-Cola products and minimize negative water impacts.	Ulrike Sapiro
WaterAid	Increase access to clean water, decent toilets, and good hygiene in impoverished communities.	Coca-Cola has partnered with WaterAid in Burkina Faso to work with local communities and the water utility on water infrastructure improvement projects that provide residents with clean, safe drinking water.	Ulrike Sapiro
Water & Sanitation for the Urban Poor (WSUP)	Improve water services to low-income urban residents in sub-Saharan Africa.	Through the Replenish Africa Initiative (RAIN), Coca-Cola has committed to investing \$65 million to support access to safe water and sanitation programs for 6 million people by 2020.	Ulrike Sapiro
World Resources Institute	Share critical water scarcity data to improve global water stewardship and management.	Coca-Cola provides data on global water scarcity trends to WRI to develop high-resolution water risk maps through the Aqueduct tool.	Ulrike Sapiro



Case Study

Collaborating with Utilities and Regulators on Water Provision








In sub-Saharan Africa, the local water utilities have major capability challenges, especially around leakage management, non-revenue water, wastewater treatment etc. Our bottlers (e.g. CCBA, CCHBC) work with the local regulators and utilities to share knowledge and best practice.

In Capetown, our local bottler Coca-Cola Peninsula Beverages (CCPB) in partnership with the Coca-Cola Foundation and participating suppliers worked actively with the local utility on developing an alternative water supply strategy and to provide millions of liters of relief water to the Province and city of Cape Town. This forms part of its commitment to helping the city mitigate the impact of Day Zero.

This initiative is dependent on CCPB being able to utilize alternate water sources in order to supplement the use of municipal water. The “prepared water” will be provided in a 2-liter recyclable PET bottle; bottles will be clearly marked “not for resale” and would also be produced to supply to emergency sites as determined by the Provincial Task Team on Water and the Disaster Risk Management team. CCPB is working with the relevant authorities to facilitate the speedy issuing of the necessary licences to ensure that municipal water supplies are protected. The company has installed a 1.5 million liter bulk water tank at the plant in order to ensure a buffer in supply once the boreholes are approved and operational. It has also acquired three 33,000 liter food-grade water tankers to transport water from sources outside the water stressed areas.

Call to Action

Close partnerships with external stakeholders are critical to achieving our system-wide climate goals and upholding our public commitments to tackle the climate crisis. There are several steps local and regional system partners can take to develop and sustain climate-focused relationships with external stakeholders:

-  **Continue to work closely with key Coca-Cola contacts at the corporate level.** Coca-Cola's corporate team can help facilitate connections between external and internal partners and advance climate work being done across the system.
-  **Leverage Coca-Cola's global partnerships in your local communities.** Many global partners, including groups like the WWF, Nature Conservancy and others, have the capacity and expertise to assist with local community-focused climate projects.
-  **Map your own stakeholders to identify potential opportunities to pursue shared climate mitigation and adaptation goals.** Some of your partners may already be working on climate issues that align with Coca-Cola's climate strategy.
-  **Select regional partnerships which are relevant to your geographies.** Each community faces its own climate-related risks and opportunities, and partnerships with external stakeholders should reflect these local priorities.
-  **Tell us what you are doing.** Coca-Cola's corporate team can support local efforts to deliver the change we seek in preparing for climate change.

INNOVATE

Innovation is a critical part of achieving our climate goals where we will need new technologies and solutions than what is available today to meet our needs.

- **Do things differently: Climate change is complex.** Its impacts can take many forms and we understand that it is a multiplier of other business risks – therefore we need to enter into new collaborations where together we have the necessary expertise and tools to prepare for climate change.
- **Create coalitions where they didn't exist before:** Our greatest impact comes from solving problems that don't yet have a solution. To do this requires input from coalitions and partnerships that may not yet exist.
- **Inform yourself:** The world of climate change mitigation and adaptation is moving quickly. Policies are being developed, solutions are being tested, and investors are redefining the concept of investable solutions. This changing landscape means that new opportunities present themselves each and every day – you can take advantage of these opportunities only if you know your market and ensure your business is able to move quickly.

To provide some further ideas to encourage brainstorming, here are a few examples of work being done by others that can also be considered, for example by our bottling partners across the system.



Case Study

Green Loans (Danone & BBVA)



A green loan is different from a standard loan, in that the proceeds from green loans are used to fund green projects that provide clear environmental benefits. To appeal to the general corporate loan market, a new type of green loan has emerged in Europe. These are general purpose loans whose interest margins are linked to a company's overall sustainability achievements, such as gas emission reduction and nutrition education programs development.

In February 2018, Danone refinanced its €2 billion revolving credit facility that includes a credit line adjustment mechanism based on the environmental, social and governance (ESG) criteria provided by third-party providers. The popularity of green lending among European banks is expected to trickle down sooner or later. BBVA bank was involved in 11 green loan transactions in Europe and Latin America in 2017.



Case Study: Green Bonds (PepsiCo)



In October 2019, PepsiCo Inc. priced its first-ever green bond, designating the proceeds from the \$1 billion offering to help cut virgin-plastic use and replenish the water it consumes in making sodas and snacks. From a credit perspective, though, there's little difference with the green bond than if the company had issued a non-green senior unsecured note. Bond proceeds, the company says, will help PepsiCo hit a new target to reduce 35% of virgin plastic content across its beverage portfolio by 2025.

The money raised will help reach this target by funding projects that purchase compostable, biodegradable and/or recyclable material for use in product packaging, and by investing in the development of packaging that includes bio-based polyethylene terephthalate (PET) bottles that can be recycled as other products, such as carpets and compostable and biodegradable snacks flex films instead of hard packaging.

Bond proceeds are also intended to push Pepsi toward reducing GHG emissions across its value chain by 20% by 2030, from a 2015 baseline. By 2025, in high water-risk areas PepsiCo aims to replenish 100% of the water it consumes in its manufacturing operations and improve its operational water-use efficiency.

Who should you contact for more information?

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THE COCA-COLA COMPANY

DEFINITIONS

DEFINITIONS

Adaptation: The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects².

Carbon Inset: A type of carbon offsetting focused on carbon sequestration, i.e. planting trees in agroforestry systems.

Carbon Footprint: The amount of greenhouse gases emitted by a person, group or company over a given time period.

Carbon Offset: An action intended to compensate for the emission of GHGs into the atmosphere, especially when quantified and traded as part of a commercial program.

Climate: The composite or generally prevailing conditions of a region averaged over a series of years. The classical period for averages is 30 years, as defined by the World Meteorological Organization.

Climate Change: Changes in average weather conditions that persist over multiple decades or longer. Climate change encompasses both increases and decreases in temperature, shifts in precipitation, changing risk of certain types of severe weather events, and changes to other features of the climate system.

Climate Scenarios: Climate scenarios describe different climate futures which we can plan towards. There are currently four different future climate change scenarios (known as RCPs 2.6, 4.5, 6.0, 8.5) ranging from an optimistic outlook (RCP 2.6) to high emissions scenario world outlook (RCP 8.5) which are described by [TCFD](#).

Drink in Your Hand: Announced in 2013, this is Coca-Cola's GHG target to reduce the carbon footprint of "the drink in your hand" 25 percent by 2020, compared to 2010.

Global Warming: The observed increase in average temperature near the Earth's surface and the lowest layer of the atmosphere. In common usage, "global warming" often refers to the warming that has occurred as a result of increased emissions of GHGs from human activities. Global warming is a type of climate change; it can also lead to other changes in climate conditions, such as changes in precipitation patterns.

Greenhouse Gas (GHG) Emissions: Any gaseous compound in the atmosphere capable of absorbing infrared radiation, resulting in trapping and holding heat in the atmosphere.

Mitigation: Actions to reduce the amount and speed of future climate change by reducing the emissions of GHGs to the atmosphere.

The Paris Climate Agreement (Paris Agreement): An agreement within the United Nations Framework Convention on Climate Change that brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects. The agreement's central aim is to strengthen the global response to the threat of climate change by keeping the increase in global average temperature to well

below 2 degrees Celsius (3.6°F) above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (2.7°F).

Resilience: Resilience is the ability of a system (such as a bottling plant, distribution network or supply chain) to rebound following a shock such as a natural disaster. Building resilience requires not only recognizing potential hazards like extreme weather events, but also understanding the underlying vulnerabilities that may affect recovery from these potential disasters. For example, insufficient infrastructure can reduce a community's capacity to rebound following a disruption like an extreme weather event, as can poverty or gender inequality³.

Science-Based Target (SBT): A [SBT](#) describes a target adopted by a company to reduce GHG emissions following a pathway aligned with keeping global temperature increase below 2°C compared to pre-industrial temperatures. SBTs are validated by the Science-Based Targets initiative, supported by the CDP, UN Global Compact, WRI and WWF.

Scope 1 Emissions (Direct GHG Emissions): Emissions occurring from sources owned or controlled by the company. For TCCC this includes the combustion of fossil fuels within TCCC buildings and fuel consumption in fleet vehicles.

Scope 2 Emissions (Indirect GHG Emissions): Indirect emissions resulting from the generation of purchased energy. For TCCC this includes the emissions resulting from the generation of electricity, heat and steam purchased by TCCC from a utility provider.

Scope 3 Emissions (Other Indirect GHG Emissions): All other emissions in the value chain, both upstream and downstream. For TCCC this includes emissions from growing and processing the ingredients for our products, from producing and landfilling our packaging, and from the use of our refrigeration units by our customers.

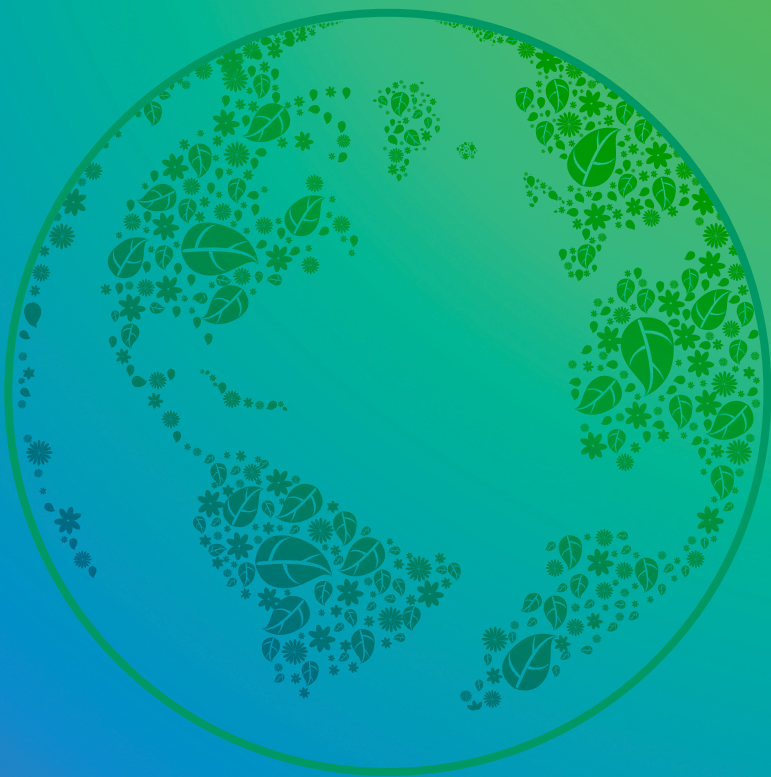
Task Force on Climate-related Financial Disclosures (TCFD):

TCFD develops guidance around financial disclosures that allows for investment, credit and insurance underwriting decisions informed by climate data. TCFD's disclosure recommendations center around governance, strategy, risk management and metrics and targets facing companies, banks and investors.

Vulnerability: The degree to which geophysical, biological and socio-economic systems are susceptible to, and unable to cope with, adverse impacts of climate change. Vulnerability is the result of the amount of exposure to physical impacts, the sensitivity to which a system is affected by climate impacts and the adaptive capacity which is the capability of a system to adapt those climate impacts.

² Intergovernmental Panel on Climate Change (IPCC), Working Group II: Impacts, Adaptation, and Vulnerability Glossary of Terms

³ BSR: TCCC Building a Resilient Value Chain



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