

PACT IMPACT REPORT 2021









Minister's Foreword

Packaging waste is one of Singapore's largest waste streams. A third of our domestic waste comprises discarded packaging, and more than half of that is made of plastic.

Ensuring packaging sustainability is key to resource stewardship, reducing carbon emissions and plastic pollution. This includes reducing the materials required, improving recyclability, using recycled content, as well as shifting from single-use to reusable packaging. Every type of material, not just plastics, has a different environmental impact over its life cycle. Stages in its life cycle include production, transportation and use to disposal and end-of-life treatment. Therefore, regardless of the materials used, avoiding the excessive consumption of disposables and minimising packaging are at the top of Singapore's waste management hierarchy.

Across the world, there is increasing focus on packaging waste, including plastics. Countries are taking action to reduce excessive packaging and move towards a circular economy. Singapore is also advancing our efforts in this area.

To better manage packaging waste, as well as other priority waste streams, the Ministry of Sustainability and the Environment introduced the landmark Resource Sustainability Act in 2019. The Act gives effect to regulatory measures that target key waste streams. These measures include the mandatory reporting of packaging by producers of packaged products, such as brand owners, manufacturers and importers, as well as retailers. We also rolled out the Say YES to Waste Less campaign to encourage the public to take simple actions to reduce the consumption of disposables and food wastage.

Earlier this year, we launched the Singapore Green Plan 2030, which charts ambitious and concrete targets over the next 10 years. Under the Green Plan, we aim to build on our 2030 aim to reduce the waste sent to our landfill by 30 per cent, to achieve a 20 per cent reduction by 2026. The Green Plan has gained increasing support from stakeholders such as businesses, non-governmental organisations (NGOs) and the public, which is crucial as we move towards becoming a Zero Waste Nation. WWF-Singapore's Plastic ACTion (PACT) initiative is a good example of how NGOs are taking the lead to drive action. Since 2019, WWF-Singapore has brought together 35 companies from the food & beverage, retail, food delivery service, supermarket and other sectors to reduce the use of plastic disposables. Collectively, PACT companies have avoided the potential use of 85 million pieces of single-use plastics in the past year. PACT champions have leveraged sustainability as a competitive advantage, adapting their business models and processes to be more resource-efficient and meeting growing consumer demand for sustainability.

PACT's success highlights how NGOs and businesses play a crucial role in driving waste reduction. These efforts will help Singapore's transition to a circular economy.

I congratulate WWF-Singapore and PACT companies on a successful year and look forward to more achievements in the reduction of both plastic and other types of disposables.

Let us work together to ensure a greener and more sustainable Singapore for future generations.

Grace Fu Minister for Sustainability and the Environment





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1 Executive Summary

WWF-Singapore launched PACT (Plastic ACTion) in Singapore in 2019 to engage businesses to reduce their waste footprint and ultimately move towards a circular economy.

PACT's vision of <u>No Plastics in Nature by 2030</u> aligns with the Government's Zero Waste Masterplan and <u>Green Plan</u>, contributing to Singapore's target of reducing the waste per capita sent to landfills by 20% in 2026 and 30% in 2030. PACT's efforts also support the Government's target of increasing Singapore's national recycling rate to 70%, domestic recycling rate to 30% and non-domestic rate to 81% by 2030.

To address the issues of excessive plastics consumption and pollution, PACT is working towards the circular economy goals:

- Help companies eliminate all unnecessary material use
- Reduce at least 50% of non-recyclable single-use items
- Transition to 100% reusable or recyclable product or packaging design models
- Removal of plastics from nature by making a net positive impact

In a challenging year brought about by the COVID-19 pandemic, businesses had to adapt their operations to retain consumer loyalty, while ensuring the safety

and well-being of their employees and customers. As restaurants and shops temporarily closed due to national lockdowns, many citizens ordered food deliveries, purchased groceries online and switched to disposable utensils for convenience. This resulted in an <u>extra 1,334 tonnes</u> of plastic waste over 8 weeks for Singapore.

Earlier this year, WWF-Singapore partnered with Accenture to produce <u>"Sustainability in Singapore"</u>, a report highlighting sustainability challenges and opportunities faced by local businesses and consumers. 75% of respondents said they want to behave sustainably but think they lack the avenues and options. PACT recognises these challenges and has been partnering with businesses to develop and adopt innovative business models that make it easier for customers to choose sustainable alternatives.

Despite these difficulties, PACT companies have doubled down efforts to reduce plastics by eliminating unnecessary plastics and switching to reusable packaging and alternative materials. **PACT companies** have collectively avoided using 85 million pieces of plastic items and packaging annually.

ANNUAL KEY ACHIEVEMENTS

OVER 85 MILLION PIECES OF PLASTIC ITEMS AND PACKAGING AVOIDED



pieces of plastic packaging and items (e.g. plastic bottles, amenity items) avoided by PACT Champions **3.6 million** bags avoided through Retail Bag Charge Pledge

67.6 million pieces of cutlery avoided through Food Delivery Pledge

PACT has kickstarted research papers and feasibility studies to tackle some of the challenges various industries face. This Impact Report provides progress updates to our stakeholders, outlines new initiatives, and includes inspiring, innovative case studies featuring our companies in their drive to reduce plastics usage.

PACT would like to thank all companies for making a difference.



2 PACT Milestones in The Last Year

August 2020 – July 2021



AUGUST 2020

The first <u>PACT Impact Report</u> was released, revealing that 22 PACT Champions had eliminated an estimated 12 million pieces of plastic items and packaging annually since the launch of PACT.



PACT released a <u>Bring-Your-Own</u> <u>Guide</u> for the F&B & Hospitality Industry, illustrating how companies could adapt their business model to accept reusables while considering increased health & safety procedures as a precaution against COVID-19.



SEPTEMBER 2020

PACT launched the <u>Alternative</u>. <u>Materials Tool</u> to assist businesses in selecting materials with the lowest environmental impact. The virtual launch event, 'Unpacking Plastics', was attended by 280 Government, academia, and industry representatives.



JULY 2021

ACT celebrated the launch of Circularity in Retail - Tackling the Waste Problem through a webinar. Over 200 individuals attended the event to understand key findings of the report and proposed recommendations for industry players. The event also included a panel discussion on increasing resource efficiency for a circular economy.



MAY 2021

PACT released the <u>Beverage Carton</u> <u>guidance pack</u>, which examines the recyclability of beverage cartons in Singapore. The report provides recommendations on how businesses should use beverage cartons in Singapore, including suitable alternative materials.



MARCH 2021

PACT held two virtual events attended by over 50 representatives from the hospitality industry to discuss single-use amenity items and providing guests with less-used items only on demand.



JANUARY 2021

PACT released the collective impact of the Retail Bag Charge Pledge, indicating that <u>over</u> <u>300,000 bags</u> were saved monthly because of the initiative.



FOOD DELIVERY SERVICES PLEDGE

In 2020, Deliveroo, foodpanda, and Grab collectively **saved 1.3 million pieces of cutlery every week (30% more than 2019)** by introducing an automatic 'opt-out of receiving cutlery' toggle button on their apps. The enhancement effectively put the onus on the customer to ask for cutlery proactively.





The three food delivery service providers have since been trialling a new initiative where over 100 merchants on each app offer reusable containers as a delivery option. While the concept of using reusables for food delivery is foreign for both businesses and consumers, foodpanda looks forward to the initiative gaining more momentum. Likewise, Deliveroo emphasised the importance of the initiative as it encourages customers to make environmentallyfriendly choices while helping businesses in their sustainability journey.



REGIONAL EXTENSION

In November 2020, Grab announced they would extend their PACT commitment beyond Singapore to Indonesia, Malaysia, Myanmar, the Philippines, Thailand and Viet Nam. After seeing the success in Singapore, each market (with the exception of Myanmar) has rolled out the automatic 'opt-out of receiving cutlery' toggle button and is working with merchants to implement greener procurement practices. In 2020 alone, Grab saved 380 million pieces of cutlery across Southeast Asia.

"We are pleased to have signed onto the WWF-Singapore's PACT (Plastic ACTion) Food Delivery Service pledge with the vision of 'No Plastics in Nature by 2030'. We are committed to innovating on sustainable packaging solutions for our deliveries business in order to reduce plastic waste in the region. We will work continuously to engage and educate our users and food merchants on the benefits of using alternative packaging benefits."

Cheryl Goh

Group Head of Marketing and Sustainability at Grab



RETAIL BAG CHARGE PLEDGE



The Retail Bag Charge Pledge implements a charge on consumers to encourage them to bring their own. The pledge signees receive advice on suitable alternatives they could procure after depleting inventory, according to PACT's Alternative Materials Tool.

In January 2021, the first eight participating retailers announced that the pledge had shown positive results, with over 60% of consumers refusing a bag and more than 300,000 bags saved monthly. The retailers shared that consumers understood and supported the bag charge, with sentiment improving over time.

The pledge has seen a steady increase in participants with Decathlon, Watsons, UNIQLO and VeganBurg joining in the last year. In March 2021, through PACT's engagement with the Orchard Road Business Association (ORBA), three retailers, Liu Jo, Metro and MUJI, signed the Retail Bag Charge Pledge.

Retailers who sign up for the Retail Bag Charge Initiative are inspiring Singapore businesses ahead of the country's plans to implement a <u>disposable bag</u> <u>charge across supermarkets</u>. "Orchard Road Business Association is a strong advocate for the move towards sustainability. The Retail Bag Charge Pledge is the first of many such campaigns to come, and we are encouraged to have supportive Orchard Road stakeholders come on board.

Every small change is a step in the right direction. Together, we can make a difference."

Mr Mark Shaw

Chairman of Orchard Road Business Association



UNDERSTANDING CONSUMER SENTIMENTS ON BAG CHARGES

WWF-Singapore commissioned an omnibus survey with YouGov to understand consumers' purchasing behaviours and attitudes towards a bag charge at retail outlets in Singapore. The results were promising:



(of 1040 respondents) were feeling positive or neutral about retail outlets implementing bag charges

71% S\$

of respondents were motivated to bring their own bag rather than pay a charge of up to S\$0.50 (43% were motivated by charges as low as S\$0.10).

This data complements findings by pledge participants who indicated that more than 60% of consumers refused a bag rather than pay a charge.



4 Progress of PACT Champions

PACT Champions have set clear goals to reduce plastics use and transition to the circular economy model. They communicate their progress through catch ups and an annual survey. PACT supports these Champions by providing specific feedback and guidance on their initiatives.



THE NEWEST PACT CHAMPIONS



Herbal Pharm, a health supplement & natural lifestyle product retailer, has committed to reducing singleuse packaging for their e-commerce operations and own-brand products. They will also be implementing initiatives at their physical outlet to encourage reuse and recycling.



An e-commerce Champion, **Rusby & Co.** joined PACT to explore suitable alternatives to package their pet supplies. They will also be exploring reusable e-commerce packaging, and prolonging the lifespan of items and packaging through refurbishment and repair.



VeganBurg, the world's first 100% plant-based burger joint, joined the PACT program as a Champion. VeganBurg aims to procure alternative packaging with the lowest environmental impact while taking on sustainability initiatives, such as implementing a bag charge to encourage Bring-Your-Own amongst consumers.

THE CHAMPIONS:





PROGRESS ON COMMITMENTS

Despite business disruptions caused by COVID-19, 80% of PACT Champions participated in the annual feedback survey.

PACT thanks all respondents for their transparency and accountability. In total, PACT Champions alone avoid an estimated 14 million pieces of plastic packaging and items annually, 2 million more than the previous year's estimation.

ممیہ A NEW BENCHMARKING SYSTEM FOR 0000 F&B AND HOSPITALITY CHAMPIONS

This year, PACT implemented a benchmarking system for F&B and Hospitality Champions to compare their progress against peers. All data was anonymised to ensure confidentiality.

PACT developed the requirements as per circular economy principles, emphasising the elimination of unnecessary plastics and promoting reuse. Where either is not feasible, companies should use alternative materials. Each Champion can score a maximum of 100 points, and PACT made deductions based on the criteria below:

- Has the Champion made changes to their plastics usage?
- Are there commonly available reusable options on the market, and is the Champion utilising such options?
- Are items being given automatically, or only when a consumer requests them?
- When applicable, are the items being individually wrapped?



BENCHMARKING THE F&B CHAMPIONS

PACT Champions in the F&B industry have **stopped using plastics for 93% of their front-of-house (dinein and takeaway)** operations by eliminating, reusing, or switching to alternative materials. The remaining challenge lies in sauce sachets due to a lack of market alternatives.

For dine-in operations, Champions have been using reusables. They have eliminated single-use items such as straws, or in some conditions, replaced them with alternatives offered only on demand.

For takeaway operations on average, Champions reported that they give **75% of takeaway items and packaging only on demand**. These include carrier bags, straws, stirrers, cutlery, and sauce sachets.

Although PACT Champions use alternative materials for takeaway packaging (such as food containers), they are conscious of the waste produced and the impact alternative materials could have on the environment. All respondents reported that they accept or incentivise bring-your-own containers. Some F&B Champions also offer reusable containers as a takeaway or delivery option.

CASE STUDY: HOW TO ELIMINATE PLASTICS FROM F&B OPERATIONS

Since 2017 Tadcaster Hospitality has taken

numerous steps to eliminate plastics from its operations. All 6 F&B venues use reusable metal teaspoons, serve water in glasses instead of plastic cups, and have stopped using plastic items such as stirrers and straws completely.

Tadcaster Hospitality developed an awareness and education campaign called "The Last Straw" with posters in all their venues to facilitate customer acceptance and adoption of these new practices.

They also launched a BYO (Bring-Your-Own) initiative across all their Cafés (Café Melba) and The Exchange. Many consumers participated, enjoying a 50 cents discount for takeaway coffee.



BENCHMARKING THE HOSPITALITY CHAMPIONS



The Hospitality Industry has been amongst the hardest hit by the COVID-19 pandemic. Many properties under the Hospitality Champions were designated as Government Stay-Home-Notice Dedicated Facilities, which impacted the information they could share with PACT in the annual feedback survey. This includes the completeness of data, closure of areas (such as F&B or meeting rooms), and the continued usage of plastics due to strict health guidelines in some cases. Despite these challenges, Champions shared as much data as possible to benchmark their progress and remain accountable.

The data presented in this year's report provides greater detail than last year to depict the progress made by our Champions more accurately. Consequently, the data is split into four categories - Dine-in (for F&B areas), Takeaway (for F&B areas), Meeting Room Areas, and Guest Rooms.

F&B IN THE HOSPITALITY INDUSTRY

Champions reported that they have **stopped using plastics completely for around half of their items** in their F&B operations, which is similar to last year's progress.

Similarly to F&B Champions, Hospitality Champions have been using reusables for many of their dine-in and meeting room items. For takeaway operations, Champions have made good progress switching from plastic packaging to alternative materials such as bagasse (sugarcane). However, some have had to use plastics for Stay-Home-Notice Dedicated Facilities, resulting in more non-applicable data compared to last year. Still, more work can be done to provide items (such as cutlery, straws, and stirrers) only on demand.

To encourage the F&B industry to accept reusable containers, PACT published a <u>BYO Guide</u> which provided detailed implementation steps, taking into account different F&B business models.

st^st HOW HOSPITALITY CHAMPIONS ARE REDUCING PLASTIC WASTE



Over 90% of plastics avoided in dine-in locations and meeting rooms



More than 50% of items are reusable in dine-in locations and meeting rooms





Over 75% of packaging used for takeaways are alternative materials

11 **PACT IMPACT REPORT 2021** PLASTIC ACTION IN SINGAPORE



GUEST ROOM AMENITY ITEMS

As was the case in 2020, the largest challenge for the Hospitality Industry is in eliminating and reducing plastic usage for amenity items in guest rooms. Compared to last year, there is a **~25% increase** in PACT Champions who have replaced single-use

plastics with reusable or single-use alternative materials, especially for combs and toothbrushes. However, although PACT recommends given items to consumers on request only, many items are provided by default because Champions face additional complexities in meeting consumer expectations and international branding guidelines.

GUEST ROOMS



Stopped
using itemStill using
plastics completelyUsing reusablesNot applicableReplaced with
alternative materialsInsufficient
information provided

On average, around 50% of plastic items and packaging in guest rooms have been avoided.

TOP 3 INSIGHTS FROM CONSUMERS REGARDING AMENITY ITEMS

Following a consumer sentiment survey conducted by Rakuten Insight, PACT held two virtual events with over 50 attendees from the hospitality industry to discuss providing amenity items only on guest request. The attendees shared existing best practices, trends and challenges they faced while tackling amenity items. PACT will work with the industry to balance consumer satisfaction and sustainability.

Only 28% of all amenity items were used all of the time by hotel guests, on average.

Over 80% of respondents would not mind asking for amenity items if the environmental narrative and messaging was evident.

Consumers who frequented 5-Star hotels resonated the most with the provision of amenity items on demand.



CASE STUDY: PROVIDING AMENITIES ON DEMAND

Conrad Centennial Singapore (part of Hilton Group and Pontiac Land Group) has reduced unnecessary single-use waste by removing some amenity items, including combs, cotton buds, and razor kits, from their guest rooms without seeing a drop in customer satisfaction. The hotel only offers these items when requested by customers. In many cases, the items are made with alternative materials such as corn starch.

Moving forward, Conrad Centennial plans to switch to bulk dispensers made from post-consumer recycled plastic for liquid bathroom amenities.

E-COMMERCE, MANUFACTURING AND RETAIL

REDUCING PACKAGING WASTE IN E-COMMERCE

PACT has kickstarted a feasibility study to understand and identify the barriers of using returnable transport packaging in E-Commerce, focusing on business-toconsumer packaging.

With 74% of consumers shopping online more frequently because of COVID-19, coupled with suppliers' tendency to over-pack goods for protection, packaging waste is increasing.

The study seeks to understand Singapore's current e-commerce ecosystem and infrastructure to identify opportunities for returnable packaging. The report explores the options and business models to implement a successful returnable scheme, and assesses the feasibility and likelihood of customers returning the packaging. The report will launch in Q3 2021, and PACT will engage with various stakeholders and industry partners to identify pilot projects.

CIRCULARITY IN RETAIL -TACKLING THE WASTE PROBLEM

A circular approach for waste management in retail is essential since 7% of solid waste in Singapore comes from the retail sector (as of 2019). Disposal of this waste is mainly in the form of incineration, and an indepth analysis is required to better understand how Singapore malls manage waste while taking guidance from global research.

The study <u>Circularity in Retail - Tackling the Waste</u> <u>Problem</u> seeks to form a baseline understanding of the problem by conducting a deep dive into Lendlease's existing waste management practices across its four retail malls in Singapore, supplemented by waste data from its malls, on-ground interviews with stakeholders, a plastic waste profiling exercise, and further data collection.

GUIDANCE PACK ON BEVERAGE CARTONS

PACT released a <u>guidance pack</u> in April 2021 that addresses the increasing trend in using beverage cartons as an alternative to plastic water bottles, urging businesses to prioritise 100% reusable packaging for water bottles. The structure of beverage cartons help retain flavour, nutrients and shelf life, which is beneficial for liquids such as juice. Water does not require such complex packaging, which is why PACT encourages businesses to seek monomaterial options which are easier to recycle, such as recycled-PET, if reusable packaging is not an option. The guidance pack substantiates this by explaining the structure and recyclability of a used beverage carton in Singapore's waste management context.

REDUCING PLASTIC USE IN FASHION: A STEPWISE GUIDE FOR FASHION BUSINESSES TO REDUCE PLASTIC PACKAGING

Launched in October 2020, <u>the guide</u> aims to help businesses in the fashion industry to quickly identify an effective strategy to minimise plastics use. Globally, the fashion industry used <u>180 billion polybags and 100 billion hangers each year</u>. More than 85% of polybags and 15% of hangers are discarded after a single-use. In Singapore, <u>consumers buy about 34 pieces of brand new apparel</u> every year, translating to approximately 190 million polybags used.

The guide outlines three steps fashion companies should take to review current packaging, develop a plan and implement solutions according to PACT's guiding principles and case studies of companies who have successfully done so globally.



5 **Researching** Alternative Materials

PACT is based on circular economy principles, focused on reducing unnecessary plastics usage and switching to reusable packaging. In cases where elimination and reusable packaging are not viable, PACT provides guidance on alternative materials.



THE ALTERNATIVE MATERIALS TOOL

The <u>Alternative Materials Tool (AMT)</u> guides businesses towards single-use packaging materials with a lower environmental footprint without transferring the environmental cost to another system. It provides a precise ranking of alternative materials and allows material comparisons by pulling from lifecycle environmental data and other scientific literature. The environmental impact calculated covers raw material extraction, manufacturing, and waste treatment in the country of disposal, currently Singapore, Malaysia, the Philippines and Thailand. PACT launched the AMT at 'Unpacking Plastics', a virtual event featuring distinguished speakers from the Government, academia, NGOs, and private industry. Speakers provided a comprehensive and unique perspective on action required to create a circular economy, debunked packaging misconceptions and addressed the implications of the tool's findings in the context of Singapore.

Since the tool's launch, over 500 organisations have utilised the tool and viewed material recommendations to assist their company's packaging material selection process.





Mr Andrew Cameron

Senior Category Manager – Global Procurement Organisation at Accor Hotels



HOW HAS THE ALTERNATIVE MATERIALS TOOL HELPED COMPANIES?

- The Fullerton Hotel and Fullerton Bay Hotel use the Alternative Materials Tool as a shared resource with one of their suppliers to better understand their product packaging's circularity in Singapore's waste management context.
- PACT advised companies participating in the Bag Charge Pledge to switch to FSC-Certified Recycled Paper bags or Retail Bag Charge Pledge as single-use options. This is based on an analysis done with the Alternative Materials Tool, which ranks the material as a top recommendation after taking into account Singapore's waste management system.
- Accor Hotels Singapore's subsidiary Swissôtel Merchant Court, Singapore used the Alternative Materials Tool to review their product stack and make better choices for change. They have since switched to bagasse (sugarcane) materials for disposable takeaway containers and are using FSC-Certified Recycled paper bags instead of LDPE plastic bags.



CASE STUDY: MANUFACTURING THE FUTURE OF WATER BOTTLES

evian[®] has introduced a new line of label-free water bottles made from recycled-PET (except the cap), marking a significant milestone in its journey to becoming 'circular' and manufacturing all its plastic bottles from 100% recycled plastic (except for the cap and label).

The new bottles will increase demand for recycled-PET pellets and provide another option for companies looking to source alternatives to virgin plastic bottles. The initiative fits neatly into Singapore's Zero Waste Masterplan to create a more sustainable living environment.

In early 2020, evian[®] received a global certification for becoming carbon neutral, reflecting its commitment and progress towards reducing virgin plastics use while increasing the use of recycled plastic.



6 The Road Forward

PACT would like to thank its donors and PACT companies for the progress made towards reducing the use of plastics. Despite the challenges brought about by COVID-19, PACT companies have remained transparent with their plastics usage and are equipped with more information on alternative solutions.

Over the following months, PACT will be rolling out multiple initiatives to help industries reduce single-use items and packaging waste. This includes expanding the Alternative Materials Tool to cover the waste management contexts of Hong Kong and South Korea. PACT will also collaborate with companies to pilot viable solutions uncovered by research for the E-commerce and retail property management sectors. By sparking ideas for redesign, product innovation and incorporating concepts such as repair and refurbishment, PACT will tackle waste reduction and circular economy holistically.

PACT will keep working with companies to help them reach their commitments and to minimise plastics use in their operations. For Champions who have been progressing well, PACT aims to identify potential synergies and cross-cutting solutions for further waste reduction and circular economy ideas for a strong post COVID-19 green recovery.

As members of the National Environment Agency's "Say YES to Waste Less" campaign, PACT and its Champions will continue supporting public efforts to reduce waste. PACT will also align all current and future initiatives with the Singapore Zero Waste Master Plan, Singapore Green Plan 2030, and the United Nations' Sustainable Development Goals.

By engaging with businesses, Government and people, PACT provides actionable recommendations on singleuse items and waste for a greener future.





A business initiative that aims to reduce waste and move towards a circular economy.

To find out more about PACT, please contact **markets@wwf.sg** or visit **plastic-action.asia**