



Uncovered

**Unilever's
complicity in the
plastics crisis and
its power to solve it**

GREENPEACE

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SEPTEMBER 2023
Plastic waste on the
shores of Freedom Island,
the Philippines
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EXECUTIVE SUMMARY

Unilever is vocal about its desire to conduct business that does ‘more good for our planet and our society – not just less harm’.¹ In recent years, it has been visible at conferences around the world, promoting its plan to use ‘less plastic, better plastic or no plastic’.²

In this report, Greenpeace International investigates the reality behind these soundbites. We expose the blight of Unilever’s single-use sachets on low-income communities and the glaring gap that exists between what the company says it will do, and what it actually does.

We conclude by urging Unilever to grasp the opportunity presented by the new UN Global Plastics Treaty. The company must spearhead an industry-wide movement, one that transitions businesses away from single-use plastics and towards the adoption of at-scale reusable packaging systems around the world.

KEY FINDINGS

New Greenpeace International analysis shows that:

- Despite committing to using ‘less plastic, better plastic or no plastic’, **Unilever’s plastic footprint has not decreased at all.** The company produced 610,000 tonnes of plastic packaging in 2017,³ 700,000 in 2018,⁴ 700,000 in 2019,⁵ 690,000 in 2020,⁶ reaching 713,000 tonnes in 2021,⁷ before dipping to 698,000 in 2022.⁸
- Unilever promised to cut its virgin plastic use in half by 2025. At its current trajectory, **this won’t be achieved until at least 2034.**⁹
- Unilever claims to want a ‘waste-free’ world, yet **just 0.2% of its plastic packaging is currently reusable**¹⁰ and the company has to date refused to set a reuse target.¹¹
- If the company continues increasing its share of reusable packaging at its current rate, **it will be the new millennium before it fully switches over to reuse.**¹²
- Unilever is the biggest corporate seller of plastic sachets in the world,¹³ and is predicted to sell **over 53 billion sachets in 2023 – 1,700 per second.**¹⁴ Campaigns around the world have called for these sachets to be banned due to their appalling environmental and health impacts, particularly in Global South communities.
- The company first promised to tackle the problem of sachet waste in 2010. Instead, it went on to produce **an estimated 475 billion over the next decade, steadily increasing sachet production by approximately 1-2 billion items a year.**¹⁵
- Dove, Unilever’s most profitable ‘master’ brand, generates billions of units of single-use plastic each year, including **an estimated 6.4 billion sachets, accounting for over 10% of Unilever’s total sachet sales.**¹⁶

This report exposes the gap between what Unilever says it will do, and what it actually does.



Unilever’s commitment to reduce its plastic footprint vs. the grim reality

Top: © Unilever

Bottom: Navotas, the Philippines
© Greenpeace / Jilson Tiu

Unilever must act in the interest of all life on Earth and end single-use plastic packaging for good.

The report also highlights that:

- **Flexible packaging, of which sachets are a subset, constitutes over 30% of Unilever's plastic footprint**,¹⁷ and the latest data shows its use to be increasing rather than decreasing.¹⁸ Flexible plastics were recently highlighted by the Ellen MacArthur Foundation as a major obstacle to companies reaching their Global Commitment targets and a priority for action.¹⁹
- Despite repeatedly condemning plastic sachets publicly, **Unilever has reportedly lobbied against laws to ban them** in regions where low-income communities are most impacted by sachet pollution.²⁰
- As part of its public pledge to address plastic pollution, Unilever has partnered with companies to burn landfill waste as fuel for cement kilns – **one of the most carbon-intensive energy sources in the world, second only to coal**.²¹
- For over a decade, Unilever has touted its CreaSolv technology, which uses a chemical process to recycle used sachets, as a solution to the problem of sachet waste. However, its CreaSolv facility in Indonesia failed to meet its recycling goals, and visiting reporters were told at the front desk that **no one had visited the facility in six months, suggesting that the entire project had been abandoned**.²²

THE GLOBAL PLASTICS TREATY

The UN is currently negotiating **The Global Plastics Treaty**, a once-in-a-generation chance to establish legally binding, international rules to get the plastics crisis under control. With a €60.1 billion turnover in 2022 and sales spanning over 190 countries worldwide,²³ Unilever has the size, reach and resources to influence the Treaty and drive the transition away from single-use plastic packaging to large-scale reuse systems.

Two million people from 29 countries have joined Greenpeace's²⁴ campaign for a strong Global Plastics Treaty. The public mandate has been set. Now Unilever must act in the interest of all life on Earth and end single-use plastic packaging for good.



Greenpeace sends a message to the UK government ahead of the UN Global Plastics Treaty negotiations in May 2023 © Greenpeace / Ollie Harrop

GREENPEACE CALLS ON UNILEVER TO:

- Commit to **end its use of plastic sachets by the end of 2025** and lead work to enable The Global Plastics Treaty to deliver a global sachet ban.
- Develop a roadmap detailing how it will phase out single-use plastic packaging from its operations and pivot to reusable packaging within 10 years, **prioritising the elimination of sachets and other flexible plastics**.
- Support Greenpeace's call for The Global Plastics Treaty to set a global target to **cut plastic production by at least 75% by 2040**.



FOREWORD

I've lived in Manila, capital of the Philippines, for almost four decades and have witnessed first-hand the scourge of sachets on my neighbourhood. These single-use products are heavily promoted in advertising and sold in sari-sari stores (neighbourhood convenience shops) as an affordable option for low-income communities. But this has dire consequences for those same communities – from the high costs of waste management services, to the increased risk of flooding as a result of plastic pollution.

Sachets and other plastic waste often clog the waterways and drains around my city and are an ever-present reminder of the threat of flooding. This experience is shared throughout much of Asia, with a recent study estimating that more than 200 million people are at risk of more severe and frequent flooding caused by plastic waste.²⁵

Unilever is no stranger to the havoc sachets wreak on communities like mine, with executives describing them as 'evil because they cannot be recycled'.²⁶ Why then does the company continue to rank as one of the worst plastic polluters in brand audits?²⁷ This double standard is deplorable, especially considering the growing demand from the public to ban single-use plastic.²⁸

The fact is: people in affected communities don't want sachets. Instead, we're urging companies like Unilever to switch to reuse systems that will clean up the places we call home. Break Free From Plastic is one such movement, calling on Unilever to scale up investments in reuse and refill systems, and to support a sachet ban through The Global Plastics Treaty.

It's high time that Unilever acted on its own condemnation of sachets and saved our environment from these 'evil' products once and for all.



Miko Aliño
Break Free From Plastic

Image above: Sachet waste collected off the coast of Parañaque in Metro Manila, the Philippines © Greenpeace / Louise Edge

INTRODUCTION

THE PLASTICS CRISIS: A WAKE-UP CALL

Plastic pollution is already devastating communities, habitats and the climate. Yet without decisive corporate and political action, the problem will only escalate.

In 2017, the world was shaken by David Attenborough's historic documentary, *Blue Planet 2*. Heartbreaking footage exposed the magnitude of plastic pollution in marine ecosystems, motivating millions to demand change. World leaders and corporations scrambled to respond, making bold commitments to tackle the issue. Yet in the six years since the alarm bells sounded, rates of plastic production, use and pollution have skyrocketed.²⁹

Today, more than 460 million tonnes of plastic is produced globally each year³⁰ – greater than the combined mass of every person alive³¹ – with plastic pollution now reaching every corner of the globe, leaching hazardous chemicals into the soil and clogging our rivers and oceans.

But whilst *Blue Planet 2* revealed the blight of plastic on our oceans, we are now realising that the impact on human health is equally harrowing. Microplastics – particles less than five millimetres in length – have not only been found on the highest mountains^{32,33} and in the deepest seas,³⁴ but in human blood,³⁵ breast milk³⁶ and placentas.³⁷ Marginalised communities bear the brunt of this health crisis, with incinerators, landfill, petrochemical facilities and polluted waterways disproportionately impacting people in the most economically disadvantaged regions of the world.^{38,39,40}

Plastics are also a significant threat to our climate: 99% are made from fossil fuels and emissions are produced at every stage of their lifecycle – from when the oil or gas is extracted, to when plastic is burned in an incinerator, or degrades in landfill or our oceans. As global demand for oil declines, the fossil fuel industry is doubling down on plastic, investing billions in plans to massively expand its production.⁴¹ Indeed, if industry has its way, global plastic production could triple by 2050.⁴²



Today, more than 460 million tonnes of plastic is produced globally each year – greater than the combined mass of every person alive.

Top: A child walking home in Manila, the Philippines © Greenpeace / Jilson Tiu

Crab: © Greenpeace / Noel Guevara

Microplastic: © The 5 Gyres Institute

Bottom: Plastic waste being burned in Bangkun Village, Indonesia © Ecoton / Fully Handoko



Despite Unilever's influential position in the industry and copious public statements about sustainability, the company is set to renege on many of its EMF commitments.

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A plastic-clogged river in Manila, the Philippines
© Greenpeace / Jilson Tiu

Meanwhile, corporate measures to tackle these myriad threats are failing. After Blue Planet 2, many companies voluntarily signed the Ellen MacArthur Foundation's (EMF) Global Commitment, agreeing to tackle plastic pollution by 2025.⁴³ Yet shockingly, signatory companies are now producing more, not less plastic.⁴⁴ Worse still, they are set to fail to meet their commitment to ensure that 100% of their plastic packaging is reusable, recyclable or compostable by 2025 – with average reusable packaging rates languishing at a miserly 1.2%.⁴⁵

Unilever, one of the world's biggest corporate plastic polluters, joined the Global Commitment back in 2017. But despite its influential position in the industry and copious public statements about sustainability, the company is also set to renege on many of its EMF commitments. This is unsurprising given its staggeringly high production of single-use, non-recyclable sachets and other 'flexible' plastics (see: 'Unilever and sachets'), along with its failure to invest in reuse.⁴⁶



Unilever's sustainability marketing paints an idyllic picture, but the reality is far less charming

Left: © Unilever

Right: © Greenpeace / Jilson Tiu

Still, with this mounting disaster comes a moment of immense opportunity.

The UN is currently negotiating The Global Plastics Treaty, a once-in-a-generation chance to establish legally binding, international rules to get the plastics crisis under control. The formation of the Business Coalition for a Global Plastics Treaty⁴⁷ has arguably been a positive first step in countering the influence of the fossil fuel lobby on Treaty negotiations, but to achieve lasting change, stronger measures are required than those currently proposed by the coalition.

Unilever, with its enormous leverage on the sector and vast brand portfolio, has the power to strengthen those measures. The company must support robust new legislation – including the setting of a global target to cut plastic production by at least 75% by 2040, targets and funding packages to drive a large-scale shift away from throwaway plastic to at-scale reusable packaging systems, and bans on items like plastic sachets. This should be in parallel with voluntary commitments to clean up Unilever's own packaging, starting with a roadmap for how the company will transition away from single-use plastic packaging to reuse systems, with the elimination of plastic sachets as an urgent first step.

Unilever must support robust new legislation – including the setting of a global target to cut plastic production by at least 75% by 2040 and bans on items like plastic sachets.

PROTESTS AROUND THE WORLD CALLING FOR A STRONG GLOBAL PLASTICS TREATY

Top left: Nairobi, Kenya

© Greenpeace / Paul Basweti

Top right: Seoul, Republic of Korea

© Greenpeace / Jung-geun Augustine Park

Bottom left: Auckland, New Zealand

© Greenpeace / Ben Sarten

Bottom right: Hollywood actor Shailene Woodley in Paris, France

© Greenpeace / Noemie Coissac



1.

UNILEVER'S BROKEN PLASTIC PROMISES

Unilever is one of the largest consumer goods companies in the world, with a €60.1 billion turnover in 2022 and sales spanning over 190 countries worldwide.⁴⁸ It is also one of the biggest producers of single-use plastic packaging on Earth, and consequently one of the biggest drivers of plastic pollution.

In a major annual brand audit of global corporate plastic polluters, Unilever has been in the top five worst performers every year,⁴⁹ and is reportedly responsible for an estimated 70,000 tonnes of mismanaged plastic waste annually (i.e. that which is burnt or dumped) across just six countries.⁵⁰

Despite this, Unilever positions itself as a green pioneer, claiming online to champion a 'waste-free world' and aiming to use 'less plastic, better plastic or no plastic'.⁵¹ To achieve this, Unilever has set itself four main goals:

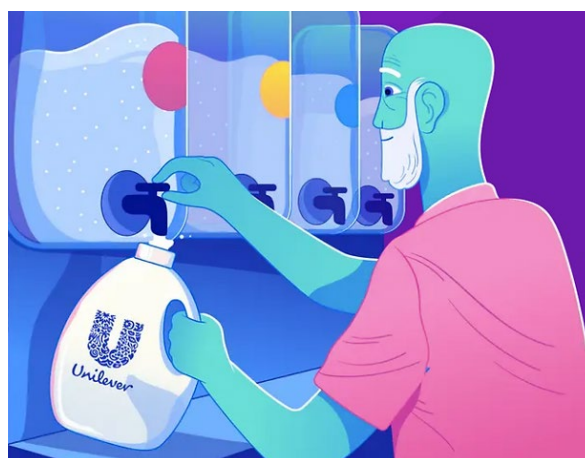
- **Reduce:** 50% virgin plastic reduction by 2025 – to include an absolute reduction of more than 100,000 tonnes.
- **Reuse:** 100% reusable, recyclable or compostable plastic packaging by 2025.
- **Recycle:** 25% recycled plastic by 2025.*
- **Recover:** to 'collect and process more plastic than we sell' by 2025.⁵²

However, these goals do not represent sufficient shifts in Unilever's business practices to address the scale of the crisis. It has no concrete commitment, target or timeline for phasing out single-use plastic and no target for moving to reusable packaging.

* This target refers to the use of recycled content in Unilever's packaging, not recycling 25% of its plastic.



Unilever positions itself as a green pioneer, claiming online to champion a 'waste-free world'.



Top: Dove sachet waste discovered in a landfill site, Indonesia, October 2023

© Greenpeace / Wahyu Susanto

Bottom: Unilever's 'waste-free' marketing
© Unilever

INSUFFICIENT TARGETS, INSUFFICIENTLY MET

Reduce

In its public PR, Unilever sometimes fails to make the distinction between its use of virgin and recycled plastic, promising a generic ‘50% cut in plastic use’.⁵³ Yet the reality behind this seemingly impressive soundbite is that Unilever’s total plastic packaging footprint – virtually all of which is single-use – has not been decreasing at all. The company produced 610,000 tonnes of plastic packaging in 2017,⁵⁴ 700,000 in 2018,⁵⁵ 700,000 in 2019,⁵⁶ 690,000 in 2020,⁵⁷ reaching 713,000 tonnes in 2021⁵⁸ before dipping to 698,000 in 2022.⁵⁹

Furthermore, in 2022, Unilever’s virgin plastic use was down a mere 13% relative to 2019,⁶⁰ a figure which seems incompatible with its commitment to reach 50% by 2025. At the current rate, it won’t achieve that goal until at least 2034.⁶¹

Meanwhile, progress against its stated objective to reduce ‘absolute plastic usage’ by 100,000 tonnes remains unclear. Indeed, this was conspicuously absent from the plastic-related commitments cited in Unilever’s 2022 annual review.⁶²

Unilever’s total plastic packaging footprint – virtually all of which is single-use – has not been decreasing at all.

Reuse

Unilever’s progress towards producing ‘100% reusable, recyclable or compostable plastic packaging’ by 2025 has been hovering between 50-55% for the past five years.⁶³ However, it’s important to note that Unilever has focused almost all of its efforts in this regard on recycling projects. The company does not report using any compostable packaging,⁶⁴ while reuse has been relatively ignored, as have repeated calls for the company to set a reuse target.⁶⁵ In fact, just 0.2% of Unilever’s plastic packaging is reusable⁶⁶ – up just 0.1% from the previous year.⁶⁷ If the company genuinely aspires to a ‘waste-free world’, reusable packaging is the gold standard to achieve that. At Unilever’s current rate, it will be the new millennium before that world is upon us.⁶⁸

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An investigation into plastic waste in Metro Manila, the Philippines, revealed used sachets polluting the environment © Greenpeace / Jilson Tiu



OCTOBER 2023

A plastic-clogged river in
Manila, the Philippines
© Greenpeace / Jilson Tiu

**If Unilever
genuinely aspires to
a 'waste-free world',
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before that world
is upon us.**

Unilever's PR machine tells a different story, coining the mantra 'Less plastic, better plastic, no plastic',⁶⁹ and publicising its numerous refill trials. However, many of these trials have been criticised for being too small, short term, or only available in expensive malls that block low-income communities from accessing them. For example, in 2019, an 'All Things Hair Refillery' station lasted a few months at three locations in the Philippines,⁷⁰ and over the next couple of years, similar initiatives were also short-lived in Singapore⁷¹ and Vietnam.⁷² In 2020, the company made 11 of its brands available at Saruga, an upmarket packaging-free store in Jakarta, to much fanfare.⁷³ In 2021, the company introduced 'Smart Fill' stations for detergents in upmarket malls in India.⁷⁴ Whilst Unilever's ads initially reported that the stations were dispensing 150L an hour,⁷⁵ in 2022, staff at one of the stations told Reuters that their branch only sold around 10 bottles worth of product a day.⁷⁶ Unilever also trialled refill stations in the UK and Ireland, selling seven of its brands for refill in a small selection of Asda and Co-op supermarkets, but there is nothing from the company to suggest that these have been extended either.⁷⁷ The most encouraging shift towards real progress came recently, when it was announced that Unilever Indonesia had partnered with a startup called Alner to roll out refill stations in convenience stores and waste banks in Jakarta.⁷⁸

Ultimately, regardless of Unilever's refill publicity, there has yet to be a significant improvement in its scaling of these schemes and the company continues to fail to set a reuse target whilst its plastic footprint remains static. If Unilever is committed to a waste-free world, it must roll out reuse and refill at a global scale and phase out single-use plastic packaging for good.

EXAMPLES OF UNILEVER BRANDS

Beauty & wellbeing

CLEAR

Simple

sunsilk

Vaseline



Personal care

Lifebuoy

Dove



AXE



Ice cream

M
MAGNUM

WALL'S

BEN & JERRY'S

Corretto

Home care

Cif

Persil

Comfort

Surf

Nutrition

HELLMANN'S
EST. 1913

Horlicks

Knorr

A selection of Unilever's 400 global brands, many of which are sold in sachets

Only a measly 9% of all the plastic ever produced has been recycled.

Recycle

Unilever's goal of using '100% reusable, recyclable or compostable plastic packaging' by 2025 is virtually impossible given its extensive use of flexible packaging like sachets. These items cannot be effectively recycled,⁷⁹ yet flexibles contribute to 31% of the company's plastic footprint⁸⁰ (see: 'Unilever and sachets').

Whilst Unilever is on track to meet its 25% recycled content target by 2025, the problem with this is two-fold. Firstly, evidence suggests that recycling is an ineffective means of tackling plastic pollution and that recycled plastic can in fact be more toxic (see: 'We can't recycle our way out of this').⁸¹ Secondly, using recycled content, regardless of the efficiency of recycling, will have minimal impact if the company continues to produce more units of single-use plastic and maintains its throwaway business model. Given that it has built room into its own targets to ramp up single-use plastic production, Unilever could technically produce more plastic than ever before but still fulfil its recycled content and virgin plastic reduction targets, thereby undermining the purpose of such goals. Instead, Unilever must prioritise its efforts upstream by phasing out single-use plastic packaging entirely.



Unilever-branded plastic waste found in the Great Pacific Garbage Patch in 2018
© Greenpeace / Justin Hofman

Recover

Unilever proudly states that its 'businesses in India, Indonesia and Vietnam [...] have collected and processed more plastic than they sold, through physical waste collection and the purchase of recycled plastic'.⁸² However, many plastic recovery programmes in these regions rely on low-waged labour and extracting waste that's already in landfill. The waste is often burned or processed into fuel for polluting cement kilns (see: 'Refuse-derived fuel'), yet according to Unilever, this counts as responsibly tackling waste.

WE CAN'T RECYCLE OUR WAY OUT OF THIS

Unilever and corporations-at-large like to tout recycling as a cure-all for the plastics crisis, but recycling simply delays the problem of plastic waste, it doesn't solve it. For one thing, recycling puts the onus firmly on the consumer, who is responsible for entering packaging into the recycling system in the first place. What's more, the vast majority of plastic in circulation is unrecyclable and plastic waste is difficult to collect, clean, sort and recirculate – particularly when it needs to be recovered from the environment. That's why only a measly 9% of all the plastic ever produced has been recycled.⁸³

To aggravate matters, many plastics, including sachets and other flexible plastics, are practically

impossible to recycle and have little to no economic value.⁸⁴ Unlike materials such as aluminium and glass, which can be recycled indefinitely, plastic quickly degrades when recycled. Furthermore, new research has shown that the recycling process releases microplastics into the environment⁸⁵ and actually makes the plastic more toxic.⁸⁶

If companies like Unilever continue to produce single-use plastic packaging, they will require huge volumes of virgin plastic – no matter how much gets recycled. To address the plastics crisis, Unilever must end its focus on recycling schemes and focus on eliminating plastic use and production altogether.

2.

UNILEVER AND SACHETS

**‘At best, the sachets end up in landfill. At worst, they end up as litter in the streets, the waterways and the oceans.’
– Unilever in a 2017 announcement about its plastics recycling initiative⁸⁷**

The plastics crisis has been exacerbated by all kinds of single-use products, from drinks bottles to food wrappers, but one of the most pernicious forms of plastic pollution is sachets. New research commissioned by Greenpeace shows an astonishing 956 billion sachets were sold globally in 2022, with a sachet packaging market value greater than the GDP of The Bahamas. This is projected to grow to 1.5 trillion in 2033, and South Asia is anticipated to be the fastest-growing market.⁸⁸ Among Fast-Moving Consumer Goods (FMCG) companies, Unilever is the biggest corporate seller of sachets in the world⁸⁹ and is predicted to sell over 53 billion sachets this year – that’s 1,700 per second. The number of sachets the company produces has been steadily increasing by approximately 1-2 billion per year since at least 2010.⁹⁰

In the 1980s, Unilever was the first to start selling sachets of its products to Indian consumers on a large scale.⁹¹ Each plastic pouch contained a single serving of shampoo and cost just one rupee, making sachets affordable to India’s poorer communities. Since then, this model has been rolled out across Asia and much of the rest of the Global South.

But by relentlessly pushing sachets on low-income communities for the last four decades, Unilever has helped create a dependency on them. In the Philippines, for example, around 164 million sachets are now used every single day.⁹² The consequences can be seen in the streets, rivers and beaches of the countries where Unilever operates. In Indonesia, sachet waste makes up 16% of all plastic waste,⁹³ and in an audit of efforts to remove the plastic waste clogging rivers in Bali, Unilever was found to be the largest source of sachet pollution.⁹⁴



Unilever is predicted to sell over 53 billion sachets this year – that’s 1,700 per second.

TOP: OCTOBER 2023 – Dove shampoo and Surf detergent sold in sachets in Manila, the Philippines © Greenpeace / Jilson Tiu

BOTTOM: SEPTEMBER 2023 – Used Dove sachets found on the shores of Freedom Island, the Philippines © Greenpeace / Jilson Tiu

According to Unilever, ‘plastic sachets allow low-income consumers an opportunity to buy small amounts of products [...] which they would otherwise not be able to afford’.⁹⁵ However, prior to the introduction of sachets, customers typically collected these small amounts in reusable containers that they brought to the shops, generating far less waste. This system was replaced by sachets, which are almost impossible to recycle and have no economic value. Moreover, Unilever’s ‘social’ justification for selling sachets rings hollow, given that by volume, sachets are more expensive than full-sized products.⁹⁶

**By volume,
sachets are more
expensive than
full-sized products.**

Dove sachets found in Freedom Island, the Philippines © Greenpeace



WHAT IS A SACHET?

Often associated with condiments or cosmetic samples in the Global North, sachets are a type of flexible plastic widely used in emerging markets to sell cheap, usually single portions of everyday products, ranging from shampoo and laundry liquid to seasoning and snacks. These palm-sized packets typically consist of multiple layers of flexible plastic between sheets of aluminium, which gives them no reusability and makes them practically impossible to recycle.

THE NEGATIVE HEALTH IMPACTS OF SACHET POLLUTION

- **EXPOSURE:** Chemicals and additives in plastics can harm human health, potentially affecting fertility, hormonal, metabolic and neurological activity.⁹⁷
- **AIR QUALITY:** A lack of infrastructure means sachet waste is often burned, releasing harmful pollutants into the air which can cause respiratory problems and air pollution related diseases.⁹⁸
- **FLOODING:** Sachet waste can clog drains and waterways, increasing the risks of flooding and waterborne diseases.⁹⁹

WHAT UNILEVER SAYS



Promised to ‘tackle sachet waste’ by 2015¹⁰⁰



‘Less plastic, better plastic, no plastic’¹⁰²



100% reusable, recyclable or compostable plastic packaging by 2025¹⁰⁵



Then CEO Alan Jope declares, ‘we will crack that problem in the next year or so’ and ‘we have to get rid of [sachets]’¹⁰⁷

WHAT UNILEVER DOES



Went on to produce an estimated **475 billion sachets over the next decade**, steadily increasing production by approximately 1-2 billion items a year.¹⁰¹



Static plastic footprint¹⁰³ and failure to adopt reusable packaging for **more than 0.2% of its plastic products**.¹⁰⁴



Will struggle to meet this target, due largely to its **increasing use of flexible packaging, including sachets**, which cannot be reused, composted or recycled.¹⁰⁶



Unilever reportedly gives two presentations to officials at Sri Lanka’s Environment Ministry, **discouraging the government from phasing out sachets**.¹⁰⁸

ALL TALK: UNILEVER CONDEMNS SACHETS WHILST LOBBYING TO KEEP THEM

‘25,000 flexible plastic packaging items end up in the ocean every second. If we remain on this track, the number will double by 2040.’ – Ellen MacArthur Foundation, 2023¹⁰⁹

Over the last two decades, Unilever has acknowledged on several occasions that sachets are an environmental scourge. In 2010, the company promised to ‘tackle sachet waste’ by 2015,¹¹⁰ but by 2020, Unilever admitted that it had failed, saying, ‘progress has been slower than we originally anticipated, but we are continuing to investigate the potential of new business models [...] to reduce our dependence on multi-layer sachets’.¹¹¹ Whilst progress was slow, production was not, and Unilever went on to produce an estimated 475 billion sachets in that 10 year period alone.¹¹²

In 2019, Unilever’s President for Global Food & Refreshments said, ‘we’re a big polluter,’ and referred to multi-layer plastic (which includes sachets) as ‘evil because you cannot recycle [them]’.¹¹³ Paul Polman, who was CEO from 2009 to 2018, wrote that ‘despite our best efforts, and lord knows we tried, packaging this small and with such little value has proved impossible to collect at scale, let alone recycle,’

concluding, ‘we need to get rid of harmful sachets for good’.¹¹⁴ In 2020, Alan Jope, the CEO after Polman, doubled down on this, saying that the company ‘had to get rid of them’.¹¹⁵

Given this, it should be safe to assume that Unilever would be quick to support any government seeking to limit the production of sachets and clean up the environment. Yet a Reuters investigation found that in 2020, Unilever actually lobbied against the Sri Lankan government introducing legislation to ban the sale of 6ml sachets – the smallest option for shampoo and conditioner – and only allow sachets larger than 20ml to be sold. When this lobbying failed and the law came into effect, Unilever reportedly then tried to bend the rules, selling the 6ml sachets in multipacks of four. The company was then threatened with legal action from Sri Lanka’s Environment Ministry, after which it stopped selling 6ml sachets but continued to legally sell larger sachets.¹¹⁶

According to Reuters, Unilever also lobbied against proposed sachet bans in India and the Philippines, which were eventually dropped.¹¹⁷ The duplicity of Unilever’s actions in the region demonstrates the enormous gulf between the rhetoric of its top executives and its steadfast commitment to putting business as usual ahead of nature and human health.

UNILEVER’S SACHET SALES AND PROJECTED SACHET SALES

Sachet sales volume (billion units)

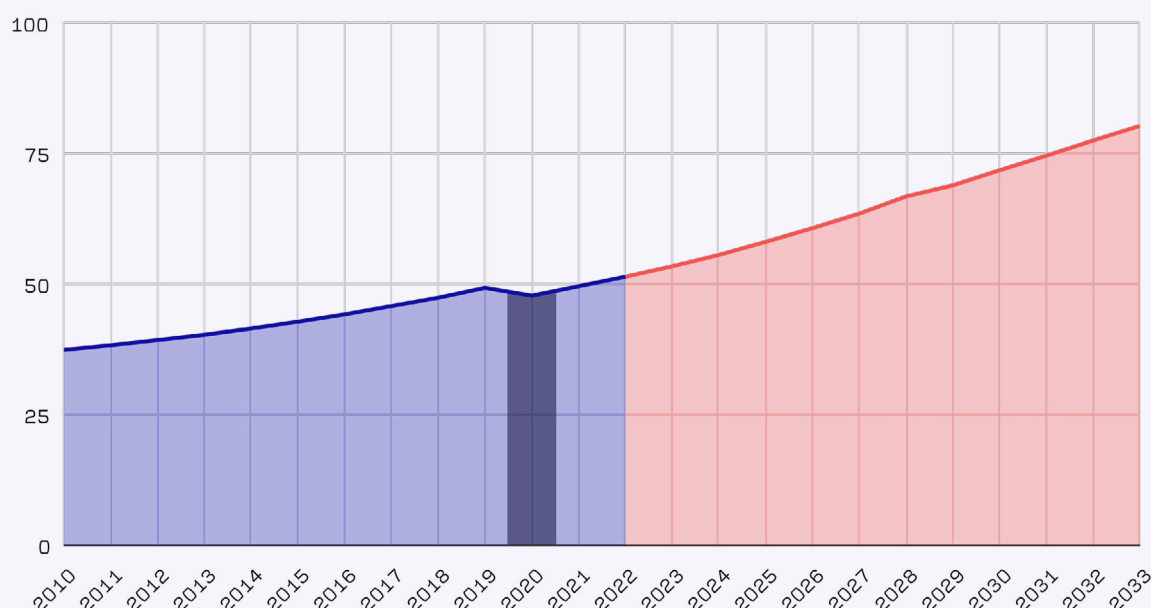


FIGURE 1

Note the dip in sales during the first stage of the pandemic.

Source: see reference 15.

KEY

Sales 2010–2022

Projected sales 2023–2033

Pandemic begins

UNILEVER'S FALSE SOLUTIONS

CreaSolv

For over a decade, when responding to criticism about its sachet use, Unilever has cited so-called 'chemical recycling' and, specifically, its CreaSolv technology as a solution it is working on.^{118,119,120}

In 2017, the company announced the opening of a CreaSolv facility in Indonesia which would use a chemical process to recycle the plastic polymers in used sachets to make new ones.^{121,122} Unilever partnered with local waste banks and waste pickers to collect sachets.¹²³ According to its initial press releases, Unilever claimed that the plant would be able to process three tonnes of flexible plastic a day, with reported plans to scale up to five tonnes.^{124,125}

In reality, the facility reportedly struggled to produce five tonnes a month.¹²⁶ What's more, despite Unilever promising to fuel a sachet-recycling boom by sharing the chemical process with its competitors, a 2021 Reuters investigation found evidence that no one had visited the CreaSolv facility in six months, suggesting that the entire project had been dropped.¹²⁷

By 2019, Unilever stopped buying sachet waste, reportedly leaving waste banks with a large volume of material that they would never normally stock. Unlike plastic bottles or other containers, used sachets have no purpose in the wider economy and almost no value, forcing waste banks to burn some of the sachets in open fires.¹²⁸

In 2020, Alan Jope, CEO of Unilever at the time, knew the writing was on the wall, saying that Unilever has 'solvolysis and pyrolysis and various other types of technologies that can just about process current multilayer materials but they're really not very economical and so the short answer [is that] we've got to get rid of them'.¹²⁹ Evidently, projects like CreaSolv are not going to solve plastic waste, and get in the way of the tenable solutions (see: 'The solution: Reusable packaging').

Refuse-derived fuel

'Refuse-derived fuel' (RDF) makes up a relatively small but growing part of the energy make-up in Asia, in which plastic waste is burned to generate energy for industrial processes, typically cement kilns. Unilever has spotted this burgeoning industry as an opportunity to dispose of some of the waste it produces in the region. In 2020, Unilever Indonesia partnered with the Jakarta Municipal Environment Office and cement manufacturer PT Solusi Bangun Indonesia Tbk (SBI) to dig up plastic waste from

'RDF is like moving the landfill from the ground to the sky.'

Burning plastic
in Manila, the
Philippines
© Greenpeace /
Daniel Müller



landfill.¹³⁰ It aimed to produce 1,000 tonnes of RDF a month from it. Unilever Indonesia then planned to expand throughout the country to collect 50,000 tonnes of plastic in 2022¹³¹ – presumably also to burn it, as is a common waste-handling practice in Indonesia. Unilever has started similar schemes with cement companies in India,¹³² Vietnam¹³³ and Thailand¹³⁴ – markets where the company proudly claims to collect and process more waste than it sells. The cement and plastics industries are hailing RDF as a clean way to solve the plastics crisis, noting that it is often used to replace coal. However, the US Environmental Protection Agency has concluded that there is no significant climate benefit from substituting plastic for coal.¹³⁵ In fact, the energy generated by burning plastic in 'energy from waste' incinerators is one of the most carbon-intensive sources of power on the planet, second only to coal.¹³⁶

To put this into context, burning the 50,000 tonnes of plastic waste that Unilever Indonesia aimed to collect in 2022¹³⁷ would have released approximately 100,000 tonnes of CO₂-equivalent emissions – comparable to driving 22,000 petrol cars for a year.¹³⁸ It's inconceivable, then, that Unilever would consider RDF a source of pride. As well as high CO₂ emissions, incineration of plastics contributes to poor air quality in local communities, sometimes releasing carcinogens into the air and contaminating the nearby land.¹³⁹ Concerns around air quality degradation have led RDF to be described as 'like moving the landfill from the ground to the sky'.¹⁴⁰ Unilever's move towards RDF is also in direct contravention to its own net zero corporate goals, which claim that there is 'no time to waste' in achieving a net zero economy.¹⁴¹ If net zero is genuinely central to its business model, it begs the question as to why Unilever is investing in carbon-intensive alternative fuels.

CASE STUDY: DOVE – REAL HARM



Top: Greenpeace is calling on Dove to phase out single-use plastic @ Greenpeace

Bottom: 'Companies like Dove don't care. How can they, when their sachets trash my community?' – Marilou, the Philippines
© Greenpeace / Jilson Tiu

The 'Campaign for Real Beauty' seems like a cynical ploy to generate sales whilst vulnerable women and girls suffer.

Dove is one of Unilever's most profitable 'master' brands. It is valued at \$6.5bn¹⁴² and among the three leading health and beauty brands worldwide.¹⁴³ It is also symptomatic of the gulf between Unilever's marketing and its business practices.

As part of Dove's 'Campaign for Real Beauty', the brand features 'real women' in its advertising to challenge the beauty standard and empower girls and women. This has led to record profits and brand loyalty, with sales jumping from \$2.5 billion to \$4 billion in the campaign's first 10 years.¹⁴⁴ But dig a little deeper and the truth is far less beautiful.

Despite saying that Dove is 'passionately committed to being one of the brands making the biggest impact against plastic waste',¹⁴⁵ the company has removed plastic packaging entirely from just one of its products¹⁴⁶ and currently sells billions of units of single-use plastic each year, including an estimated 6.4 billion sachets in 2022 (accounting for over 10% of Unilever's total sachet sales).¹⁴⁷ It has replaced much of its virgin plastic with recycled plastic and in 2019, launched recycled bottles in Europe and North America¹⁴⁸ – regions with infrastructure to handle at least some plastic waste. However, throughout Asia, Dove continues to sell its products in sachets – packaging that Unilever itself has branded 'evil' (see: 'Unilever and sachets'). This not only damages fragile ecosystems but has unjust and harmful ramifications for the women and girls that Dove claims to empower.

According to Renuka Thakore, a lecturer and researcher at the University of Central Lancashire, 'women are disproportionately affected by plastic toxicity and gender inequality throughout the plastic lifecycle, from manufacturing to waste management'.¹⁴⁹ This is far worse for marginalised women and children, including vulnerable and at-risk populations, low-income communities, women of colour, and Indigenous women. The health of nearly two billion people in lower and middle income countries (LMICs) is affected by mismanaged and dumped waste, including plastic,¹⁵⁰ and this hits economically and socially disadvantaged communities, including women and girls, the hardest.

It can be said, then, that Dove's message of female empowerment is irreconcilable with the gendered impact of its plastic packaging. Rather, the 'Campaign for Real Beauty' seems like a cynical ploy to generate sales and modernise Dove's public image with pseudo-feminism, whilst vulnerable women and girls suffer. The company claims to want to 'turn the tide against plastic waste'.¹⁵¹ It owes it to the next generation of women and girls to take that statement beyond PR and spearhead a waste-free world. That starts by phasing out single-use plastic, beginning with sachets.

3.

THE SOLUTION: REUSABLE PACKAGING

The plastics crisis can feel insurmountable, but before the proliferation of single-use packaging, reuse systems were commonplace and there is growing demand for them, with a recent study showing that more than half of UK consumers are more likely to buy from a brand that offers returnable packaging.¹⁵²

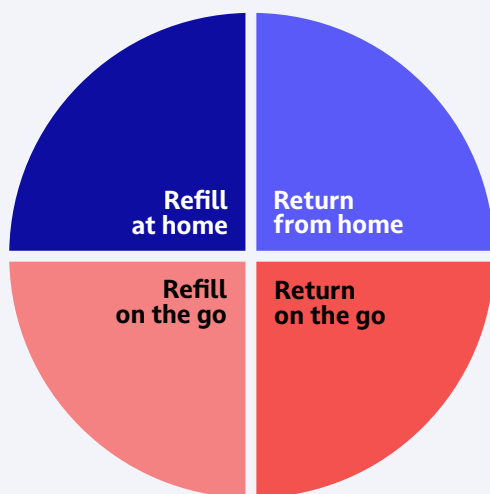
In 2018, Unilever called on the consumer goods industry to ‘invest in innovation towards new delivery models that promote reuse’, in order to address plastic pollution.¹⁵³ Clearly, Unilever understands the need for a transformation of the packaging system towards reuse and refill. All that’s left is for the company to embed that understanding into the way it runs its business.

ALTERNATIVES TO SINGLE-USE PLASTIC

There are four main reuse models: refill at home, return from home, refill on the go and return on the go. Each model varies depending on whether the consumer owns the container or rents it, and how they refill the product.



Refillable products at a sari-sari store (neighbourhood shop) in Quezon city, the Philippines © Greenpeace / Jilson Tiu



Adapted from a graphic by the EMF

The four reuse models

Refill at home

Users refill their reusable container at home (e.g. with refills delivered through a subscription service).

Return from home

Packaging is picked up from home by a pick-up service (e.g. by a logistics company).

Refill on the go

Users refill their reusable container away from home (e.g. at an in-store dispensing system).

Return on the go

Users return the packaging to a store or drop-off point (e.g. a deposit return machine or mailbox).

Return models

Deposit return schemes (DRS) are prevalent in Europe and the USA; a system where businesses own the packaging, which consumers then rent and return for cleaning, refilling and redistribution. Norway is home to one of the oldest schemes in the world and in 2021, had an average container return rate of 92.3%.¹⁵⁴

Refill models

Rather than renting the container, in refill models consumers buy it with the initial purchase of the product and then refill it, either with at-home deliveries or in-store. Successful trials and implementations of these models exist across several industries, and would be particularly straightforward for Unilever, since the majority of its sachet products are for home or personal care, lacking the challenges associated with food storage and hygiene.



The EMF estimates that replacing even 20% of single-use packaging with reusables could be worth \$10 billion in business opportunity.

The mutual benefits of reuse

Reuse has undeniable environmental benefits, including a reduction of greenhouse gas emissions, water use and material consumption. Indeed, Reloop and Zero Waste Europe estimate that such schemes can decrease lifecycle emissions by up to 85%.¹⁵⁵ Swapping single-use plastic for a reuse and refill model is not just an environmental imperative, it's a strategic business move. The EMF estimates that replacing even 20% of single-use packaging with reusables could be worth \$10 billion in business opportunity, with other benefits beyond the reduced environmental impacts, including customer convenience and choice.¹⁵⁶

In every market where it operates, Unilever should introduce reuse systems alongside innovations that eliminate packaging entirely. For instance, by offering 'pre-filled' products at supermarkets, and/or in partnership with local businesses setting up dedicated refill stations. Also by offering low-cost solid shampoo and conditioner bars that eliminate the need for packaging entirely. This is especially urgent in markets where single-use sachets are most widely sold. These initiatives align with Unilever's purported environmental commitments and would set a powerful example across the consumer goods industry. To ensure success, it is important that, as companies like Unilever innovate away from single-use plastic, programmes are well resourced, properly incentivised and advertised, and accessible to a wide range of customers in all geographic regions.

Top: A DRS in London, UK
© Greenpeace / Kristian Buus

Bottom: Kuha sa Tingi refill dispensers at a sari-sari store (neighbourhood shop) in Quezon City, the Philippines
© Greenpeace / Basilio Sepe

CASE STUDY: KUHA SA TINGI

'Kuha sa Tingi' is a project co-led by Greenpeace Philippines in collaboration with Impact Hub Manila and the local government.¹⁵⁷ The project seeks to reduce the use of sachets by developing a zero-waste alternative delivery system (ADS) with competitive pricing. It has a broad and practical inventory and adaptable design, providing consumers with affordable, accessible and environmentally friendly alternatives to single-use plastic. By integrating refilling stations in sari-sari stores (neighbourhood shops), Kuha sa Tingi protects existing stakeholders and makes alternatives to plastic-packaged goods readily available. The business model is replicable, viable and achieves the desired objective: eliminating single-use plastic.

'Tingi' means 'retail' in Filipino. Before sachets, the Philippines' tingi culture of small-volume retail was characterised by sustainable practices. Products were bought in the exact quantity needed, ensuring little waste and maximum affordability. This culture was then exploited by corporations, who introduced sachets that targeted the low-income groups who benefitted from tingi. Kuha sa Tingi seeks to reclaim the system by reimagining small-volume retail as the zero-waste model it was originally intended to be.

By integrating refilling stations in sari-sari stores, Kuha sa Tingi protects existing stakeholders and makes alternatives to plastic-packaged goods readily available.

A sari-sari store owner selling refillable products as part of Kuha sa Tingi, Quezon city, the Philippines
© Greenpeace / Jilson Tiu



CONCLUSION

UNILEVER'S CAPACITY TO INFLUENCE THE SECTOR

Just as the climate crisis has spurred a global effort to phase out the internal combustion engine,¹⁵⁸ the plastics crisis must be met with similar urgency and ambition. As one of the world's biggest consumer goods companies, Unilever has the power to help lead the way. By working with suppliers, competitors and consumers, it can spearhead a new movement to totally phase out single-use plastic packaging and revolutionise reusable delivery systems. And as one of the world's biggest plastic polluters, it has the clear responsibility to do so.

Such a shift away from single-use plastic would drastically curtail Unilever's environmental footprint and have a significant impact on reducing plastic pollution worldwide. What's more, polls show that these policies are popular with the public,¹⁵⁹ making decisive action not just something that aligns with Unilever's goal to become 'the global leader in sustainable business',¹⁶⁰ but a move that will attract new customers. It would also address concerns from investors, who are increasingly worried about the financial risks associated with single-use plastic. These include legal challenges regarding health and environmental impacts, as well as risks related to new legislation. Indeed, just this year, 185 investment companies with over \$10 trillion in assets called on consumer goods companies to 'set their sights higher and act more swiftly to address the plastics crisis through reducing their dependence on single-use plastic packaging'.¹⁶¹

Wielding this influence for good has proven enormously successful in the past. In 2004, Unilever and Coca Cola spearheaded the 'Refrigerants, Naturally!' initiative, aiming to eliminate the fluorinated gases from their cooling units which were a major driver of climate change. This high-profile push, supported by the UN Environment Programme and Greenpeace, gained sign-on from PepsiCo and Red Bull, and is estimated to have saved the equivalent carbon emissions of 8.86 million passenger cars in one year.¹⁶²

Two million people in 29 countries are calling for a strong Global Plastics Treaty. We urge Unilever to heed their voices and step up once more by helping to transform its industry for the betterment of humankind.



Two million people in 29 countries are calling for a strong Global Plastics Treaty. We urge Unilever to heed their voices and transform its industry for the betterment of humankind.

Top: A Global Plastics Treaty protest in Berlin, Germany
© Greenpeace / Sina Niemeyer

Bottom: A protest to ban sachets outside Unilever's AGM in Serpong, Indonesia © Greenpeace / Jurnasyanto Sukarno

WE CALL ON UNILEVER TO:

1

Commit to end its use of plastic sachets by the end of 2025 and lead work to enable The Global Plastics Treaty to deliver a global sachet ban.

2

Develop a roadmap detailing how it will phase out single-use plastic packaging from its operations and pivot to reusable packaging within 10 years, prioritising the elimination of sachets and other flexible plastics.

3

Support Greenpeace's call for The Global Plastics Treaty to set a global target to cut plastic production by at least 75% by 2040.

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Wahyu Susanto



WHY GREENPEACE IS CALLING ON GOVERNMENTS TO CUT PLASTIC PRODUCTION BY AT LEAST 75% BY 2040

The data is clear. Global plastic production doubled from 2000 to 2019, reaching 460 million tonnes per year.¹⁶³ Without action, it is anticipated to triple by 2050¹⁶⁴ and consume at least 13% of the Earth's remaining carbon budget.¹⁶⁵

The uncontrolled production of plastics is accelerating a triple planetary crisis – climate change,¹⁶⁶ pollution and biodiversity loss¹⁶⁷ – and threatening human health at an unimaginable scale,¹⁶⁸ whilst exacerbating racial, gender and economic inequality.¹⁶⁹

If we look at the plastics crisis through a climate lens alone, the best available modelling¹⁷⁰ tells us that cutting plastic production by 75% by 2040 will help keep warming to 1.5°C and prevent the most dire impacts of climate change. This window of opportunity is rapidly closing,¹⁷¹ and offers yet another stark wake-up call – the world needs to do much more, much faster, to protect life on Earth. Setting a global target to cut plastic production by at least 75% by 2040 answers this call for bold, ambitious international action. Doing so will not only help countries to meet their climate goals, but create jobs, unlock new levels of innovation and advance real solutions towards low-carbon, toxic-free, reuse-based economies.¹⁷²

REFERENCES

Executive summary

- 1 Unilever (no date). 'Our strategy' <https://www.unilever.com/our-company/strategy/>
- 2 Unilever (n.d.). 'Waste-free World' <https://www.unilever.com/planet-and-society/waste-free-world/>
- 3 Unilever (2018, unpublished). 'Unilever response to Greenpeace single-use plastic survey'
- 4 Ellen MacArthur Foundation (2019). Global Commitment 2019 Progress Report, p. 133 <https://archive.ellenmacarthurfoundation.org/assets/downloads/Global-Commitment-2019-Progress-Report.pdf>
- 5 Unilever (2019). 'Unilever announces ambitious new commitments for a waste-free world' <https://www.unilever.com/news/press-and-media/press-releases/2019/unilever-announces-ambitious-new-commitments-for-a-waste-free-world/>
- 6 Unilever (2021). 'Unilever Sustainable Living Plan 2010 to 2020: Summary of 10 years' progress', p.21 <https://www.unilever.com/files/92ui5egz/production/16cb778e4d31b81509dc5937001559f1f5c863ab.pdf>
- 7 Ellen MacArthur Foundation (2022). 'Global Commitment Progress Report 2022', Unilever Packaging producers and users <https://gc-22.emf.org/detail-ppu/?cid=Unilever>
- 8 Ellen MacArthur Foundation (2023). 'The Global Commitment 2023 Progress Report' <https://www.ellenmacarthurfoundation.org/global-commitment-2023/overview>
- 9 In 2022, Unilever's virgin plastic use was down 13% relative to 2019. Assuming that 13% is evenly spread over the three years 2020-2022, for a reduction of 4.3% per year it will take until 2034 until the total is less than 50% of the 2019 number. Unilever (2023). 'Delivering sustainable business performance: Unilever Annual Report and Accounts 2022' <https://www.unilever.com/files/92ui5egz/production/257f12db9c95ffa2ed12d6f2e2b3ff67db49fd60.pdf>
- 10 Ellen MacArthur Foundation (2023). 'The Global Commitment 2023 Progress Report', p.9 <https://www.ellenmacarthurfoundation.org/global-commitment-2023/overview>
- 11 Greenpeace (2021, unpublished). Notes from meeting with Unilever.
- 12 The share of Unilever's plastic packaging that was reusable in 2021/2022 was just 0.1% according to the Ellen MacArthur Foundation's Global Commitment Report 2022 <https://gc-22.emf.org/detail-ppu/?cid=Unilever>. This figure increased to 0.2% in the 2023 report <https://gc-data.emf.org/2023/detail-ppu/?cid=unilever>. If the company continued increasing its share of reusable packaging by 0.1% per year, it would be the new millennium before it fully switched its plastic packaging over to reuse.
- 13 Future Market Insights (2023, unpublished). 'Sachet Packaging Market Report - Global Industry Analysis 2018-2022 and Opportunity Assessment 2023-2033'.
- 14 Future Market Insights (2023, unpublished). 'Sachet Packaging Market Report - Global Industry Analysis 2018-2022 and Opportunity Assessment 2023-2033', (2023 figures).
- 15 Future Market Insights (2023, unpublished). 'Unilever's Sachets Market - Unilever's Sachets Brand Use by Personal Care and Beauty Brands by Country - Global Industry Analysis 2010-2022 and Opportunity Assessment 2023-2033', (p.2, Historic data of sachets for top FMCG brands (volume units)).
- 16 Future Market Insights (2023, unpublished). 'Unilever's Sachets Market - Unilever's Sachets Brand Use by Personal Care and Beauty Brands by Country - Global Industry Analysis 2010-2022

and Opportunity Assessment 2023-2033', (p.14 Unilever's sachets brand data (2022) volume analysis)).

- 17 Ellen MacArthur Foundation (2023). 'The Global Commitment Progress Report 2023 - Unilever' <https://gc-data.emf.org/2023/detail-ppu/?cid=unilever>
- 18 Ellen MacArthur Foundation (2023). 'The Global Commitment Progress Report 2023 - Unilever' <https://gc-data.emf.org/2023/detail-ppu/?cid=unilever>
- 19 Ellen MacArthur Foundation (2023). The Global Commitment Five Years In: Learnings to Accelerate Towards a Future Without Plastic Waste or Pollution' <https://www.ellenmacarthurfoundation.org/global-commitment/overview>
- 20 Reuters (2022). 'Unilever's Plastic Playbook' <https://www.reuters.com/investigates/special-report/global-plastic-unilever/>
- 21 Eunomia (2020). 'Greenhouse Gas and Air Quality Impacts of Incineration and Landfill', p.29 <https://www.clientearth.org/media/1h2nalrh/greenhouse-gas-and-air-quality-impacts-of-incineration-and-landfill.pdf>
- 22 Reuters (2021). 'The recycling myth: Big oil's solution for plastic waste littered with failure' <https://www.reuters.com/investigates/special-report/environment-plastic-oil-recycling/>
- 23 Unilever (2023). 'Delivering sustainable business performance: Unilever Annual Report and Accounts 2022' <https://www.unilever.com/files/92ui5egz/production/257f12db9c95ffa2ed12d6f2e2b3ff67db49fd60.pdf>
- 24 Throughout this report, when the text refers to Greenpeace, as a term standing alone, it is referring to the global Greenpeace network's Plastic Free Future, a campaign that multiple Greenpeace offices, including Greenpeace International and Greenpeace USA, participate in.

Foreword

- 25 Tearfund (2023). 'Plastic pollution and flooding' <https://learn.tearfund.org/en/resources/research-report/plastic-pollution-and-flooding>
- 26 Unilever (2019). 'Investor Event 2019 - Hanneke Faber.' YouTube video. <https://www.youtube.com/watch?v=S7aBXPvMPE0>
- 27 Break Free From Plastic (2022). 'Branded - Five Years of Holding Corporate Plastic Polluters Accountable. Brand Audit Report 2018-22', p.10 <https://brandaudit.breakfreefromplastic.org/wp-content/uploads/2022/11/BRANDED-brand-audit-report-2022.pdf>
- 28 Ipsos (2022). 'Attitudes Towards Single-Use Plastics' <https://www.ipsos.com/sites/default/files/ct/news/documents/2022-02/Attitudes-towards-single-use-plastics-Feb-2022.pdf>

Introduction

- 29 Minderoo Foundation (2021). 'Plastic Waste Makers Index', (2021 figures) <https://www.minderoo.org/plastic-waste-makers-index>
- 30 Organisation for Economic Co-operation and Development (2022). 'Plastic pollution is growing relentlessly as waste management and recycling fall short, says OECD', (2019 figures) <https://www.oecd.org/environment/plastic-pollution-is-growing-relentlessly-as-waste-management-and-recycling-fall-short.htm>
- 31 L. Greenspoon et al. (2023). 'The global biomass of wild mammals', PLAS Vol. 120 no. 10 <https://www.pnas.org/doi/10.1073/pnas.2204892120>
- 32 National Geographic (2020). 'Microplastics found near

Everest's peak, highest ever detected in the world' <https://www.nationalgeographic.com/environment/article/microplastics-found-near-everests-peak-highest-ever-detected-world-perpetual-planet>

33 One Earth (2020). 'Reaching New Heights in Plastic Pollution - Preliminary Findings of Microplastics on Mount Everest' [https://www.cell.com/one-earth/fulltext/S2590-3322\(20\)30550-9](https://www.cell.com/one-earth/fulltext/S2590-3322(20)30550-9)

34 Ocean Blue Project (n.d). 'Plastic Pollution in the Mariana Trench'. <https://oceanblueproject.org/plastic-pollution-in-the-mariana-trench/>; and X. Peng et al. (2018). 'Microplastics contaminate the deepest part of the world's ocean', *Geochem. Persp. Lett.* (2018) 9, 1-5 https://www.geochemicalperspectivesletters.org/documents/GPL1829_noSI.pdf

35 D. Carrington (2022). The Guardian, 'Microplastics found in human blood for first time' <https://www.theguardian.com/environment/2022/mar/24/microplastics-found-in-human-blood-for-first-time>; and A. Heather et. al. (2022). 'Discovery and quantification of plastic particle pollution in human blood', *Environment International*. Vol. 163 <https://www.sciencedirect.com/science/article/pii/S0160412022001258>

36 D. Carrington (2022). The Guardian, 'Microplastics found in human breast milk for the first time' <https://www.theguardian.com/environment/2022/mar/24/microplastics-found-in-human-blood-for-first-time>; and A. Ragusa et al. (2022). 'Microspectroscopy Detection and Characterisation of Microplastics in Human Breastmilk', *Polymers (Basel)*, 2022 Jun 30;14(13):2700 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9269371/>

37 D. Carrington (2020). The Guardian, 'Microplastics revealed in the placentas of unborn babies' <https://www.theguardian.com/environment/2020/dec/22/microplastics-revealed-in-placentas-unborn-babies>; and A. Ragusa et al. (2021). 'Plasticenta: First evidence of microplastics in human placenta', *Environment International*, Vol. 146 <https://www.sciencedirect.com/science/article/pii/S0160412020322297>

38 L.J. Cushing et al. (2021). 'Up in smoke: characterizing the population exposed to flaring from unconventional oil and gas development in the contiguous US', *Environ. Res. Lett.* 16 034032. <https://iopscience.iop.org/article/10.1088/1748-9326/abd3d4>

39 R.D. Bullard (2001). 'Environmental Justice in the 21st Century: Race Still Matters', *Phylon* (1960-), 49(3/4), 151-171 <https://www.jstor.org/stable/3132626?origin=crossref>

40 M. Langrand (2021). 'Marginalised communities bear the brunt of plastic pollution: UNEP', *Geneva Solutions* <https://genevasolutions.news/climate-environment/marginalised-communities-bear-the-brunt-of-plastic-pollution-unep>

41 The Center for International Environmental Law (2017). 'Fueling Plastics: Fossils, Plastics, & Petrochemical Feedstocks' <https://www.ciel.org/wp-content/uploads/2017/09/Fueling-Plastics-Fossils-Plastics-Petrochemical-Feedstocks.pdf>

42 The Center for International Environmental Law (2023). 'Reducing Plastic Production to Achieve Climate Goals: Key Considerations for the Plastics Treaty Negotiations'. https://www.ciel.org/wp-content/uploads/2023/09/Reducing-Plastic-Production-to-Achieve-Climate-Goals_Sept21_V5.pdf

43 Ellen MacArthur Foundation (no date). 'Global Commitment. Businesses, governments and endorsing signatories' <https://www.ellenmacarthurfoundation.org/global-commitment-2021/who-is-involved>

44 Ellen MacArthur Foundation (no date). 'Global Commitment. Businesses, governments and endorsing signatories' <https://www.ellenmacarthurfoundation.org/global-commitment-2021/who-is-involved>

45 Ellen MacArthur Foundation (2023). 'The Global Commitment 2023 Progress Report' <https://www.ellenmacarthurfoundation.org/global-commitment-2023/overview>

46 Ellen MacArthur Foundation (2023). 'The Global Commitment Five Years In: Learnings to Accelerate Towards a Future Without Plastic Waste or Pollution', p.19 <https://www.ellenmacarthurfoundation.org/global-commitment/overview>

47 Business Coalition for a Global Plastics Treaty (no date). 'Our endorsers: Who is in our coalition' <https://www.businessforplasticstreaty.org/endorsers>

1. Unilever's broken plastic promises

48 Unilever (2023). 'Delivering sustainable business performance: Unilever Annual Report and Accounts 2022' <https://www.unilever.com/files/92ui5egz/production/90573b23363da2a620606c0981b0bbd771940a0b.pdf>

49 Break Free From Plastic (2022). 'Branded - Five Years of Holding Corporate Plastic Polluters Accountable. Brand Audit Report 2018-22', p.10 <https://brandaudit.breakfreefromplastic.org/wp-content/uploads/2022/11/BRANDED-brand-audit-report-2022.pdf>

50 Tearfund (2020). 'The Burning Question: Will Companies Reduce Their Plastic Use?', p.7 <https://learn.tearfund.org/-/media/learn/resources/reports/2020-tearfund-the-burning-question-en.pdf>

51 Unilever (no date). 'Waste-free World' <https://www.unilever.com/planet-and-society/waste-free-world/>

52 Unilever (no date). 'Waste-free World: Strategy and Goals' <https://www.unilever.com/planet-and-society/waste-free-world/strategy-and-goals/>

53 Unilever (2022). 'The future of plastic – how to fix the broken system' <https://www.unilever.com/news/news-search/2022/the-future-of-plastics-how-to-fix-the-broken-system/>

54 Unilever (2018, unpublished). 'Unilever response to Greenpeace single-use plastic survey'

55 Ellen MacArthur Foundation (2019). Global Commitment 2019 Progress Report, p.133 <https://archive.ellenmacarthurfoundation.org/assets/downloads/Global-Commitment-2019-Progress-Report.pdf>

56 Unilever (2019). 'Unilever announces ambitious new commitments for a waste-free world' <https://www.unilever.com/news/press-and-media/press-releases/2019/unilever-announces-ambitious-new-commitments-for-a-waste-free-world/>

57 Unilever (2021). 'Unilever Sustainable Living Plan 2010 to 2020 Summary of 10 years' progress', p.20 <https://www.unilever.com/files/92ui5egz/production/16cb778e4d31b81509dc5937001559f1f5c863ab.pdf>

58 Ellen MacArthur Foundation (2022). 'Global Commitment Progress Report 2022', Key metrics <https://gc-22.emf.org/detail-ppu/?cid=Unilever>

59 Ellen MacArthur Foundation (2023). 'The Global Commitment 2023 Progress Report' <https://www.ellenmacarthurfoundation.org/global-commitment-2023/overview>

60 Unilever (2023). 'Delivering sustainable business performance: Unilever Annual Report and Accounts 2022', p.32 <https://www.unilever.com/files/92ui5egz/production/257f12db9c95ffa2ed12d6f2e2b3ff67db49fd60.pdf>

61 Assuming that 13% is evenly spread over the three years 2020-2022, for a reduction of 4.3% per year it will take until 2034 until the total is less than 50% of the 2019 number.

62 Unilever (2023). 'Delivering sustainable business performance: Unilever Annual Report and Accounts 2022' <https://www.unilever.com/files/92ui5egz/production/257f12db9c95ffa2ed12d6f2e2b3ff67db49fd60.pdf>

63 2021-2022 data from <https://gc-data.emf.org/2023/detail-ppu/?cid=unilever> and 2020-2021 data from <https://gc-22.emf.org/detail-ppu/?cid=Unilever>; and 2019-2020 data from <https://www.ellenmacarthurfoundation.org/global-commitment-2021/signatory-reports/ppu/unilever> and 2018-2019 data <https://archive.ellenmacarthurfoundation.org/resources/apply/global-commitment-progress-report/organisation-reports/report/ppu/recVRxcOCd6z093Vc>

64 Greenpeace does not support FMCGs switching to compostable packaging due to lack of infrastructure to manage them appropriately.

- 65 Greenpeace (2021, unpublished). Notes from meeting with Unilever.
 - 66 Ellen MacArthur Foundation (2023). 'The Global Commitment 2023 Progress Report', p.9 <https://www.ellenmacarthurfoundation.org/global-commitment-2023/overview>
 - 67 Ellen MacArthur Foundation (2022). 'Global Commitment Progress Report 2022', Key metrics <https://gc-22.emf.org/detail-ppu/?cid=Unilever>
 - 68 The share of Unilever's plastic packaging that was reusable in 2021/2022 was just 0.1% according to Ellen MacArthur Foundation's Global Commitment Report 2022 <https://gc-22.emf.org/detail-ppu/?cid=Unilever>. This figure increased to 0.2% in the 2023 report: <https://gc-data.emf.org/2023/detail-ppu/?cid=unilever>. If the company continued increasing its share of reusable packaging by 0.1% per year, it would be the new millennium before it fully switched its plastic packaging over to reuse.
 - 69 Unilever (no date). 'Rethinking plastic packaging' <https://www.unilever.com/planet-and-society/waste-free-world/rethinking-plastic-packaging/>
 - 70 Reuters (2022). 'Unilever's Plastic Playbook' <https://www.reuters.com/investigates/special-report/global-plastic-unilever/>; and Unilever (2019). 'The All Things Hair Refillery Station' <https://www.unilever.com.ph/news/press-releases/2019/the-all-things-hair-refillery-station/>
 - 71 Cosmetics Design Asia. (2020). 'Reduce, reuse and refill: Unilever says it 'remains positive' on consumer readiness for 'refillery' concept' <https://www.cosmeticsdesign-asia.com/Article/2020/02/26/Unilever-says-it-remains-positive-on-consumer-readiness-for-refillery-concept>
 - 72 Break Free From Plastic. (2021) Missing the Mark: Unveiling corporate false solutions to the plastic pollution crisis https://drive.google.com/file/d/1VWL78eU8VMDApX8H5mlvui_zJ3RhNvi8/view
 - 73 Unilever (2020). 'Indonesia in-store refill station launches with 11 Unilever brands' <https://www.unilever.com/news/news-search/2020/indonesia-in-store-refill-station-launches-with-11-unilever-brands/>
 - 74 Hindustan Unilever Ltd. (2021). "Smart Fill" empowers consumers to reduce plastic waste' <https://www.hul.co.in/news/2021/smart-fill-empowers-consumers-to-reduce-plastic-waste/>
 - 75 Smart Fill – Unilever (Vimeo video, no date) <https://vimeo.com/720688659>
 - 76 Reuters (2022). 'Unilever's Plastic Playbook' <https://www.reuters.com/investigates/special-report/global-plastic-unilever/>
 - 77 Unilever (no date). Waste-free World <https://www.unilever.com/planet-and-society/waste-free-world/rethinking-plastic-packaging/>
 - 78 Changemakr (2023). Transforming Waste: Alner and Unilever Lead Indonesia's Circular Economy with Reusable Packaging Innovations <https://changemakr.asia/transforming-waste-alner-and-unilever-lead-indonesias-circular-economy-with-reusable-packaging-innovations/>
 - 79 Ellen MacArthur Foundation (2023). The Global Commitment Five Years In: Learnings to Accelerate Towards a Future Without Plastic Waste or Pollution', p.27 <https://www.ellenmacarthurfoundation.org/global-commitment/overview>
 - 80 Ellen MacArthur Foundation (2023). 'The Global Commitment 2023 Progress Report'. Company details <https://gc-data.emf.org/2023/detail-ppu/?cid=unilever>
 - 81 Greenpeace USA (2023). 'Forever Toxic: The science on health threats from plastic recycling', p.7 <https://www.greenpeace.org/usa/reports/forever-toxic/>
 - 82 Unilever (no date). Waste-free World: Strategy and Goals: Collect and process more plastic than we sell by 2025 <https://www.unilever.com/planet-and-society/waste-free-world/strategy-and-goals/#collect-and-process-more-plastic-than-we-sell-by-2025>
 - 83 R. Geyer et al. (2017). 'Production, use, and fate of all plastics ever made'. Science Advances, Vol. 3, Issue 7 (2015 figures) <https://www.science.org/doi/10.1126/sciadv.1700782>
 - 84 Unilever (2022). "Why do you continue to sell plastic sachets?" <https://www.unilever.com/news/news-search/2022/why-do-you-continue-to-sell-plastic-sachets/>
 - 85 K. McVeigh (2023). The Guardian, 'McRecycling can release huge quantities of microplastics, study finds' <https://www.theguardian.com/environment/2023/may/23/recycling-can-release-huge-quantities-of-microplastics-study-finds>
 - 86 Greenpeace USA (2023). 'Forever Toxic: The science on health threats from plastic recycling', p.7 <https://www.greenpeace.org/usa/reports/forever-toxic/>
- ## 2. Unilever and sachets
- 87 Unilever (2017). 'CreaSolv®: a breakthrough recycling technology we want to share' <https://www.unilever.com/news/news-search/2017/creasolv-a-breakthrough-waste-recycling-technology-that-we-want-to-share/>
 - 88 Future Market Insights (2023, unpublished). 'Sachet Packaging Market Report - Global Industry Analysis 2018-2022 and Opportunity Assessment 2023-2033'.
 - 89 Future Market Insights (2023, unpublished). 'Sachet Packaging Market Report - Global Industry Analysis 2018-2022 and Opportunity Assessment 2023-2033'.
 - 90 Future Market Insights (2023, unpublished). 'Unilever's Sachets Market - Unilever's Sachets Brand Use by Personal Care and Beauty Brands by Country - Global Industry Analysis 2010-2022 and Opportunity Assessment 2023-2033'.
 - 91 Reuters (2022). 'Unilever's Plastic Playbook' <https://www.reuters.com/investigates/special-report/global-plastic-unilever/>
 - 92 Global Alliance for Incinerator Alternatives (2020). 'Sachet Economy: Big Problems in Small Packets', p.11 https://www.no-burn.org/wp-content/uploads/Sachet-Economy_final.pdf
 - 93 K. McVeigh and G. Holliani Cahya (2022). The Guardian, 'Single servings at low prices: how Unilever's sachets became an environmental scourge' <https://www.theguardian.com/environment/2022/aug/01/how-unilever-plastic-sachets-became-a-toxic-scourge-oceans>
 - 94 Sungai Watch (no date). 'Sungai Watch Impact Report 2022'. Top 10 Sachet Polluters Per Category https://www.canva.com/design/DAFaHlwBG80/2xd9fWx65Myt3K2F0oFcRw/view?utm_content=DAFaHlwBG80&utm_campaign=designshare&utm_medium=link&utm_source=viewer#17
 - 95 Unilever (2022). "Why do you continue to sell plastic sachets?" <https://www.unilever.co.uk/news/2022/why-do-you-continue-to-sell-plastic-sachets/>
 - 96 Trash Hero (2023). 'Exposing the Hidden Cost of Sachets' <https://trashhero.org/exposing-the-hidden-cost-of-sachets/>
 - 97 J. Flaws et al. (2020). Plastics, EDCs & Health: A Guide For Public Interest Organizations And Policy-Makers On Endocrine Disrupting Chemicals & Plastics. Endocrine Society, p.45 https://www.endocrine.org/-/media/endocrine/files/topics/edc_guide_2020_v1_6chqennew-version.pdf
 - 98 R. Verma et al. (2016). 'Toxic Pollutants from Plastic Waste- A Review'. Procedia Environmental Sciences, Vol. 35 <https://www.sciencedirect.com/science/article/pii/S187802961630158X>
 - 99 L. Tanner (2023). 'A Flood of Plastic'. Tearfund <https://learn.tearfund.org/en/resources/footsteps/footsteps-111-120/footsteps-120/a-flood-of-plastic>
 - 100 Unilever (no date). 'Unilever Sustainable Living Plan: Small Actions. Big Difference'. <https://assets.unilever.com/files/92ui5egz/production/9752ff2d82b8afabb507eb92c47b5dad795801d5.pdf/unilever-sustainable-living-plan.pdf>
 - 101 Future Market Insights (2023, unpublished). 'Unilever's

Sachets Market - Unilever's Sachets Brand Use by Personal Care and Beauty Brands by Country - Global Industry Analysis 2010-2022 and Opportunity Assessment 2023-2033', (p.2 Historic data of sachets for top FMCG brands (volume units)).

102 Unilever (no date). Waste-free World <https://www.unilever.com/planet-and-society/waste-free-world/>

103 See references 3-8.

104 Ellen MacArthur Foundation (2023). 'The Global Commitment 2023 Progress Report', p.9 <https://www.ellenmacarthurfoundation.org/global-commitment-2023/overview>

105 Unilever website (no date). Waste-free World: Strategy and Goals <https://www.unilever.com/planet-and-society/waste-free-world/strategy-and-goals/>

106 Ellen MacArthur Foundation (2023). The Global Commitment Five Years In: Learnings to Accelerate Towards a Future Without Plastic Waste or Pollution', p.19 <https://www.ellenmacarthurfoundation.org/global-commitment/overview>

107 Pew (2020). Breaking the Plastic Wave: Launch Event. YouTube video <https://www.youtube.com/watch?v=tNtkgRkenlk>

108 Reuters (2022). 'Unilever vowed to scrap polluting plastic packets, then fought to keep them' <https://www.reuters.com/article/global-plastic-unilever-idAFI8N2Y74K2>

109 Ellen MacArthur Foundation (2023). 'The Global Commitment Five Years In: Learnings to Accelerate Towards a Future Without Plastic Waste or Pollution', p.27 <https://www.ellenmacarthurfoundation.org/global-commitment/overview>

110 Unilever (no date). 'Unilever Sustainable Living Plan: Small Actions. Big Difference' p.17 <https://assets.unilever.com/files/92ui5egz/production/9752ff2d82b8afabb507eb92c47b5dad795801d5.pdf/unilever-sustainable-living-plan.pdf>

111 Unilever (2021). 'Unilever Sustainable Living Plan 2010 to 2020: Summary of 10 years' progress', p.22 <https://www.unilever.com/files/92ui5egz/production/16cb778e4d31b81509dc5937001559f1f5c863ab.pdf>

112 Future Market Insights (2023, unpublished). 'Unilever's Sachets Market - Unilever's Sachets Brand Use by Personal Care and Beauty Brands by Country - Global Industry Analysis 2010-2022 and Opportunity Assessment 2023-2033', (p.2 Historic data of sachets for top FMCG brands (volume units)).

113 Unilever (2019). 'Investor Event 2019 - Hanneke Faber.' YouTube video <https://www.youtube.com/watch?v=S7aBXPvMPE0>

114 P. Polman (2023). 'Plastics are in our air, food, and water. A reckoning is coming—and smart businesses can see it'. Fortune <https://fortune.com/europe/2023/05/24/plastics-air-food-water-reckoning-business-environment-paul-polman/>

115 Pew (2020). Breaking the Plastic Wave: Launch Event. YouTube video <https://www.youtube.com/watch?v=tNtkgRkenlk>

116 Reuters (2022). 'Unilever's Plastic Playbook' <https://www.reuters.com/investigates/special-report/global-plastic-unilever/>

117 J. Brock and J. Geddie (2022). Reuters, 'Special Report – Unilever vowed to scrap polluting plastic packets, then fought to keep them' <https://www.reuters.com/article/global-plastic-unilever-idAFI8N2Y74K2>

118 Unilever (2018). 'Our solution for recycling plastic sachets takes another step forward' <https://www.unilever.com/news/news-search/2018/our-solution-for-recycling-plastic-sachets-takes-another-step-forward/>

119 Unilever (2017). 'CreaSolv®: a breakthrough recycling technology we want to share' <https://www.unilever.com/news/news-search/2017/creasolv-a-breakthrough-waste-recycling-technology-that-we-want-to-share/>

120 Unilever (no date). 'Tackling Sachet Waste' <https://web.archive.org/web/20130508211029/http://www.unilever.com/sustainable-living/wasteandpackaging/litter/index.aspx>

121 Unilever (2017). 'CreaSolv®: a breakthrough recycling technology we want to share'

<https://www.unilever.com/news/news-search/2017/creasolv-a-breakthrough-waste-recycling-technology-that-we-want-to-share/>

122 Reuters (2021). 'The recycling myth: Big oil's solution for plastic waste littered with failure' <https://www.reuters.com/investigates/special-report/environment-plastic-oil-recycling/>

123 K. McVeigh and G. Holliani Cahya (2022). The Guardian, 'Single servings at low prices: how Unilever's sachets became an environmental scourge' <https://www.theguardian.com/environment/2022/aug/01/how-unilever-plastic-sachets-became-a-toxic-scurge-oceans>

124 Unilever (2017). 'CreaSolv®: a breakthrough recycling technology we want to share' <https://www.unilever.com/news/news-search/2017/creasolv-a-breakthrough-waste-recycling-technology-that-we-want-to-share/>

125 Global Alliance for Incinerator Alternatives (2022). 'Chemical Recycling of Sachet Waste: A Failed Experiment', p.7 https://www.no-burn.org/wp-content/uploads/2022/03/Chemical-Recycling-of-Sachet-Waste_A-Failed-Experiment-2022.pdf

126 Global Alliance for Incinerator Alternatives (2022). 'Chemical Recycling of Sachet Waste: A Failed Experiment', p.7 https://www.no-burn.org/wp-content/uploads/2022/03/Chemical-Recycling-of-Sachet-Waste_A-Failed-Experiment-2022.pdf

127 Reuters (2021). 'The recycling myth: Big oil's solution for plastic waste littered with failure' <https://www.reuters.com/investigates/special-report/environment-plastic-oil-recycling/>

128 K. McVeigh and G. Holliani Cahya (2022). The Guardian, 'Single servings at low prices: how Unilever's sachets became an environmental scourge' <https://www.theguardian.com/environment/2022/aug/01/how-unilever-plastic-sachets-became-a-toxic-scurge-oceans>

129 Pew (2020). 'Breaking the Plastic Wave: Launch Event'. YouTube video <https://www.youtube.com/watch?v=tNtkgRkenlk>

130 IDN Financials (2020). 'Semen Indonesia uses biomass as alternative fuel' <https://www.idnfinancials.com/archive/36570/semn-indonesia-biomass-alternative-fuel>

131 Unilever Indonesia (no date). 'Waste-Free World' <https://www.unilever.co.id/unilever-indonesia/planet-society/our-action/wastefree-world/>

132 Confederation of Indian Industry (2020). 'Managing Plastic Waste: From the Exemplars of Indian Industry. Case Studies', p.30 <https://sustainabledevelopment.in/wp-content/uploads/2020/11/Plastic-Waste-Management.pdf>

133 VietnamPlus (2020). 'Vietnam builds public private collaboration to address plastic waste' <https://en.vietnamplus.vn/vietnam-builds-public-private-collaboration-to-address-plastic-waste/168884.vnp>

134 SCGC (2022). 'Unilever-SCGC Reduce Plastic Waste with Circular Economy, Highlighting Community-based Waste Management Project "Sorting for the Better" to Celebrate World Environment Day' <https://www.scgchemicals.com/en/articles/news/1655355444>

135 Reuters (2021). 'Trash and burn: Big brands stoke cement kilns with plastic waste as recycling falters' <https://www.reuters.com/investigates/special-report/environment-plastic-cement/>

136 Eunomia (2020). 'Greenhouse Gas and Air Quality Impacts of Incineration and Landfill', p.29 <https://www.clientearth.org/media/1h2nalrh/greenhouse-gas-and-air-quality-impacts-of-incineration-and-landfill.pdf>

137 Unilever Indonesia (no date). 'Waste-Free World' <https://www.unilever.co.id/unilever-indonesia/planet-society/our-action/wastefree-world/>

138 Calculated using Greenhouse Gas Equivalencies Calculator <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

139 Zero Waste Europe (2018). 'Hidden emissions: A story from the Netherlands' <https://zerowasteurope.eu/wp-content/uploads/2018/11/NetherlandsCS-FNL.pdf>

- 140 Reuters (2021). 'Trash and burn: Big brands stoke cement kilns with plastic waste as recycling falters' <https://www.reuters.com/investigates/special-report/environment-plastic-cement/>
- 141 Unilever (no date). 'Climate action' <https://www.unilever.com/planet-and-society/climate-action/>
- 142 Kantar BrandZ (2023). 'Most Valuable Global Brands' https://indd.adobe.com/view/publication/b6033624-f784-4869-a0eb-6b6e14fcb43c/ktg7/publication-web-resources/pdf/Kantar_BrandZ_2023_Most_Valuable_Global_Brands.pdf
- 143 Statista (2023). 'Brand value of Dove worldwide from 2016 to 2023' <https://www.statista.com/statistics/1010915/dove-brand-value-worldwide/>
- 144 Digital Marketing Institute (2023). 'Dove: A Spotless Approach to Digital Marketing' <https://digitalmarketinginstitute.com/blog/dove-a-spotless-approach-to-digital-marketing>
- 145 Marcela Melero, Dove Global Skin Cleansing Vice President (no date). Dove, 'Care for the planet: our plastic mission' <https://www.dove.com/us/en/stories/about-dove/plastics-commitment.html>
- 146 Dove (no date). 'Care for the planet: our plastic mission' <https://web.archive.org/web/20230321151854/> <https://www.dove.com/uk/stories/about-dove/plastics-commitment.html>
- 147 Future Market Insights (2023, unpublished). 'Unilever's Sachets Market - Unilever's Sachets Brand Use by Personal Care and Beauty Brands by Country - Global Industry Analysis 2010-2022 and Opportunity Assessment 2023-2033'.
- 148 Unilever (2019). 'Dove moves to 100% recycled plastic bottles' <https://www.unilever.com/news/news-search/2019/dove-moves-to-100-per-cent-recycled-plastic-bottles/>
- 149 I. Brighty-Potts (2023). The Independent, 'Is the plastic problem exacerbating gender inequality?' <https://www.independent.co.uk/climate-change/news/university-of-central-lancashire-oecd-ivf-studies-pcos-b2349018.html>
- 150 P.J. Landrigan et al. (2023). The Minderoo-Monaco Commission on Plastics and Human Health. Annals of Global Health, 89(1), p.23. DOI: <https://annalsofglobalhealth.org/articles/10.5334/aogh.4056>
- 151 Dove (no date). 'Care for the planet: our plastic mission' <https://www.dove.com/uk/stories/about-dove/plastics-commitment.html>

3. The solution: Reusable packaging

- 152 Circular (2023). '53% of Brits more likely to buy products with reusable packaging' <https://www.circularonline.co.uk/news/53-of-brits-more-likely-to-buy-products-with-reusable-packaging/>
- 153 Unilever (2018). 'Unilever calls for accelerated industry action on packaging waste' <https://www.unilever.com/news/press-and-media/press-releases/2018/unilever-calls-for-accelerated-industry-action-on-packaging-waste/>
- 154 Euronews.green (2023). 'Norway has had a bottle deposit scheme since 1902: Why is England lagging behind its neighbours?' <https://www.euronews.com/green/2023/03/14/norway-has-had-a-bottle-deposit-scheme-since-1902-why-is-england-lagging-behind-its-neighb>
- 155 ReLoop and Zero Waste Europe (2020). 'Reusable vs single-use packaging: A review of environmental impacts' https://zerowasteurope.eu/wp-content/uploads/2020/12/zwe_reloop_report_reusable-vs-single-use-packaging-a-review-of-environmental-impact_en.pdf_v2.pdf
- 156 Ellen MacArthur Foundation and New Plastics Economy (2019). 'Reuse: Rethinking Packaging', p.7 <https://www.ellenmacarthurfoundation.org/assets/downloads/Reuse.pdf>
- 157 Philippine Information Agency (2023). 'QC, Greenpeace PH, Impact Hub Manila launch 'Kuha sa Tingi'' <https://pia.gov.ph/news/2023/06/15/qc-greenpeace-ph-impact-hub-manila-launch-kuha-sa-tingi>

Conclusion

- 158 O. Milman (2021). The Guardian, 'Car firms agree at Cop26 to end sale of fossil fuel vehicles by 2040' <https://www.theguardian.com/environment/2021/nov/10/cop26-car-firms-agree-to-end-sale-of-fossil-fuel-vehicles-by-2040>
- 159 Ellen MacArthur Foundation (2022). 'The rise of single-use plastic packaging avoiders' <https://www.ellenmacarthurfoundation.org/articles/the-rise-of-single-use-plastic-packaging-avoiders>
- 160 Climate Week NYC (2023). 'Unilever' <https://www.climateweeknyc.org/sponsors-partners/unilever-1>
- 161 Dutch Association of Investors for Sustainable Development (2023). 'Investors call for urgent action to reduce plastics from intensive users of plastic packaging' https://www.vbdo.nl/wp-content/uploads/2023/05/EMBARGO_VBDO_Investor-statement-on-plastics_def.pdf
- 162 Refrigerants, Naturally! (no date). 'Refrigerants, Naturally! previous successes' <https://www.refrigerantsnaturally.com/about-us/achievements/>
- 163 OECD (2022). 'Plastic pollution is growing relentlessly as waste management and recycling fall short, says OECD' <https://www.oecd.org/environment/plastic-pollution-is-growing-relentlessly-as-waste-management-and-recycling-fall-short.htm>
- 164 Center for International Environmental Law (2023). 'Reducing Plastic Production to Achieve Climate Goals: Key Considerations for the Plastics Treaty Negotiations' https://www.ciel.org/wp-content/uploads/2023/09/Reducing-Plastic-Production-to-Achieve-Climate-Goals_Sept21_V5.pdf
- 165 Center for International Environmental Law (2023). 'Reducing Plastic Production to Achieve Climate Goals: Key Considerations for the Plastics Treaty Negotiations' https://www.ciel.org/wp-content/uploads/2023/09/Reducing-Plastic-Production-to-Achieve-Climate-Goals_Sept21_V5.pdf
- 166 Greenpeace USA (2021). 'The Climate Emergency Unpacked' <https://www.greenpeace.org/usa/reports/the-climate-emergency-unpacked/>
- 167 Greenpeace International (2021). 'Tons of potentially toxic microplastics are covering Sri Lanka's western coastline' <https://www.greenpeace.org/international/story/48292/potential-toxic-plastic-sri-lanka-oil-spill-xpresspearl/>
- 168 Center for International Environmental Law (2019). 'Plastic & Health: The Hidden Costs of a Plastic Planet' <https://www.ciel.org/wp-content/uploads/2019/02/Plastic-and-Health-The-Hidden-Costs-of-a-Plastic-Planet-February-2019.pdf>
- 169 Greenpeace International (2022). '#PlasticsTreaty: Stop exploiting African and other global majority countries with "waste colonialism"' <https://www.greenpeace.org/international/story/52154/africa-waste-colonialism-plastic-treaty/>
- 170 Pacific Environment (2023). 'Stemming the Plastic-Climate Crisis: Paris Alignment for Plastics Requires at least 75% Reduction' <https://www.pacificenvironment.org/wp-content/uploads/2023/05/Stemming-the-Plastic-Climate-Crisis-1.pdf>
- 171 World Resources Institute (2023). 'What Is the "Global Stocktake" and How Can It Accelerate Climate Action?' <https://www.wri.org/insights/explaining-global-stocktake-paris-agreement>
- 172 Greenpeace International (2021). 'The world is ditching plastics with reuse and refill laws and practices' <https://www.greenpeace.org/international/story/51843/plastics-reuse-and-refill-laws/>

DECEMBER 2023

FRONT - NOVEMBER 2023

Dove sachet waste found in a landfill site
in Indonesia © Greenpeace / Wahyu Susanto

BACK - SEPTEMBER 2023

A waste worker removing plastic waste from
a river in Malabon, the Philippines
© Greenpeace / Jilson Tiu

An aerial photograph showing a massive pile of plastic waste, including numerous white and blue sachets, floating in a river. A red and orange boat is positioned on the right side of the frame, with two people inside. One person is using a long-handled net to scoop up the waste. The water is dark and murky, and the overall scene depicts a significant environmental pollution problem.

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