

Should Australia ban plastic straws?

What they said...

'Though just a small fraction of all plastic pollution, straws have become a symbol of waste to rally behind and a feasible way for consumers to feel like they're making a difference'

Sarah Gibbens, writing for National Geographic

'Plastic is...an essential part of my health and wellness. With my neuromuscular disability, plastic straws are necessary tools for my hydration and nutrition'

Alice Wong, founder and director of the Disability Visibility Project

The issue at a glance

The movement toward banning plastic straws in Australia is growing.

On November 18, 2018, the Australian Hotels Association Victoria announced that its members would now only give straws to customers on request at bars, pubs and other venues, while the South Melbourne Market will ban plastic straws from December 1.

<https://www.heraldsun.com.au/news/victoria/pubs-bars-and-south-melbourne-market-join-war-on-plastic-straws/news-story/626ccfc5e6ad04dcd3d2407084870521>

On September 10, 2018, Virgin Australia announced that plastic straws and stirrers have been removed from its in-flight and lounge operations.

<https://www.virginaustralia.com/au/en/about-us/media/2018/BANS-PLASTIC-STRAWS/>

On August 8, 2018, the Australian burger chain, Grill'd, removed all black plastic straws from its 130 restaurants. <http://www.foodservicenews.com.au/latest/another-australian-restaurant-chain-ditches-plastic-straws>

On July 18, 2018, McDonalds Australia announced that it would phase out plastic straws in its restaurants over the next two years.

<https://www.news.com.au/finance/business/retail/mcdonalds-move-to-ban-plastic-straws-angers-aussies/news-story/45bdb9d7b7144891cc7fadfd033c6e20>

Conservation advocates have stressed that plastic straws epitomise the contamination of the marine environment through the use of unnecessary plastic products. However, disability advocacy groups argue that these products are essential, at least to some within the community.

Background

History of plastic straws

A straw is a prepared tube used to suck a beverage out of a container. Historians theorize the first straws were cut from dried wheat shafts and they were named accordingly.

<http://www.madehow.com/Volume-4/Drinking-Straw.html#ixzz5bm5dFXFe> An American inventor, Marvin C. Stone, patented the modern drinking straw, made of paper, in 1888. He wound paper around a pencil to make a thin tube, slid out the pencil from one end, and applied glue between the strips. He later refined the straw by building a machine that would coat the outside of the paper with wax to hold it together.

https://en.wikipedia.org/wiki/Drinking_straw#Materials

Plastic straws began to gain popularity following World War II, especially within the United States. Plastics were growing increasingly cheap to produce at this time and so too were fast-food meals, each of them accompanied by sodas in to-go cups with crosshairs that easily tore apart flimsier paper straws. Overtime, the plastic straw overtook the paper as the standard in

eateries across the United States and, eventually, across the globe.
<http://time.com/5336242/plastic-straws-history/>

The composition of plastic straws

Plastic straws are generally made of polypropylene. Polypropylene is a resin made by polymerizing, or stringing together, molecules of a propylene gas. When a very large number of these molecules are chemically hooked together they form a solid plastic material. Polypropylene was first developed in the mid-1950s and has many properties which make it suitable for use in straw manufacturing. The resin is light-weight, has fair abrasion resistance, good dimensional stability, and good surface hardness. It typically does not experience problems with stress cracking and it offers excellent chemical resistance at higher temperatures. Another key attribute of this plastic is that it is safe for contact with food and beverages. Polypropylene is approved for indirect contact with food and, in addition to drinking straws, is used to make many types of food packaging such as margarine and yogurt containers, cellophane-type wrapping, and various bottles and caps.
<http://www.madehow.com/Volume-4/Drinking-Straw.html#ixzz5bm69qvYG>

Plastic straw bans and proposals around the world United Kingdom

On April 19, 2018, ahead of Earth Day, a proposal to phase out single-use plastics was announced during the meeting of the Commonwealth Heads of Government. This will include plastic drinking straws, which cannot be recycled and contribute to ocean deterioration, damaging ecosystems and wildlife. It is estimated that as of 2018, about 23 million straws are used and discarded daily in the United Kingdom. In a press release, Prime Minister, Theresa May, also committed to calling on other Commonwealth countries to 'join in the fight against plastic pollution'.
<http://edgeeffects.net/plastic-straw-bans/>

A few months before, Queen Elizabeth II banned the plastic straws and other one-use plastic items from her palaces.

Canada

After the British proposition, fellow Commonwealth nation Canada was considering banning the straws too. An unofficial online survey showed that over 70 percent of voters agreed with a plastic straw ban.

Starting in 2019, a ban of plastic straws will go into effect in the City of Vancouver, due to a vote in May 2018 that included banning other single-use items.

European Union

In May 2018, the European Union proposed a ban on single-use plastics including straws, cotton buds, cutlery, balloon sticks and drink stirrers.

The European Union's broad proposal would not only ban plastic, single-use eating and drinking utensils, but also limit or restrict other plastic goods such as beverage containers, filters on tobacco products, and even fishing gear. <http://edgeeffects.net/plastic-straw-bans/>

United States

In 2015, Williamstown, Massachusetts banned straws that are not recyclable or compostable as part of its Article 42 polystyrene regulations.

On November 7, 2017, the city of Santa Cruz, California implemented a ban on all non-recyclable to-go containers, straws, and lids but allowed for 6 months for all businesses to

come into compliance before enforcement would occur. On January 1, 2018, the city of Alameda, California citing the Santa Cruz effort, implemented an immediate ban on all straws, except if requested by a customer, and gave business until July 1, 2018 when it would be required that all straws to be of compostable paper and that all other to-go containers be recyclable.

In the first half of 2018, three towns in Massachusetts banned petrochemical plastic straws directly in the case of Provincetown, and as part of broader sustainable food packaging laws in Andover and Brookline.[59] The city of Seattle implemented a ban on non-compostable disposable straws on July 1, 2018

A drinking straw ban has been proposed in New York City since May 2018. Local regulations have also been passed in Malibu, California; Davis, California; San Luis Obispo, California; Miami Beach, Florida; and Fort Myers, Florida.

A statewide California law restricting the providing of single-use plastic straws will go into effect on January 1, 2019. Under the law, restaurants will only be allowed to provide single-use plastic straws upon request. The law will apply to sit-down restaurants but exempts fast-food restaurants, delis, coffee shops, and restaurants that do takeout only. The law will not apply to to-go cups and takeaway drinks. A restaurant will receive warnings for its first two violations, then a \$25 per day fine for each subsequent violation, up to a maximum of \$300 in a year. In a statement released upon his signing the legislation into law, Governor Jerry Brown said "It is a very small step to make a customer who wants a plastic straw ask for it. And it might make them pause and think again about an alternative. But one thing is clear, we must find ways to reduce and eventually eliminate single-use plastic products."

Internet information

On January 2, 2018, National Geographic published an analysis titled 'A running list of action on plastic pollution' which details action being taken worldwide to reduce plastic pollution. It includes the banning of plastic straws in restaurants in Washington DC from January 1, 2019. The full text can be accessed at <https://www.nationalgeographic.com/environment/2018/07/ocean-plastic-pollution-solutions/>

Fight the Plastic Bag Ban is a lobby group formed to oppose bans on single-use plastic items in the United States. The group's November archives, which include their opposition to California's plastic straw ban can be accessed at <https://fighttheplasticbagban.com/2018/11/>

On November 19, 2018, The Daily Signal published a report titled 'DC's Ban on Plastic Straws Extends Beyond Restaurants and Bars to Churches and Day Care Centers' which outlines the range venues in which the District of Columbia will implement a new ban on single-use plastic straws and coffee stirrers from January 1, 2019. The full text can be accessed at <https://www.dailysignal.com/2018/11/19/d-c-s-ban-on-plastic-straws-extends-to-churches-and-day-care-centers/>

On October 22, 2018, The Spirits Business published a report titled 'UK government to ban sales of plastic straws' which outlines the announcement made by the British government that it will introduce a ban, which would come into force at some point between October 2019 and October 2020, subject to a new consultation. The full text can be accessed at <https://www.thespiritsbusiness.com/2018/10/uk-government-to-ban-plastic-straws/>

On September 28, 2018, Environmental Leader published a report titled 'Why Activists Are Questioning Corporate Plastic Straw Bans' which details opposition from disability activists to the increasing number of bans placed on plastic straws. The full text can be accessed at <https://www.environmentalleader.com/2018/09/plastic-straw-bans-backlash/>

On September 20, 2018, Fortune published a report titled 'California Bans Plastic Straws in Restaurants, But Exempts Fast Food' which gives details on the first United States state-wide ban on the use of plastic straws in restaurants. The full text can be accessed at <http://fortune.com/2018/09/20/california-bans-straws-except-fast-food/>

On September 20, 2018, Beverage Daily published a report titled 'The straw law flaw: What more can be done' which outlines the opposition from disability advocates to plastic straw bans and the concerns of some conservationist that this is tokenism on the part of corporations. The full text can be accessed at <https://www.beveragedaily.com/Article/2018/09/20/The-straw-law-flaw-what-more-can-be-done>

On September 19, 2018, ABC News published a report titled 'Sea turtles that eat 14 pieces of plastic have 50 per cent chance of dying, CSIRO study finds' which details the findings of a CSIRO report outlining the effect of plastics pollution on marine life. The full text can be accessed at <https://www.abc.net.au/news/2018-09-14/eating-14-pieces-of-plastic-enough-to-kill-turtles/10243618>

On September 18, 2018, Stanford News published a collection of expert opinions on plastic pollution under the headline 'Last straw: The path to reducing plastic pollution' Stanford University experts discuss the limitations of the growing number of bans on single-use plastic and the potential for meaningful change. The full text can be accessed at <https://news.stanford.edu/2018/09/18/last-straw-path-reducing-plastic-pollution/>

On September 17, 2018, Independent Australia published a report titled 'More plastic than fish in the oceans by 2050' which considers both the extent of the recent plastic straw bans and what more might be done to reduce the impact of plastic pollution on the world's oceans. The full text can be accessed at <https://independentaustralia.net/life/life-display/more-plastic-than-fish-in-the-oceans-by-2050,11894>

On September 13, 2018, Gimlet Media broadcast a audio giving expert opinion on the nature of the threat plastic pollution represents to the world's oceans. The site, including supporting text materials, can be accessed at <https://www.gimletmedia.com/science-vs/plastics-the-final-straw>

On September 10, 2018, Virgin Australia issued a media release titled 'Virgin Australia has had the last straw' announcing the airline's intention to remove plastic straws from its inflight and lounge operations. The full text can be found at <https://www.virginaustralia.com/au/en/about-us/media/2018/BANS-PLASTIC-STRAWS/>

On September 9, 2018, The Washington Post published a report titled 'Plastic straws are little, but they are part of a huge problem' which outlines the effect of plastics pollution and considers plastic straws in particular.

The full text can be accessed at https://www.washingtonpost.com/lifestyle/kidspost/plastic-straws-are-little-but-they-are-part-of-a-huge-problem/2018/09/07/63bfe44e-ac9f-11e8-b1da-ff7faa680710_story.html?utm_term=.a356380eedec

On September 5, 2018, sacare published a comment titled 'What happens when South Australia bans the plastic straw?' which draws attention to the difficulties that would be faced by many with a disability in the event of a plastic straw ban.

The full text can be accessed at <https://www.sacare.com.au/news/what-happens-if-they-ban-the-plastic-straw>

On September 4, 2018, SBS published an analysis titled 'Why compostable plastics may be no better for the environment' The discussion examines the environmental impacts of many of the alternatives to plastic straws.

The full text can be accessed at <https://www.sbs.com.au/food/article/2018/09/04/why-compostable-plastics-may-be-no-better-environment>

On August 5, 2018, ABC Science published an analysis titled 'War on Waste: Do we really use 10 million straws a day? We don't know, but it's time to count' which attempts to estimate the number of plastic straws used in Australia.

The full text can be accessed at <https://www.abc.net.au/news/science/2018-08-05/plastic-straws-how-many-do-we-really-use-war-on-waste/10042990>

The conservation group For a Strawless Ocean supplies information on the extent of plastics pollution, especially the effect of plastic straws on the marine environment.

The full text can be accessed at <https://www.strawlessocean.org/faq/>

On July 26, 2018, Business Insider published a comment and analysis titled 'The real reason why so many cities and businesses are banning plastic straws has nothing to do with straws at all' which examines some of the motivations that can lie behind imposing bans on plastic straws and other plastic items.

The full text can be accessed at <https://www.businessinsider.com.au/plastic-straw-ban-why-are-there-so-many-2018-7?r=UK&IR=T>

On July 24, 2018, The Conversation published an analysis titled 'Why you shouldn't be a 'straw-man' environmentalist' by Riley Schnurr, Graduate Student, Dalhousie University, and Tony Robert Walker, Assistant Professor, Dalhousie University.

The article outlines the extent of the movement against the use of plastic straws and considers the nature of the backlash against it.

The full text can be accessed at <https://theconversation.com/why-you-shouldnt-be-a-straw-man-environmentalist-100303>

On June 29, 2018, The Guardian published a report titled 'If you drop plastic in the ocean, where does it end up?' which details what occurs to plastic waste in a marine environment.

The full text can be accessed at <https://www.theguardian.com/environment/2017/jun/29/if-you-drop-plastic-in-the-ocean-where-does-it-end-up>

Arguments in favour of banning plastic straws in Australia

1. Plastic straws end up disproportionately in the ocean

Supporters of a ban on plastic straws argue that though they are only a very small component, by weight, of the plastic waste that finishes up in the world's oceans, they disproportionately arrive at this destination. It has been argued that this is because they are particularly difficult to recycle and their light weight means they easily find their way into drains, waterways and so into seas and oceans. Additionally, the problem they create is compounded by the very large numbers in which they are consumed.

Sustainability Victoria states, 'Unlike some soft plastics which can be recycled, plastic straws cannot be recycled. As they travel down the conveyor belt at your local recycling facility, small items like straws fall through the cracks. This means that straws sit in landfill for years or pollute our oceans and waterways, harming marine life.'

<https://www.sustainability.vic.gov.au/You-and-your-home/Live-sustainably/Single-use-items/Straws>

The same problem has been noted in the United States. The environment-awareness site, Get Green Now, states, 'Plastic straws are small, thin, and bend easily. This is a problem because they easily fall into the cracks and crevices of recycling machinery. Therefore, most recyclers do not accept plastic straws, and most straws that do make it to a recycling facility do not become recycled.' <https://get-green-now.com/recycle-plastic-straws/>

Their critics claim that adding to the problem these straws create because of the difficulty in recycling them is the very large numbers in which they are consumed. Together with the plastic bag and the disposable plastic water bottle, plastic straws have come to epitomise single-use plastic waste. They are products which are used only once, for a short time and then discarded.

Clean Up Australia notes that Australians use about 10 million plastic straws a day. Over a year this amounts to 3.5 billion plastic straws. Plastic straws are the twelfth most common item reported by Clean Up volunteers. They represent 7.5 percent of all reported plastics - with 7,304 reported from rubbish recorded last Clean Up Day. That figure is said to have doubled over the last two years. <https://www.cleanup.org.au/straws-no-more>

Though the origin of the often-quoted 10-million-straws-a-day statistic is not known, the ABC's War on Waste attempted to quantify Australia's daily plastic straw use. A report published by ABC Science on August 5, 2018, stated, 'Pubs polled used an average of about 90,000 straws per year. Across the 6,000 pubs in Australia, that's 540 million straws used by pubs alone. Then add in fast food chains: there are 900 McDonald's restaurants across the country, serving more than 1.7 million people a day. If only half of those customers got a straw, that one fast food chain would be accounting for more than 850,000 straws a day. And that's not considering the straws that other fast food chains, RSLs, cafes, restaurants, food courts, movies, airlines, sports grounds, supermarkets, schools, hotels and hospitals would all use daily.' The analysis concluded that the 10 million a day estimate may be conservative. <https://www.abc.net.au/news/science/2018-08-05/plastic-straws-how-many-do-we-really-use-war-on-waste/10042990>

Critics further note that not only do Australia and other nations use plastic straws in huge numbers each day, many of these straws find their way into seas and oceans where they remain as they do not fully degrade.

The conservation group Strawless Ocean note that once in the litter stream, plastic straws are very likely to finish in the ocean. Strawless Ocean's Internet site states, 'Plastic straws end up in the ocean primarily through human error, often left on beaches in coastal communities and

seaside resorts globally, littered or blown out of trash cans (oftentimes overfilled) or transport boats and vehicles.' <https://www.strawlessocean.org/faq/>

2. Plastic straws are injurious to the marine environment and to marine animals

Opponents of plastic straws argue that though they are not the only source of plastic contamination in the world's oceans, there is growing evidence that they are part of a problem that is harming the marine environment and marine animals.

An analysis published in the Australian edition of The Guardian on June 29, 2017, stated, 'A lot of plastic debris in the ocean breaks down into smaller pieces and is ingested by marine life, and it is thought that a significant amount sinks to the sea bed. But a lot of it just floats around...[with] huge amounts of plastic end[ing] up in six "garbage patches" around the world, the largest one being in the north Pacific.'

<https://www.theguardian.com/environment/2017/jun/29/if-you-drop-plastic-in-the-ocean-where-does-it-end-up>

It has been demonstrated that when plastic gets into the ocean it breaks down into smaller and smaller pieces known as 'microplastics', rather than biodegrading or dissolving, which poses great threats to marine life including fish. The conservation group Strawless Ocean has cited research which predicts that by 2050, 99 percent of all sea bird species will have ingested plastic. The mortality rate can be up to 50 percent. Research has also shown plastic in sea salt, 94 percent of United States tap water, and shellfish. <https://www.strawlessocean.org/faq/> Scientists at the UGA New Materials Institute have conducted a study which discovered microplastics particles smaller than dust or powdered sugar inside baby sea turtles. Of the turtles studied in this research, 100 percent were found to have eaten plastic. These baby sea turtles appeared to be dying due to ingested plastic pollution, which threatens the species' survival. <https://www.strawlessocean.org/faq/>

John Calvelli, the leader of the Give a Sip campaign, a movement seeking to have plastic straws banned, has claimed that the impact on sea life has been immense. Calvelli has stated, 'Research has found that 70 percent of seabirds and 30 percent of sea turtles have some amount of plastic in their systems.' <https://www.nbcnews.com/news/us-news/plastic-straws-clog-ocean-hurt-fish-now-there-s-growing-n877356>

In September, 2018, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) linked the amount of plastic a sea turtle consumes and its likelihood of death, with an estimated half of all sea turtles having plastic in their gut. The study found that once a turtle had 14 pieces of plastic in its gut, it had a 50 percent likelihood that it would cause death.

Principal research scientist, Chris Wilcox, at the CSIRO in Hobart, has stated, 'What we found was that when the turtle eats the first piece of plastic, it has about a 20 per cent chance of dying due to that one piece of plastic and as they eat more plastic, the chance that they die goes up... We find hundreds of pieces of plastic in some turtles, everything from thin film to rope to fishing line, anything you see in your daily life we see in a turtle.'

Dr Wilcox warned, 'All this plastic was in someone's hand at one point or another and it's really about changing how we act around our waste.' <https://www.abc.net.au/news/2018-09-14/eating-14-pieces-of-plastic-enough-to-kill-turtles/10243618>

It has also been noted that the plight of the endangered Galapagos green turtles is being made worse by their ingestion of plastic debris. Plastic debris ingested by these turtles can cause intestinal blockage resulting in malnutrition, reduced growth rates and death. The turtles can starve to death because they feel full after swallowing plastic debris.

The Galapagos Conservation Trust based in the United Kingdom is launching a multi-year program to reduce plastic use in the Archipelago, where a ban on single-use plastic straws, bottles and bags began on August 21, 2018. The ban was promoted by the Governing Council

of the Special Regime of the Galápagos. <https://www.unenvironment.org/news-and-stories/story/fatal-attraction-turtles-and-plastic>

3. Plastic straws are generally a discretionary item

Those who advocate that plastic straws should be banned argue that they are an appropriate product with which to begin cutting back on plastic use because they are a discretionary item. According to this line of argument, plastic straws are generally viewed as a small indulgence that consumers can do without.

Diana Lofflin, founder of StrawFree.org, has stated, 'Straws are something anyone can give up easily without having it affect their lifestyle. It's a small step anyone can take to make a global impact.'

Opponents of plastic straws tend to see them as a consumer indulgence. An editorial published in Nolisoli on May 15, 2017, stated, 'Go to any food establishment and you will find a straw dispenser somewhere. If there's none, chances are they're going to serve it with your drink anyway. The rising demand for consumer convenience can be seen in fast food chains offering disposable foodware, simply because more people are taking their meals on the go.' <http://nolisoli.ph/13112/case-plastic-straws-really-necessary/>

On April 17, 2018, Ying Wong made a similar comment that was published in De Minimis. Wong states, 'It's very rare that one actually needs [a plastic straw]. While there are some exceptions, there are remarkably few drinks that cannot be drunk directly from the lip of the cup...It is hence frustrating that some choose to indulge in the pleasure of sucking their drink like a baby on a teat for a total of six minutes, without considering the 450 years attached to that piece of plastic that will not break down in landfill, or will end up in the ocean.'

<https://www.deminimis.com.au/home/local-moralist-shakes-fist-at-people-who-use-plastic-straws>

Councillor Neil Horner, Qualicum Beach, Vancouver Island, has also stressed the redundancy of plastic straws for most users. Councillor Horner stated, 'We've made a big mistake as a society and we need to do something about it and make some changes... While plastic bags are seen by some as necessary, plastic straws are just an indulgence - a small indulgence and nothing more.' <https://www.vancouverislandfreedaily.com/news/qualicum-beach-seeks-info-on-banning-plastic-straws/> Qualicum Beach council is currently in the process of approving a bylaw that would eventually ban the provision of plastic straws and single-use plastic bags. Supporters of plastic straw bans do not take issue with those with a disability who need to use plastic straws, rather, they argue, the problem is created by the vast majority of users of plastic straws for whom these items are not a necessity. The anti-plastic straw lobby group, The Last Straw, states, 'If only people that needed plastic straws used them, we wouldn't have such a big problem. However, there is a lot of unnecessary waste being produced by people who don't need to use a straw, and by the service industry being in the habit of giving them out. Our issue is not with the people that need to use straws, or even straws themselves, but the sheer volume that are being used and thrown away unnecessarily.'

<http://www.laststraw.com.au/>

4. There are biodegradable alternatives to plastic straws

Opponents of plastic straws argue that they can easily be either withdrawn or issued in a limited manner because there are biodegradable and/or more permanent alternatives that can be used in their stead.

Difford's Guide, Australia, suggests a wide range of alternatives that can be used instead of plastic straws. One of these is bamboo, which is claimed to be highly sustainable, durable and compostable. The site also recommends stainless steel, glass and paper straws. Glass and stainless steel straws are able to be cleaned and are reusable. Paper straws are described as

'compostable, biodegradable and made from renewable resources'. The site recommends a particular brand of paper straw which it claims 'are durable enough to last up to three hours in cold drinks'. The site also recommends silicone straws, which while hard to recycle, produce nine times less greenhouse gas in their manufacture than conventional plastic straws.

<https://www.diffordsguide.com/en-au/encyclopedia/1405/cocktails/straws-10-alternatives-to-plastic-straws>

The Last Plastic Straw recommends these and a number of other alternatives. One of these is lolistraws which are said to be edible, compostable, marine degradable and made using a seaweed-based material technology. The site also recommends straws made from straw which are non-polluting and biodegradable. Also available are stainless steel straws which are able to be bent. <https://thelastplasticstraw.org/resources/>

On August 25, 2015, The Guardian published a review of alternatives to plastic straws by Vivian Ho. Ho writes, 'I ranked the metal straws as first in terms of use, durability, efficiency and ease of cleaning...Something about their solidity made me feel I could trust them more than the other straws. I expected a slight metallic taste but found none. They tended to absorb the temperature of the liquid, getting chilly in the cold drinks and warm in the hot drinks. I had dreaded cleaning the straws – there is just something so daunting about the teeny-tiny brushes that accompany them – but I found that after one use, a quick rinse with hot water did the job just fine.' <https://www.theguardian.com/us-news/2018/aug/25/plastic-straw-ban-testing-compostable-metal-bamboo>

On July 29, 2018, Business Insider South Africa reviewed five different alternatives to plastic straws - stainless steel, etched copper, glass, bamboo, and reed. It was noted that all were reusable, two were both bio-degradable and renewable – and none had the long-term environmental impact of plastic. The glass straw was judged the most effective: 'It suffers none of the heat conductivity or taste issues of other straws. The thick, rounded edges are pleasant in the mouth. It is entirely thick and sturdy enough to clamp satisfyingly between the teeth.' <https://www.businessinsider.co.za/plastic-straw-alternatives-glass-bamboo-copper-steel-khanyiso-test-2018-6>

On July 11, 2018, Fortune published a report detailing how a number of businesses planning no longer to offer plastic straws intended to replace them. 'Starbucks will replace straws with recyclable plastic lids for all cold beverages. Straws made from other materials, like paper and compostable plastic, are also available for use with Frappuccinos upon request... Hoping to cut its environmental footprint in half by 2030, Hilton Hotels outlined its plans to remove plastic straws from 650 properties in 2018. The company says it will replace the plastic straws with a paper or biodegradable option... Alaska Airlines also announced... that it would start to replace plastic straws...with “sustainable, marine-friendly alternatives”... Royal Caribbean...said it will offer paper straws to customers by request.'

<http://fortune.com/2018/07/11/ditching-plastic-straws-replacements/>

5. Plastic straws bans can lead to more substantial measures

Some advocates for plastic straw bans argue that, though plastic straws are not the world's most pressing plastics pollution problem, their banning is of major symbolic significance. According to this line of argument, banning plastic straws is a measure which raises environmental awareness among the general community, especially awareness of the impact of plastics pollution. Supporters of a plastic straw ban hope that this measure will lead to additional changes which will further reduce the production and use of plastic products. Dianna Cohen, the chief executive officer of the Plastic Pollution Coalition, has stated, 'We look at straws as one of the gateway issues to help people start thinking about the global plastic pollution problem. They have been designed to be used for a very short amount of

time, and then be tossed away.' <https://www.businessinsider.com.au/plastic-straw-ban-why-are-there-so-many-2018-7?r=US&IR=T>

Jenni Avins, writing for Quartz, in a comment published on July 10, 2018, stated, 'There's reason to believe that incremental changes can help create more meaningful ones (not to mention compound). A plastic straw - however symbolic - can lead to conversations about larger looming issues, including the acidification of our oceans, or more significant sources of ocean trash, such as waste from the commercial fishing industry and poor waste management in Asia.' <https://qz.com/quartz/1324129/starbucks-plastic-straw-ban-wont-save-the-world-but-its-better-than-nothing/>

Psychologist Robert Gifford has similarly stated, 'Banning straws is about as important as spitting in the wind, but a lot of social psychology research says that if you get people to say yes to a small request, they are more likely to accede to more serious requests.'

<https://qz.com/quartz/1324129/starbucks-plastic-straw-ban-wont-save-the-world-but-its-better-than-nothing/>

From the same perspective, Sarah Gibbens, in an article published in National Geographic on July 23, 2018, stated, 'Though just a small fraction of all plastic pollution, straws have become a symbol of waste to rally behind and a feasible way for consumers to feel like they're making a difference.'

<https://www.nationalgeographic.com/environment/2018/07/news-how-plastic-straw-bans-work/>

Supporters of the ban on plastic straws argue that not only do the straws themselves have a significant symbolic value in the battle against plastics pollution, one of the triggers which helped motivate action against this particular product has also become a powerful catalyst for change.

At the time of writing this issue outline, more than 30 million people had watched a disturbing 8-minute viral video of an olive ridley sea turtle with a stream of blood draining from its nostril, as two researchers worked to extract a 10-cm plastic straw.

<https://www.youtube.com/watch?v=4wH878t78bw> An abbreviated version of the video had been watched by ten million people. <https://www.youtube.com/watch?v=d2J2qdOrW44>

Christine Figgner, a PhD student at Texas A&M University and a sea turtle expert, has stated, 'We have been talking about the detrimental effects of straws for years, but seeing that video, as horrible as it was, is what we needed to wake people up.'

<https://www.plasticpollutioncoalition.org/pft/2015/10/27/the-turtle-that-became-the-anti-plastic-straw-poster-child> In an analysis published on June 6, 2017, Cirrus Wood stated, 'The image has become a symbol in the plastics debate, representing how developed nations often prioritise consumer ease over planetary health.'

<https://www.berkeleyside.com/2017/06/06/know-berkeley-straw-ban-proposal>

Arguments against banning plastic straws in Australia

1. The contribution plastic straws make to Australia's and the world's plastics pollution is very small

Critics of the banning of plastic straws by many food retailers argue that such measures divert attention from more significant problems which will be more difficult to address. Plastic straws are a small and for most people completely discretionary plastic product which it is relatively easy to go without. The real issue, critics argue, is the many more necessary and desired plastic products which make up the vast amount of Australia's plastics consumption. Single-use plastic shopping bags and drinking straws make up less than 1% of the more than 100 kilograms of plastic that each Australian uses every year. According to Federal Government reports, Australians probably use about 40,000 tonnes of single-use bags and straws; Australia uses about 3.5 million tonnes of total plastic.

<https://www.businessinsider.com.au/plastic-straws-shopping-bag-bans-scale-of-plastic-challenge-2018-11>

Most of Australia's plastics consumption comes from the use of other plastic consumer goods which it will be far harder to reduce. Some 66 percent of the total plastic Australians consume is through packaging, which keeps goods and food products transportable, safe and hygienic. More plastic is now going into Australians' growing collections of digital equipment (15 devices per household); safer, more affordable cars (being built with less metal every year), and medical care for an ageing population.

<https://www.businessinsider.com.au/plastic-straws-shopping-bag-bans-scale-of-plastic-challenge-2018-11>

Critics of plastic straw bans note that this pattern has been found in other developed nations. According to a recent report by environmental group Better Alternatives Now (BAN), plastic straws and stirrers (grouped together in this report but not in all bans) comprised about 7 percent of plastic items found along the California coastline, by piece. Compared to plastic bags at 9 percent or plastic bottle caps at 17 percent. When taken by weight, a report by Jambeck Research Group places plastic straws at only .03 percent of aggregate plastic in the oceans themselves, suggesting that straws' lightness and buoyancy lead them to end up overrepresented on the coastline. <https://sprudge.com/straw-ban-or-straw-man-why-plastic-straw-bans-arent-the-answer-135315.html>

The same point was made by Adam Minter in comment published by Bloomberg Opinion on June 8, 2018. Minter stated, 'This well-intentioned campaign assumes that single-use plastics, such as straws and coffee stirrers, have much to do with ocean pollution. And that assumption is based on some highly dubious data. Activists and news media often claim that Americans use 500 million plastic straws per day, for example, which sounds awful. But the source of this figure turns out to be a survey conducted by a nine-year-old. Similarly, two Australian scientists estimate that there are up to 8.3 billion plastic straws scattered on global coastlines. Yet even if all those straws were suddenly washed into the sea, they'd account for about .03 percent of the 8 million metric tons of plastics estimated to enter the oceans in a given year.' <https://www.bloomberg.com/opinion/articles/2018-06-07/plastic-straws-aren-t-the-problem> Considered on a global scale, critics claim the impact a ban on plastic straws would have on the pollution of the world's oceans is relatively minor. Some critics of moves to ban these products point to the fact that plastic straws, if measured per item, make up only four percent of ocean debris. Such criticisms suggest that environmentalists should be focusing their efforts on more consequential issues such as fishing debris and many critics assert that, even if enacted globally, plastic straw bans would fail to significantly reduce the plastics contamination of the oceans. <http://edgeeffects.net/plastic-straw-bans/>

2. The contribution Australia makes to the world's plastics pollution is small

Opponents of plastic straw bans argue that actions such as these over represent the significance of the contribution that Australia makes to the world's plastics pollution problem. According to this line of argument, the vast majority of the world's plastic pollution comes from Asia and Africa and therefore it is on these pollution sources that attention needs to be focused.

In February 2015, Science published a report from a team of researchers in the United States and Australia led by Jenna Jambeck, an environmental engineer at the University of Georgia, which had analysed plastic waste levels in the world's oceans. They found that China and Indonesia are the top sources of plastic bottles, bags and other rubbish clogging up global sea lanes. Together, both nations account for more than a third of plastic detritus in global waters. <https://www.statista.com/chart/12211/the-countries-polluting-the-oceans-the-most/>

The international study calculated that 192 nations produced a total of 275 million tonnes of plastic waste. Regarding Australia's contribution, Australia was not placed among the top 20 of the world's plastic polluters and contributed less than 0.01 million tonnes annually.

Ecologist Dr Chris Wilcox, from the CSIRO, observed, 'We don't have a very large population and we have well developed waste disposal systems.'

<https://www.abc.net.au/science/articles/2015/02/13/4178113.htm>

On August 7, 2018, Statista published a report by data journalist, Niall McCarthy which restated the finding that the largest amounts of plastic pollution tend not to come from established, economically well-developed countries. McCarthy noted, 'In 2010, 8.8 million metric tons of mismanaged plastic waste came from China with an estimated 3.53 million metric tons of it ending up in the ocean. A total of 3.2 million metric tons of mismanaged plastic waste came from Indonesia and it is estimated that 1.29 million metric tons became plastic marine debris. The United States is also guilty of polluting oceans with plastic, but at a much lower level than China. Annually, 0.11 million metric tons of waterborne plastic garbage comes from the United States.' <https://www.statista.com/chart/12211/the-countries-polluting-the-oceans-the-most/>

The countries listed as contributing the largest amounts of mismanaged plastic waste to global waters, ranked in order of the size of their contribution in 2010 were: China, Indonesia, Philippines, Vietnam, Sri Lanka, Egypt, Thailand, Malaysia, Nigeria, Bangladesh and Brazil. <https://www.statista.com/chart/12211/the-countries-polluting-the-oceans-the-most/>

On June 8, 2018, the World Economic Forum published an article highlighting the major sources of the world's plastic pollution. It stated, 'Researchers were able to estimate that just 10 river systems carry 90 percent of the plastic that ends up in the ocean.

Eight of them are in Asia: the Yangtze; Indus; Yellow; Hai He; Ganges; Pearl; Amur; Mekong; and two in Africa – the Nile and the Niger...

The Yangtze is Asia's longest river and also one of world's most ecologically important rivers. The river basin is home to almost 500 million people (more than one third of China's population). It is also the biggest carrier of plastic pollution to the ocean.'

<https://www.weforum.org/agenda/2018/06/90-of-plastic-polluting-our-oceans-comes-from-just-10-rivers/>

On July 26, 2018, The American Council on Science and Health published a comment by Alex Berezow. Berezow observed, 'Why are these countries such big polluters? Well, they're poor. They don't have good infrastructure for dealing with waste. As countries become wealthier, they are better able to clean up their messes. This is a phenomenon known as the environmental Kuznets curve. Instead of banning plastic straws, we should be focusing our efforts on helping developing countries become wealthier and healthier.'

<https://www.acsh.org/news/2018/07/26/asia-africa-cause-90-plastic-pollution-worlds-oceans-13233>

3. Recycling of plastic straws and other plastics is a better solution

Critics of measures such as the banning of plastic straws argue that with appropriate ingenuity it should be possible to develop a means of recycling these items. On a broader scale, critics are concerned that a focus on banning any plastic product diverts attention from more significant plastic management issues, such as the small amount of the plastics which Australians use which are recycled each year. Banning, they argue, can never be the solution as we cannot eliminate all plastic products from our lives. What we must do is dispose of them responsibly and recycle.

With regard to the recycling of plastic straws, it has been noted that although it is difficult, it is possible. On July 30, 2018, 9 News televised a report outlining convenience store chain 7-

Eleven's efforts to recycle plastic straws and disposable coffee cups. The report stated, 'Convenience store 7-Eleven has launched a new nationwide recycling program for plastic straws. Dedicated bins will be installed in more than 200 stores across Australia today, allowing people to recycle straws along with takeaway coffee cups.

The initiative is in partnership with Simply Cups, which earlier this year teamed up with the brand to rescue takeaway cups from landfill. '

<https://www.9news.com.au/national/2018/07/30/12/45/7-11-stores-plastic-straws-recycling-program-australia>

The convenience store chains' chief executive officer, Angus McKay, stated, 'A problem this size requires multiple solutions and we want to drive a behaviour change and help people dispose of their takeaway cups and straws responsibly.'

<https://www.9news.com.au/national/2018/07/30/12/45/7-11-stores-plastic-straws-recycling-program-australia>

Critics further note, that though recycling plastic straws is desirable, the far more urgent problem is Australia's failure to recycle the huge amounts of plastic waste it creates from other sources. It has been noted that Australia currently recycles only about 12 percent of all the plastic it consumes. The majority of what is collected from Australian homes and businesses is sent to overseas plants for reprocessing and remanufacturing. Only about 150,000 tonnes of the 3.5 million tonnes of plastic Australia consumes annually is recycled in Australia. A new National Waste Policy will set a target of 70 percent recycling of packaging plastic – for which there will need to be massive market and infrastructure development.

<https://www.businessinsider.com.au/plastic-straws-shopping-bag-bans-scale-of-plastic-challenge-2018-11>

The same point has been made within business communities in the United States. An executive at the Plastics Industry Association has claimed that the best way to reduce the flow of plastic waste into the world's oceans is for governments to invest more in recycling and waste management

Scott DeFife, vice president of government affairs for the trade group Plastics Industry Association, stated, 'Banning a specific product that is one small part of the larger problem is not a solution to the marine debris issue.' DeFife went on to claim that such bans give a 'false sense of accomplishment' and that a real solution to the problem will only come when government invests more in managing trash. <https://www.nbcnews.com/news/us-news/plastic-straws-clog-ocean-hurt-fish-now-there-s-growing-n877356>

4. Plastic straws are necessary for some Australians with a disability

Other criticisms of the banning of plastic straws come from some disability rights activists who object to the adverse impact this ban would have on significant numbers of people with a disability.

It has been claimed that utensils such as plastic straws serve an essential role in the daily lives of some people with physical disabilities, helping them with to eat and drink. They are also used as tools to exercise the lungs. Plastic straws are claimed to be particularly important for disabled people because they are flexible, cheap and widely available.

<https://www.abc.net.au/news/2018-04-25/the-problem-with-banning-plastic-straws/9689346>

The difficulties faced by some of those with disabilities before the development and general availability of plastic straws has been demonstrated by Dianne Laurine, a Seattle resident who has cerebral palsy, quadriplegia and no use of her extremities. Ms Laurine's carer, Bill Reeves, has stated, 'She is old enough to remember a time before plastic and everybody just used rubber straws. They ended up being disgusting, hard to clean. The advent of plastic in the 1950s changed her life.'<https://www.npr.org/sections/thesalt/2018/07/11/627773979/why-people-with-disabilities-want-bans-on-plastic-straws-to-be-more->

flexible?utm_source=tumblr.com&utm_medium=social&utm_campaign=npr&utm_term=npr news&utm_content=20180711

Alice Wong, the founder and director of the Disability Visibility Project, has explained the importance of plastic straws to maintain her own wellbeing and that of other people who suffer similarly. Wong states, 'Plastic is...an essential part of my health and wellness. With my neuromuscular disability, plastic straws are necessary tools for my hydration and nutrition.' <https://www.eater.com/2018/7/19/17586742/plastic-straw-ban-disabilities> Critics note that a ban on plastic straws ignores the needs of those who rely on disposable plastic straws to drink independently. Reusable straws made of wood or metal can be harmful, and paper straws lack the flexibility actually to make drinking easier. Further, disability rights activists argue that targeting plastic straws can exclude disabled people from the environmental movement and lead to eco-shaming. <http://edgeeffects.net/plastic-straw-bans/>

Advocates for those with a disability argue that there are few if any alternatives to plastic straws that are effective replacements. Alice Wong has noted, 'As demand increases for alternatives to plastic, so do the voices from the disability community sharing their concerns about how these bans will create additional labour, hurdles, and difficulties.'

<https://www.eater.com/2018/7/19/17586742/plastic-straw-ban-disabilities> It has been noted that permanent straw options, like metal or bamboo, are too hard for some people who [currently] rely on ... a plastic straw. Injury is also said to be a risk. It has also been noted that biodegradable paper straws have a tendency to disintegrate when placed into heated drinks, which poses a particular hazard for many disabled users, while porous silicone straws require cleaning immediately after use, something which it is often difficult for those with a disability to manage. <https://www.upworthy.com/there-s-an-unexpected-downfall-to-banning-plastic-straws-here-s-what-to-consider>

Disability rights advocate Michaela Hollywood from Muscular Dystrophy UK has similarly noted some of the difficulties people with disabilities confront in their search for an alternative to plastic straws. She has stated, 'Biodegradable plastic straws melt, and many of the other environmentally friendly straws don't bend. There is no one-size-fits-all solution.'

<https://www.abc.net.au/news/2018-04-25/the-problem-with-banning-plastic-straws/9689346>

Autism activist Wiley-Mydske has complained that through the imposition of plastic straw bans, the burden of environmental action regarding plastics reduction is being placed unfairly on the disabled. Referring to the potentially life-threatening consequences of the ban on those with disabilities, Wiley-Mydske notes, 'You [able-bodied people] won't even take the bus instead of driving your car somewhere. How many of you are willing to die for the environment?' <https://www.npr.org/sections/thesalt/2018/07/11/627773979/why-people-with-disabilities-want-bans-on-plastic-straws-to-be-more->

flexible?utm_source=tumblr.com&utm_medium=social&utm_campaign=npr&utm_term=npr news&utm_content=20180711

5. Common alternatives to plastic straws are not environmentally desirable

Those who oppose the banning of plastic straws argue that many of the alternatives offered are equally, if not more, environmentally harmful.

Some critics claim that paper straws may be as environmentally harmful a product as plastic straws. Paper straws are derived from wood and so involve the destruction of trees which are a carbon sink, helping to free the atmosphere of carbon dioxide, a major greenhouse gas.

Plastic straws, on the other hand, are made from a petroleum by-product and so can be seen as a form of recycling or value-adding from the manufacture of petroleum as they are made from materials that have already been extracted and processed for other purposes. It has also

been claimed that paper manufacture is more resource hungry in terms of energy and water than making polypropylene.

<https://www.cleanwateraction.org/2018/06/25/paper-or-plastic-why-answer-should-be-%E2%80%9Cneither%E2%80%9D>

It has also been noted that though paper straws will decompose they are slow to do so, especially if they have been treated to make them more durable as straws. It is also argued that if they are to decompose, care must be taken with their disposal.

Paper straws are unlikely to be recycled. Aardvark Straws, a company manufacturing an environmentally-conscious paper straw product have noted, 'Even though our straws are made out of paper, most recyclers will not accept food contaminated paper products. So depending on your recycling facility, they may be, but most likely not. That is why we suggest composting our straws instead.' <https://www.triplepundit.com/2018/07/single-use-plastic-paper-straws-really-eco-friendly-answer/>

Courtney Powell, founder of Elevated Enviro, a Canadian waste diversion company, has further stated, 'If these plant-based straws, these paper straws, go to the landfill, they don't decompose. Nothing really decomposes in a landfill. So it is no different than a plastic straw going there.' Powell explained that landfill operations involve spreading the garbage and covering it with dirt or gravel, removing contact with air. Without air, decomposition does not happen. <https://www.cbc.ca/news/canada/edmonton/paper-straws-not-biodegradable-in-landfill-1.4751021>

There have also been significant concerns raised about supposedly biodegradable plastic straws which have been offered as an alternative to conventional polypropylene straws by some pubs and other food outlets.

<https://www.morningadvertiser.co.uk/Article/2018/02/16/How-pubs-can-take-advantage-of-biodegradable-straws> These straws are typically made of polylactic acid, or PLA. PLA is a polymer made up of small lactic acid units, an organic substance. However, it has been claimed that PLA and other bioplastics can only break down when all oxygen is removed and temperatures are constantly above 60 degrees centigrade for at least 10 days. When it does break down it still leaves behind a harmful residue of 'plastic soup' microparticles that pollute the environment and threaten life at the bottom of the food chain. It has also been noted that PLA straws are not marine degradable.

<https://static1.squarespace.com/static/5488af22e4b0eae0eae7886/t/5a32b45953450a5368bec49f/1513272409523/Compostable+Plastics.pdf>

Further implications

The move away from single use plastic products is growing rapidly within Australia and across the world. On June 26, 2018 a Senate inquiry into the waste and recycling industry in Australia recommended a ban on single-use plastics such as takeaway food containers and plastic-lined coffee cups by 2023. Australia.

https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/WasteandRecycling/Report In the same week major supermarkets across Australia stopped supplying free, single use plastic bags, while there were outright bans on free plastic bags at shops in Queensland and Western Australia.

<https://theconversation.com/there-are-some-single-use-plastics-we-truly-need-the-rest-we-can-live-without-99077>

The potential success of such measures is apparently shown by recent developments in the United Kingdom. A report released in Britain in April, 2018, indicated a significant drop in the plastic bag pollution on the seabeds around the United Kingdom. The scientists behind the new research at the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) have suggested the trend they observed on the sea floor could be partly a result of changes in

the distribution and use of plastic bags in Britain. Changes in supermarket carrier bag policies have led to an 80 per cent drop in plastic bag use across England. Dr Thomas Maes, a marine litter scientist at CEFAS and the report's lead author, has stated, 'It is encouraging to see that efforts by all of society, whether the public, industry, NGOs or government to reduce plastic bags are having an effect.' <https://www.independent.co.uk/environment/plastic-bag-uk-sea-seabed-waste-pollution-ocean-reduce-environment-a8288526.html> Such apparent success has been used as an indicator of what concerted action can achieve.

While these are valuable developments, it is important they are thoughtfully adopted so that they do in fact help to achieve the reduction in environmental degradation that is intended. Two concerns that have been flagged are firstly the need to adopt changes in a manner which respects the needs of all within national communities and secondly the need to acknowledge is that consumption behaviours are only part of the solution to the problem.

Recent bans on the use of plastic straws have revealed the danger of imposing a prohibition without thoughtful consideration of the potential utility of the products being banned. In an opinion piece published in *The Conversation* on June 29, 2018, Paul Harvey, a Environmental Science researcher at Macquarie University, stated, 'We are rapidly reaching the point at which the relevant question is not "which plastics can we do without?", but "which single-use plastics do we genuinely need?" Harvey went on to warn that single use plastics play a necessary in medicine and scientific research where they help to maintain hygiene and prevent contamination. <https://theconversation.com/there-are-some-single-use-plastics-we-truly-need-the-rest-we-can-live-without-99077>

Reactions from disability advocates around the world to recent bans imposed in different jurisdictions on the use of plastic straws have indicated what can occur if the needs of a key section of the community are not properly considered when a ban is imposed. Kathryn Carroll, a policy analyst with the Center for Disability Rights in Washington, has stated, 'The basic premise of the community's concern is that when blanket policies like these are put in place, they don't take into account the individual needs of people with disabilities. While we want to protect the environment like everybody else, that's our concern.'

<https://wjla.com/news/nation-world/pushback-against-plastic-straw-bans-from-disability-rights-groups> What is particularly concerning is that the valid arguments of disability advocates regarding their need to use plastic straws, may serve to fuel those who are opposed for less valid grounds - a straw ban is an inconvenience or a straw ban may be a government infringement of individual liberty or lead to a reduction in profit or an increase in cost. There has been a pushback against straw bans around the world, partly motivated by concern for disability rights, but also prompted by less justifiable concerns.

<https://theconversation.com/why-you-shouldnt-be-a-straw-man-environmentalist-100303>

The second concern prompted by the adoption of partially symbolic conservation measures that may not achieve the ends claimed for them, is that they can distract from undertaking more significant actions. One irreducible fact of modern consumption patterns is that plastics are used for some functions that are not going to be easily performed by other products. Addressing the problems caused by plastic consumption is not going to be solved exclusively by bans or using different materials. A large part of the issue has to be resolved by addressing the manner in which plastic waste is disposed of and managed. Kate O'Neill, Associate Professor, Global Environmental Politics, University of California, Berkeley, has stated, 'Upgrading materials recycling facilities and expanding domestic markets for plastic scrap is an obvious priority but will require large-scale investments.' O'Neill's recognition of the investment required both by governments and companies in order to develop technological solutions that will result in better waste management is important. It is easier and less expensive for both governments and corporations to ban or withdraw products than it is for them to develop better waste management processes. The role of the private citizen is not just

to manage his or her own behaviour, so as to avoid the use of wasteful, polluting plastic products, but also to demand of governments and corporations that they help to develop systemic solutions.