

Canada's plastic problem: Sorting fact from fiction

Our oceans are facing a [plastic crisis](#). Plastic debris has been found floating on the sea surface, washing up on the world's most remote coastlines,¹ melting out of Arctic sea ice,² sitting at the deepest point of the ocean floor,³ and in the stomachs of fish, marine mammals and seabirds. It's everywhere. To make matters worse, the volume of plastic waste is expected to increase four times by 2050.⁴

And yet, here in Canada some people still think that plastic pollution, especially in our oceans, is not a Canadian problem. We recycle, we have good waste management systems, do beach cleanups, and generally we care about the environment. Isn't plastic pollution being dealt with appropriately?

The truth is that between individuals, corporations and industries, Canadians produce more garbage per capita than any other country on earth. As one of the wealthiest nations with a relatively small population, this is huge problem made worse by the fact that we only recycle about 9% of our plastics waste. This is harming our oceans, the animals that call them home and even our health. We need to be doing more to stop the oceans from drowning in plastics.

Let's dive into this issue and sort some of the fact from fiction. Listed below are some of the comments we've heard from people across Canada.

"Plastic waste isn't a Canadian issue."

FACT:

- Canadians produce a lot of plastic waste; an estimated 3.3 million tonnes per year.⁵
- About 2.8 million tonnes of plastic waste ends up in Canadian landfills every year – equivalent to the weight of 24 CN towers.^{5,6}
- According to the Canadian government, Canadians use almost 15 billion plastic bags every year and close to 57 million straws every day.⁷
- In Canada, more than one-third of our plastics are created for single-use products or packaging.^{5,7}

"Canadians recycle their plastic waste."

FACT: About 86 per cent of Canada's plastic waste ends up in landfill, while a meager nine per cent is recycled.^{5,8} The rest is burned to create energy, which causes emission problems, or the plastic enters the environment as litter.⁹ Additionally, Canada ships about 12 per cent of its plastic waste outside of North America to be processed for "recycling", which far too often results in waste polluting the environment around the world rather than being properly recycled.

"Canada doesn't produce as much plastic waste as other countries. Its their problem, not ours."

FACT: Many countries in Asia have become the world's dumping ground for plastic waste. About 12 per cent of Canada's plastic waste is sent outside of North America to be 'recycled'.¹⁰ The majority of this exported plastic waste is sent to countries in Southeast Asia, many of which do not have the proper infrastructure to deal with this waste.^{11,12} Unfortunately, this results in the plastic either being incinerated or entering the environment. North American and European countries



specifically have been sending waste there for decades, but many countries, like China, are now refusing it. Canada is contributing to the plastic problem halfway across the world. Check out the video below for more on how the western world is driving plastic pollution in Asian countries.

[\[EMBED video\]](#)

“We can just switch to biodegradable alternatives and bioplastics.”

FACT: Unfortunately, bioplastics are still resource-intensive, rely on fossil fuels for production and are disposable, single-use items. There are also many different types of bioplastics, which can lead to confusion in the disposal process. If bioplastics wrongly end up in recycling facilities instead of industrial compost facilities, they can contaminate recycled plastics and reduce their value, making recycling even less effective.^{13, 14} Even worse, if these bioplastics are not compostable in your regular organics bin at home, they must be returned to proper industrial compost facilities.

“I don’t live near the ocean, so my plastic doesn’t end up there.”

FACT: Plastic that accumulates in lakes, rivers and other bodies of water may eventually flow out into the ocean. Plastic from overflowing trash cans, litter on the street and waste sitting in landfill can get blown into stormwater sewers or rivers and streams. Additionally, microplastics and microfibrils from clothing and textiles are washed down the drain and are often too small to be filtered out at wastewater treatment facilities. This all eventually carries into larger bodies of water, making its way to the oceans.

“Most plastic in the ocean comes from cruise ships or fishing activity.”

FACT: Approximately 80 per cent of plastic that ends up in the ocean comes from land-based sources. The remaining 20 per cent of ocean plastic comes from at-sea sources, which includes both fishing and shipping litter.¹⁵ While we do agree that ghost gear is a significant problem affecting our oceans, fishing gear is created with the intention of long-term use and can be very expensive. It is therefore not likely to be intentionally lost or thrown away, and we can’t say the same about single-use plastic products.

“Shouldn’t we focus on cleaning up the plastic that’s already in the oceans?”

FACT: With projections estimating that plastic waste is expected to quadruple in volume by 2050⁴, and oceans covering about 70% of earth’s surface, cleaning ocean plastic presents an almost insurmountable feat. It is also estimated that the cost of cleaning up plastic pollution in the Great Lakes area alone (U.S. and Canada) is about \$468 million a year.¹⁶ It doesn’t make good sense to spend millions of dollars every year on a persistent problem, without addressing its root cause. It’s like if your bathtub was overflowing – you wouldn’t run to get a mop first, you’d turn off the tap. To mitigate this problem, we need to stop plastics from getting into our oceans in the first place.

Ensuring our oceans are clean, healthy and plastic-free is the responsibility of everyone in Canada, including companies, governments and consumers, and also requires concerted action from all

sectors around the world. Since the oceans do not have boundaries, plastic gets carried far and wide by ocean currents. This is why Oceana has launched a global plastics campaign.

We need companies, from multinational corporations to small businesses and local restaurants, to adopt alternatives to single-use plastics; we need the Canadian government to enact strong legislation and regulations that limit or eliminate single-use plastics and ensure they don't end up in our oceans; and we need members of the public to keep the pressure on governments and corporations to end the threat plastic pollution poses to our oceans.

Oceana Canada is advocating for plastic-free oceans and we need your support to be successful, [join us as a Wavemaker for the latest campaign updates and actions you can take](#). For more information on the work we are doing visit oceana.ca/Plastics. You can also check out this great resource created by the National Resource Defense Council (NRDC) on [10 Ways to Reduce Plastic Pollution](#) in your own life.

¹ Lavers AL, & Bond AL. (April 7, 2017). Exceptional and rapid accumulation of anthropogenic debris on one of the world's most remote and pristine islands. *PNAS*. 114: 052-6055. Doi: 10.1073/pnas.1619818114

² Peeken I, Primpke S, Beyer B, Gutermann J, Katlein C, Krumpfen T, Bergmann M, Hehemann L and Gerdt G (2018). Arctic sea ice is an important temporal sink and means of transport for microplastic. *Nat Commun*, 9: 1505. Doi: 10.1038/s41467-018-03825-5

³ Chiba S, Saito H, Fletcher R, Yogi T, Kay M, Miyagi S, Ogido M and Fujikura K. (2018). Human footprint in the abyss: 30 year records of deep-sea plastic debris. *Mar Pol*. doi: 10.1016/j.marpol.2018.03.022

⁴ Geyer R, Jambeck JR and Law KL. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, 3: 7. doi: 10.1126/sciadv.1700782

⁵ Deloitte & Cheminfo Services Inc. (2019). Economic study of the Canadian plastic industry, markets and waste. Environment and Climate Change Canada. Retrieved from: http://publications.gc.ca/collections/collection_2019/eccc/En4-366-1-2019-eng.pdf

⁶ Lewis J. (May 2019). Reduce, reuse, recycle, rejected: Why Canada's recycling industry is in crisis mode. The Globe and Mail. Retrieved from: <https://www.theglobeandmail.com/canada/article-wish-cycling-canadas-recycling-industry-in-crisis-mode/>

⁷ Trudeau, J., Prime Minister of Canada. (2019, June 10). Canada to ban harmful single-use plastics and hold companies responsible for plastic waste. Retrieved from: <https://pm.gc.ca/en/news/news-releases/2019/06/10/canada-ban-harmful-single-use-plastics-and-hold-companies-responsible>

⁸ Statistics Canada. (2019). Materials diverted, by type. Table: 38-10-0034-01. Retrieved from: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810003401>

⁹ Aldag, J. (June 2019). The last straw: turning the tide on plastic pollution in Canada; Report of the standing committee on environment and sustainable development. House of Commons.

¹⁰ More Recycling. (June 2019). 2017 Post-Consumer Plastics Recycling in Canada. Canadian Plastics Industry Association. Retrieved from: file:///C:/Users/ryoung/Downloads/2017_CanadaPlasticRecyclingReport_190619.pdf

¹¹ Stats Can. (2019). Canadian International Merchandise Trade Database. Table 980-0039, 39. Domestic exports – Plastics and articles thereof. Retrieved from: [https://www5.statcan.gc.ca/cimt-cicm/topNCountries-pays?lang=eng&getSectionId\(\)=0&dataTransformation=0&refYr=2018&refMonth=7&freq=12&countryId=0&getUsaState\(\)=0&rovid=1&retrieve=Retrieve&country=null&tradeType=1&topNDefault=10&monthStr=null&chapterId=39&arrayId=0§ionLabel=&scaleValue=0&scaleQuantity=0&commodityId=391590](https://www5.statcan.gc.ca/cimt-cicm/topNCountries-pays?lang=eng&getSectionId()=0&dataTransformation=0&refYr=2018&refMonth=7&freq=12&countryId=0&getUsaState()=0&rovid=1&retrieve=Retrieve&country=null&tradeType=1&topNDefault=10&monthStr=null&chapterId=39&arrayId=0§ionLabel=&scaleValue=0&scaleQuantity=0&commodityId=391590)

¹² Greenpeace Malaysia. (November 2018). The Recycling Myth: Malaysia and the broken global recycling system. Retrieved from: <https://www.greenpeace.org/archive-seasia/PageFiles/936685/The%20Recycling%20Myth%20-%20Malaysia%20and%20the%20Broken%20Global%20Recycling%20System.pdf>

¹³ B.A.N. List 2.0.(2018). Better Alternatives Now. 34p.

¹⁴ Momami B. (2009). Assessment of the Impacts of Bioplastics: Energy Usage, Fossil Fuel Usage, Pollution, Health Effects, Effects on the Food Supply, and Economic Effects Compared to Petroleum Based Plastics. Worcester Polytechnic Institute.

¹⁵ Eunomia. (June 2016). Plastics in the Marine Environment. Retrieved from: <https://www.eunomia.co.uk/reports-tools/plastics-in-the-marine-environment/>

¹⁶ Driedger AGJ, Durr HH and Van Cappellen P. (January 2015). Plastic debris in the Laurentian Great Lakes: A review. *J Great Lakes Res*, 41(1): 9-19. <https://doi.org/10.1016/j.jglr.2014.12.020>