



## Shareholder Resolution to McDonald's Corp. Global Phase-out of Polystyrene Cups

### Executive Summary

- McDonald's Corp. has phased out harmful polystyrene foam<sup>1</sup> packaging for food applications such as hot beverage cups in the U.S., but continues its use in overseas markets where plastic pollution migration into waterways is highest.
- Polystyrene foam is creating huge problems post-consumer and downstream. Plastic packaging is a prime component of ocean gyre pollution, which threatens marine animals and potentially, human health. Recent studies estimate that 8 million tons of plastics are dumped in oceans annually and project that **oceans will contain more plastic than fish by weight by 2050.**<sup>2</sup> This has led nine countries and more than 100 U.S. cities or counties to ban foam packaging.
- Non-recycled packaging like polystyrene cups exacerbates existing efforts to recycle more post-consumer packaging. The Environmental Protection Agency (EPA) says there is no significant recovery of foam food service packaging in the U.S.
- Leaders of 15 major companies called for phase out of use of polystyrene for packaging purposes in January 2017.
- *The company has not shown awareness of the potential for polystyrene waste to create brand risk, or shown evidence of plans to phase out polystyrene packaging globally, or of how to respond to the increasing presence of its plastic packaging in ocean gyres.*

### Resolution Summary

The proposal asks McDonald's to assess the environmental impacts of continued use of polystyrene foam beverage cups, including quantifying the amount that could reach the environment, and assessing the potential for increased risk of adverse health effects to marine animals and humans. The supporting statement asks for an assessment of the reputational, financial and operational risks associated with continuing to use foam cups and a timeline to phase out their use.

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<sup>1</sup> Polystyrene foam applications for food service containers and cups are often erroneously referred to as Styrofoam, which is a trademark of Dow Chemical Corp., used for building applications of polystyrene foam, not food service.

<sup>2</sup> Jambeck et al, Plastic waste inputs from land into the ocean, Science 13 February 2015

<http://science.sciencemag.org/content/347/6223/768>, and Ellen MacArthur Foundation, January 2016, The New Plastics Economy: Rethinking the Future of Plastics, <http://www.ellenmacarthurfoundation.org/publications/the-new-plastics-economy-rethinking-the-future-of-plastics>



## Why This Is Important

Polystyrene (PS) foam beverage cups and other kinds of packaging are a major contributor to ocean gyre pollution, which has been found to be harmful to fish and birds. Styrene has occupational safety concerns in its production and has been listed as a possible human carcinogen. Foam is rarely recycled and safer alternatives are readily available.

McDonald's Corp. continues to use PS foam-based cups for hot beverages in some overseas markets 20 years after phasing out use of PS-based clamshell food containers, and three years after phasing out hot beverage cups in the U.S., due to its negative environmental impact. (The company acknowledges continued use of foam in the U.S. for cold drinks and food trays in a few areas).

Polystyrene foam used for coffee cups, takeout containers and packing materials, is rarely recycled. In 2012, EPA's annual solid waste report estimated that just 3.8% of PS foam food containers were recycled in the U.S. By 2013, EPA said "no significant recovery" was identified. Due to its extreme light weight, it can become easily airborne and is often swept into waterways, and is one of the top items found in ocean beach cleanups. Foam packaging materials break down into small indigestible pellets which marine animals mistake for food. Ingestion can result in malnutrition, intestinal blockage, buildup of toxics, and death as demonstrated in birds, turtles, and whales.

Foam has also been shown to transfer hazardous chemicals to wildlife. Plastics absorb toxics like dioxins, pesticides, and metals from water, transferring them to the marine food web and potentially to human diets, increasing risk of adverse effects to wildlife and humans. Foam may pose a higher risk to marine animals than other plastics due to its hazardous constituent chemicals and research showing it can accumulate high concentrations of water borne toxins in a short time frame.<sup>3</sup> Polystyrene has caused decreased reproduction in laboratory populations of oysters and fish.<sup>4</sup>

## Polystyrene Production May Be Harmful

McDonald's is a member of the Sustainable Packaging Coalition, which defines sustainable packaging as "beneficial, safe & healthy for individuals and communities throughout its life cycle." Styrene is not safe and healthy for individuals especially in its production cycle. The International Agency for Research on Cancer has determined that styrene, used in the production of polystyrene, is a possible human carcinogen. Several epidemiologic studies suggest an association between occupational styrene exposure and an increased risk of leukemia and lymphoma.

## Major companies call for phase out of polystyrene

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<sup>3</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4140420/>

<sup>4</sup> <http://www.pnas.org/content/113/9/2430.abstract>



The leaders of 15 major companies recommended phasing out polystyrene for packaging purposes in a report released in January. *“The New Plastics Economy – Catalyzing Action,”* released at the World Economic Forum in Davos, recommended replacing polystyrene, expanded polystyrene (EPS), and polyvinyl chloride as packaging materials globally. The report singled out these three materials as “uncommon” plastic packaging materials whose replacement would make a “huge impact.” Replacing these materials would enhance the economics of recycling and reduce the potential negative impact of these materials as “substances of concern.” The report noted that PS is often used for takeout food packaging and contaminated with waste food, making it harder to recycle. The report was endorsed by leaders brands including Coca-Cola Co., Danone, L’Oreal, Marks & Spencer, Mars, PepsiCo, Procter & Gamble, and Unilever. Another prominent signatory was Dow Chemical Co., a manufacturer of polystyrene. Dow’s CEO Andrew Liveris praised the report as “a key step in delivering science-based solutions by providing options that help us close resource loops for plastics...”

## **Nine Countries and 100 U.S. jurisdictions have banned foam**

Antigua and Barbuda, Bangladesh, Barbados, France, Guyana, Haiti, Rwanda, Taiwan and states in India and Malaysia have enacted bans on foam packaging. More than 100 U.S. cities or counties have banned or restricted foam packaging. The problem can be exacerbated in developing countries with less sophisticated solid waste management systems. Recent scientific research estimates that one half of ocean plastic deposition comes from several rapidly developing Asian countries including China and the Philippines where McDonald’s still uses foam cups in some areas.

## **Polystyrene and other plastics pollute the marine environment**

Management has not acknowledged growing evidence that PS foam contributes significantly to pollution of the world’s oceans which clogs waterways, damages marine ecosystems, and impairs the marine food web. Management needs to recognize that its packaging is creating significant global pollution problems downstream and that its cups found on beaches creates brand risk.

Huge gyres of swirling plastic particles have been identified in five ocean areas (North and South Pacific, North and South Atlantic, Indian). Researchers estimate that 150 million tons of plastics circulate in the gyres, spread across about 16 million square kilometers of ocean surface—about the size of the U.S. and Australia combined.

The U.S. Environmental Protection Agency says degraded plastics in these ocean gyres pose threats to marine animals,<sup>5</sup> and potentially to human health.<sup>6</sup> **Food and beverage packaging and containers are among the top 5 items found on beaches and coastlines<sup>7</sup>.**

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<sup>5</sup> [http://water.epa.gov/type/oceb/marinedebris/md\\_impacts.cfm](http://water.epa.gov/type/oceb/marinedebris/md_impacts.cfm)

<sup>6</sup> <http://www.epa.gov/region9/marine-debris/faq.html>

<sup>7</sup> <http://www.oceanconservancy.org/our-work/marine-debris/check-out-our-latest-trash.html>



A 2015 study published in *Science* concluded the oceans are loading with plastics far faster than previously thought, with 8 million tons—equivalent to one garbage truck every minute—being added annually. **At that rate, without significant mitigation, by 2050 plastic could exceed fish by weight.** A recent Ocean Conservancy report concludes that poorly designed waste management systems, not just beach litter, sewage, or blowing plastic, contribute substantially to ocean plastic, particularly in developing markets.<sup>8</sup>

An assessment of marine debris by a panel of the Global Environment Facility of the UN Environment Program concluded that an underlying cause of debris entering oceans is unsustainable production and consumption patterns including "design and marketing of products internationally without appropriate regard to their environmental fate or ability to be recycled in the locations where sold..."<sup>9</sup>

*Valuing Plastics: The Business Case for Measuring, Managing and Disclosing Plastic Use in the Consumer Goods Industry*, a 2014 UN Environment Program report, presented the first cost estimates associated with corporations' use of plastic in terms of damage to the environment. The report estimated the natural capital cost of plastic use in the consumer goods sector each year at \$75 billion, about \$13 billion of which is due to damage to marine ecosystems.<sup>10</sup>

California spends nearly \$500 million annually preventing trash, much of it packaging, from polluting beaches, rivers and oceanfront. Local governments, especially those in states with coastlines, have begun to ban plastic packaging. California has adopted 80 local bans on PS foam take out packaging.<sup>11</sup>

## Response to company statement in opposition

The company statement cites its [work](#) with Environmental Defense Fund 25 years ago to phase out use of polystyrene-based clamshell food containers. However, there is no discussion of why the action stopped with replacement of food containers. Given the strong environmental concerns raised around PS 25 years ago and the company's stated commitment to sustainable sourcing, it is puzzling why the company never completed phase out by also removing PS cups and trays from all its packaging systems.

The company does not mention that it [agreed](#) to phase out use of foam cups in the U.S. only following a shareholder engagement and resolution by As You Sow in 2011.

The company states that PS comprises less than 2% of packaging in McDonald's restaurants globally. However, with 36,000 in more than 100 countries, foam could still be playing a significant role in plastic pollution in areas where it is still in use.

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<sup>8</sup> Ocean Conservancy, 2015, *Stemming the Tide: Land based strategies for a plastic-free ocean*,

<http://www.oceanconservancy.org/our-work/marine-debris/mckinsey-report-files/full-report-stemming-the.pdf>

<sup>9</sup> Scientific and Technical Advisory Panel, *Marine Debris as a Global Environmental Problem: Introducing a solutions based framework focused on plastic*, November 2011, p.3.

<http://www.thegef.org/gef/sites/thegef.org/files/publication/STAP%20MarineDebris%20-%20website.pdf>

<sup>10</sup> UNEP, 2014, *Valuing Plastics: The Business Case for Measuring, Managing and Disclosing Plastic Use in the Consumer Goods Industry* <http://www.unep.org/pdf/ValuingPlastic>

<sup>11</sup> <http://www.cleanwateraction.org/ca/rethinkdisposable/phaseoutfoam>



The company mentions an ongoing dialogue with As You Sow, which we appreciate. However, the dialogue by itself has not been sufficient to convince the company to study the risk posed by continuing to use PS foam applications, especially in light of the significant concerns related to ocean plastic pollution discussed above. A shareholder vote can provide a valuable indicator of how highly investors prioritize this issue.

## Conclusion

- Alarming new data indicates that plastic swept into oceans from consumer products like McDonald's foam beverage cups could exceed the level of fish by weight by 2050.
- Continued use of PS foam cups means branded containers found floating in rivers or on beaches have the potential to create brand risk, as well as contributing to environmental risks.
- Leaders of 15 major companies called for phase out of use of PS for packaging purposes in January 2017.
- Management has not indicated that it has analyzed these risks, or developed plans to phase out PS packaging globally, or indicated how it will respond to the increasing presence of its plastic packaging in ocean gyres.
- Shareholders and the company would benefit from the report requested by the proposal. The report would demonstrate that board and management is aware of and has studied the environmental and brand risk posed by PS foam waste, and has developed a strategy to replace it with more environmentally responsible alternatives.