

# Reuse is a climate and plastics solution

## Highlights

- Reusable food service ware beats single-use alternatives through every environmental measure (climate, water, land use, waste, pollution, etc.)
- Over their life-cycle, reusables have lower greenhouse gas emissions compared to disposable alternatives.
- Reuse helps reduce overall pollution, chemical exposure, and litter.
- Reuse can help 'turn off the tap' for single-use plastics
- Reuse services create good local jobs

**On a planet of 7 billion people and growing, products that are designed to be used for just a few minutes before they become waste is not sustainable.** We are never going to be able to recycle or compost our way to a sustainable future. The throw-away economy treats both people and the planet as disposable.

**Plastic packaging is the leading cause for increased demand for single-use plastics, representing 40% of the total production of plastic products.**<sup>1</sup> If plastic production and use continue to grow, as planned, emissions could reach 1.34 gigatons per year by 2030 – equivalent to emissions released by more than 295 new (500-megawatt) coal-fired plants.<sup>2</sup>

**The expansion of the plastics industry is fueling a petrochemical infrastructure buildout.** At least 42 facilities opened since 2019, or are under construction or in the permitting process. They threaten the release of an additional 55 million tons of greenhouse gasses – the equivalent of 27 coal-fueled power plants.<sup>3</sup> The impacts are the highest in Black & Brown, low-income, and Indigenous communities.

**As of 2015, there was 150 million metric tons of plastic in our oceans,<sup>4</sup> and the problem is growing. Plastic food and beverage packaging is a major contributor, making up nearly 70% of all litter found on streets and in waterways.<sup>5</sup>** But, banning single-use plastics leads to regrettable substitutes – other disposables that often have different, but substantial environmental impacts.<sup>6</sup> The problem isn't just plastic, it's single-use itself.

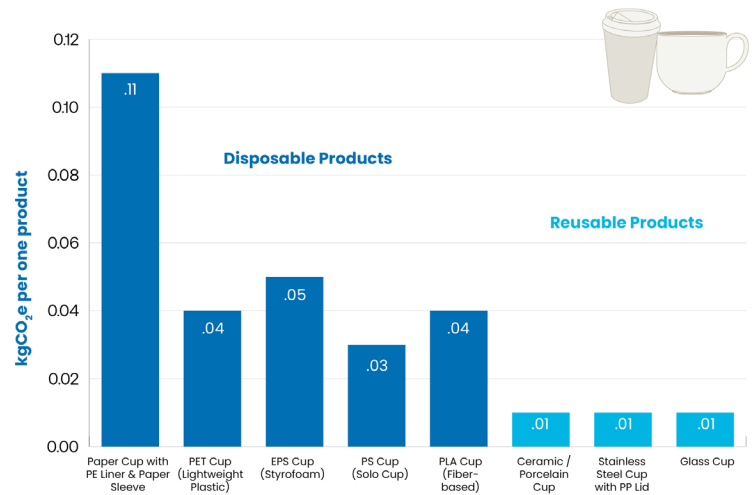
**Single-use disposable products produce large amounts of greenhouse gasses over their life-cycle, from extraction to end-of-life disposable.** For example, the CO<sub>2</sub> emissions of 360 compostable fiber clamshells used once are 85.5 kgCO<sub>2</sub>, while one polypropylene reusable clamshell used 360 times causes 1.27 kgCO<sub>2</sub> emissions.<sup>7</sup> The carbon impacts of the compostable clamshells are therefore 68 times greater than the reusable alternative.<sup>8</sup>



## How does reusable foodware solve the climate and plastics crisis?

**Reusable food service ware beats single-use alternatives through every environmental measure** (climate, water, land use, waste, pollution, etc.). Reusables always hit a break-even point where they outperform the disposables, and the benefits to the environment accrue with each additional use past that point.

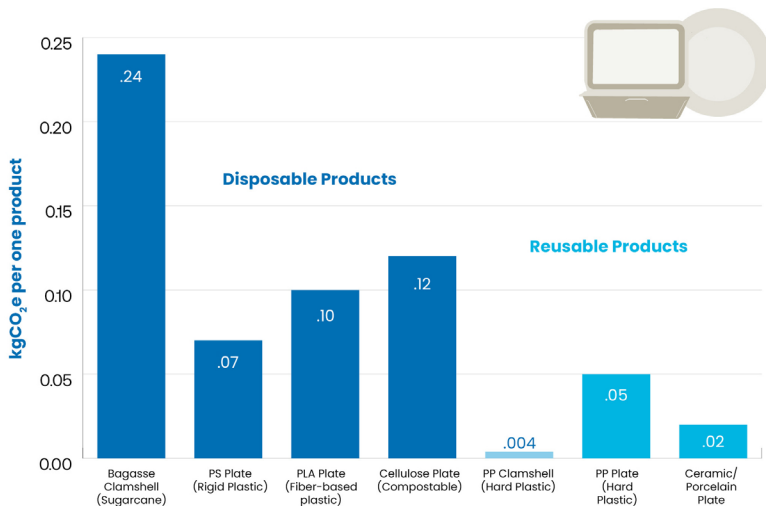
**Reuse protects the climate.** Over their life-cycle, reusable food and beverage packaging has lower greenhouse gas emissions compared to disposable alternatives. For example, the CO<sub>2</sub>e impacts of disposable paper, plastic, and bioplastic cups are 3 to 10 times greater than reusable ceramic, stainless steel, and glass.<sup>9</sup>



**Non-toxic reuse helps reduce overall pollution, chemical exposure, and litter** and can greatly improve the overall living conditions of a community, while reducing overall litter and waste management costs for local businesses and government.

**Reuse can help “turn off the tap” for single-use plastics**, as it reduces the demand for single-use products. It can reduce the need to expand production operations that disproportionately affect Black, Brown, and Indigenous communities who are often living on the fenceline of industry.

**Reuse services create good local jobs. Replacing just 20% of single-use packaging with reusable alternatives offers an opportunity worth at least \$10 billion.**<sup>10</sup> The logistics of reusables collection, washing, and redistribution provides safe local jobs, whereas disposable-related jobs are in the other locales where extraction, production, and disposable takes place.



### Endnotes

1 [Plastic & Climate: The Hidden Costs of a Plastic Planet](#). Center for International Environmental Law (CIEL). May 2019. Accessed April 12, 2022.

2 id.

3 Ocean Conservancy and McKinsey Center for Business and Environment, *Stemming the Tide: Land-based strategies for a plastic-free ocean* (2015). Cited in Ellen MacArthur Foundation, *The New Plastics Economy* (2016). Accessed March 4, 2022.

4 id.

5 [ReThink Disposable Resources](#). The 2011 “Taking Out the Trash” survey. Accessed March 31, 2022.

6 [Reuse Wins Report](#), by Upstream. 2021. Accessed on March 4, 2022.

7 id.

8 id.

9 id.

10 id.