

# Is Switching to Compostable Cups a More Sustainable Choice?



## Summary

Many businesses want to practice responsible and sustainable purchasing but, in some cases, it's not always clear what the better choice is. For example, recently there has been an increase in demand for compostable serviceware, specifically Biodegradable Products Institute (BPI) Certified serviceware, but the misconception about compostable serviceware is that they are an environmentally friendly choice since they are decomposable. However, what many people do not know is that if these items are not making it to an industrial compost facility after use and they go to the landfill instead, purchasing them is not necessarily a more environmentally friendly choice.

The BPI Certification of a product indicates that the product has been scientifically verified that it will break down at a commercial compost facility without leaving toxic residues behind. Even though these plastics made from plants, such as corn are compostable, they require certain conditions that the landfill does not provide for them to break down the way they are intended. In other words, BPI Certified compostable serviceware is designed to be composted in commercial facilities, where levels of oxygen, moisture, porosity, temperature, and carbon-to-nitrogen ratios are monitored.

At a commercial compost facility, you will find windrows which are long-shaped compost piles. These piles are turned over regularly which enables oxygen to reach more volume of decomposing materials. The windrows are heated from 131 to 160 degrees Fahrenheit, temperatures that enable decomposition and kill any harmful pathogens. More carbon or nitrogen-heavy materials are added as needed. For example, grass clippings, plant cuttings, and fruit and vegetable scraps are added if more nitrogen, while brown or woody materials such as autumn leaves, wood chips, sawdust, and shredded paper can be mixed in to add more carbon. Additionally, given that there has not been sufficient rain or snowfall the windrows are watered as needed. By properly maintaining these conditions, microbes that eat and break down organics will flourish.

Most landfills are "capped" and have a cover that keeps them isolated and in place to avoid contamination etc. Since capped landfills are air-locked or anaerobic, they are deprived of oxygen, a critical element for microorganisms and the decomposition process. Lack of oxygen severely restricts the process of breaking down compostable serviceware, so they maintain a stable condition for longer. However, over long periods, bacteria slowly decompose organic materials releasing methane, a gas with a much higher trapping ability than CO<sub>2</sub>.

Composting not only prevents greenhouse gas emissions, but it produces a healthy, rich soil that can be circulated back into helping produce nutritious foods or beneficial plant life, helps conserve landfill space allowing us to use them longer, and reduces disposal costs and conserves energy since landfill hauls become lighter without organics or compostable serviceware.

## Conclusion

Purchasing BPI Certified compostable serviceware is an excellent alternative to plastics made from petroleum, only if they reach a commercial compost facility after use. Ultimately, reducing product use overall is the most eco-friendly choice, but when it comes to navigating responsible and sustainable purchasing, it requires research, staying informed, and keeping up with evolving rules and regulations at your local landfill and compost facility.