



The growth of greenhouse gas emissions in our atmosphere represents an opportunity for plant-based products to help achieve environmental resilience. Traditional plastics are made using fossil fuels that further contribute greenhouse gas emissions to our ecosystem.

Plant-based alternatives can help reduce greenhouse gas emissions because they come from a renewable source of carbon and can avoid contributing to landfill emissions when properly disposed of.

The carbon used to create plant-based materials comes directly from the atmosphere in the form of CO₂, the primary greenhouse gas emitted by human activities

Unlike materials derived from fossil fuels, **feedstocks from plant-based materials remove CO₂ from the atmosphere** during their growing phase

The CO₂ taken up by plants during their growing phase is **used to build these plant-based products** and sequestered in their materials during their time as a useful consumer product.

By 2030,

if two-thirds of conventional plastics around the globe were replaced by plant-based alternatives, the reduction of emissions would be equivalent to removing from the atmosphere the annual energy use of over 80 million homes

Plant-based materials used in food service applications can significantly reduce landfill emissions by diverting food and plastic waste from landfills.

Landfills are the **third-largest source of methane emissions.**

Food waste, **which is 22% of landfilled municipal waste**, is a large contributor to landfill methane emissions.

Unlike traditional plastics, when many plant-based materials are done with their useful life, they can be **sent to composting facilities along with associated food waste**, where facilities then **produce soil-enriching compost instead of harmful methane emissions from landfills.**

Through plant-based products – made from renewable sources like bamboo, corn, hemp, potato, sugarcane, soy, and more – we can help lower greenhouse gas emissions.

PBPC is working to guide the evolving global economy toward innovation and growth through the development and adoption of plant-based consumer products and packaging.