

Coca-Cola unveiling 100% plant-based sustainable packaging

03 November 2021 | News

The Coca-Cola Company's sustainable packaging journey crosses a major milestone this week with the unveiling of its first-ever beverage bottle made from 100% plant-based plastic, excluding the cap and label, that has been made using technologies that are ready for commercial scale. The prototype bottle comes more than a decade after the company's PlantBottle® debuted as the world's first recyclable PET plastic bottle made with up to 30% plant-based material. A limited run of approximately 900 of the prototype bottles have been produced. "We have been working with technology partners for many years to develop the right technologies to create a bottle with 100% plant-based content—aiming for the lowest possible carbon footprint—and it's exciting that we have reached a point where these technologies exist and can be scaled by participants in the value chain," said Nancy Quan, Chief Technical and Innovation Officer, The Coca-Cola Company.



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PET, the world's most recycled plastic, comprises two molecules: approximately 30% monoethylene glycol (MEG) and 70% terephthalic acid (PTA). The original PlantBottle™, introduced in 2009, includes MEG from sugarcane, but the PTA has been from oil-based sources until now. PlantBottle™ packaging looks, functions and recycles like traditional PET but has a lighter footprint on the planet and its resources.

Coca-Cola's new prototype plant-based bottle is made from plant-based paraxylene (bPX) - using a new process by Virent - which has been converted to plant-based terephthalic acid (bPTA). As the first beverage packaging material resulting from bPX produced at demonstration scale, this new technology signals a step-change in the commercial viability of the biomaterial. The bPX for this bottle was produced using sugar from corn, though the process lends itself to flexibility in feedstock