

PepsiCo Develops 100 Percent Plant-Based, Renewably Sourced PET Bottle

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PepsiCo has developed a PET plastic bottle made entirely from fully renewable resources. The company says its "green" bottle is the world's first 100 percent plant-based, renewably sourced pet bottle, and enables the company to manufacture a beverage container with a significantly reduced carbon footprint.

The bottle is made from bio-based raw materials, including switch grass, pine bark and corn husks. In the future, the company expects to broaden the renewable sources used to create the "green" bottle to include orange peels, potato peels, oat hulls and other agricultural byproducts from its foods business.



The company says, this process further reinforces PepsiCo's "Power of One" advantage by driving a strategic beverage innovation via a food-based solution. PepsiCo also remarks that the strategy builds upon the company's unique ability to source plant-based materials for production

"This breakthrough innovation is a transformational development for PepsiCo and the beverage industry, and a direct result of our commitment to research and development," says PepsiCo chairman and CEO, Indra Nooyi. "PepsiCo is in a unique position, as one of the world's largest food and beverage businesses, to ultimately source agricultural byproducts from our foods business to manufacture a more environmentally-preferable bottle for our beverages business - a sustainable business model that we believe brings to life the essence of performance with purpose."

Combining biological and chemical processes, PepsiCo has identified methods to create a molecular structure that is identical to petroleum-based PET, which results in a bottle that looks, feels and protects its product identically to existing PET beverage containers.

PepsiCo will pilot production of the new bottle in 2012. Upon successful completion of the pilot, the company intends to move directly to full-scale commercialization.

"As You Sow" applauds PepsiCo's innovative packaging design," said Conrad Mackerron, senior program director of As You Sow, a San Francisco-based foundation, which promotes corporate social responsibility through shareholder engagement. "By reducing reliance on petroleum-based materials and using its own agricultural scraps as feedstock for new bottles, this advancement should deliver a double win for the environment and PepsiCo."

This development is part of PepsiCo ongoing work in developing and using sustainable packaging, which includes:

- The development of SunChips' compostable bag, and the company's use of solar power at the Modesto manufacturing facility to take some of the plant off the electrical grid;
- The light-weighting of Aquafina's bottles with the introduction of the Eco-Fina bottle in 2009, which PepsiCo says is the lightest bottle of its size among U.S. bottled water brands;
- The transition of Naked to a 100 percent post-consumer recycled plastic bottle with the introduction of its reNEWabottle™, which the company reports is the first beverage, distributed nationally in the U.S., to do so; and
- The introduction of the Dream Machine recycling initiative, to provide greater access to on-the-go recycling receptacles and help increase the U.S. beverage container recycling rate from 34 percent to 50 percent, by 2018.