

Can plants edge out petroleum as raw material for textiles and plastics?

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Your next pair of spandex pants could be made out of corn—or, more precisely, from dextrose derived from corn. This option is part of a new wave, albeit a small one, of consumer goods that are being produced from plants rather than petroleum-based materials. But a complete transition to a biobased economy won't be easy, according to an article in *Chemical & Engineering News* (C&EN), the weekly newsmagazine of the American Chemical Society.

Melody M. Bomgardner, a senior editor at C&EN, notes that a range of companies, from start-up firms to industrial giants, have been searching for ways to fill a growing consumer demand for sustainable materials. Invista and Genomatica say they will pursue nylon intermediates from sugar. Coca-Cola is making progress toward a 100 percent biobased soda bottle (they're already at 30 percent). But trading in all conventional materials for ones that might be more sustainable won't be easy.

The main challenge to this shift is economics. Prices for biobased raw materials to feed the supply chain must drop to competitive levels. Manufacturers must invest in new facilities to process the raw materials. And ultimately, it's the consumers' pocketbooks that will likely decide just how far this trend will go.

More information: "Biobased Polymers" - cen.acs.org/articles/92/i43/Biobased-Polymers.html

Provided by American Chemical Society

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