

DuPont and Next Generation Biofuels

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Data Conference
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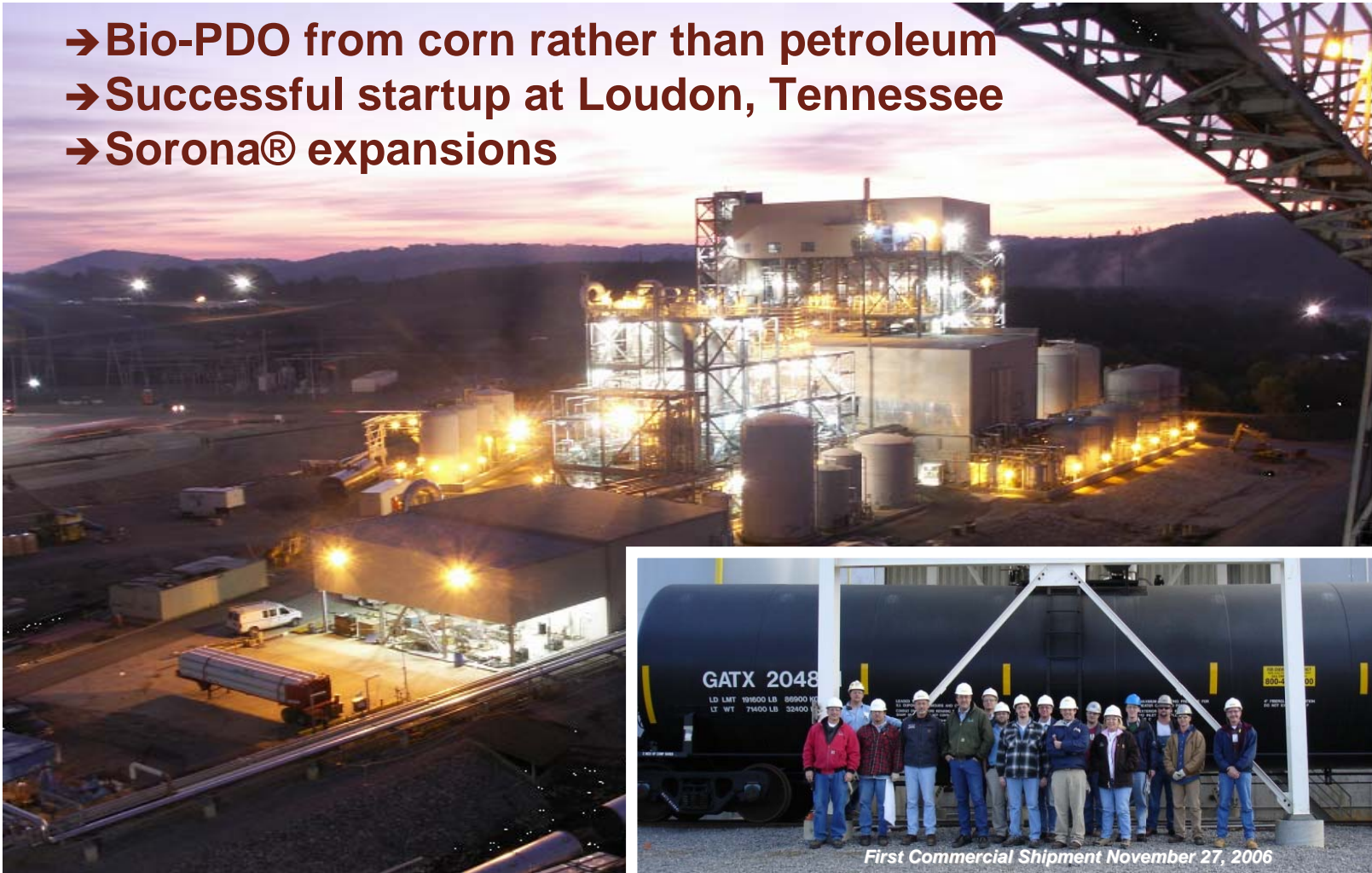
DU PONT
The miracles of science™

TECHNOLOGY THAT *fuels*™



Where We Started - Bio-Based Materials

- Bio-PDO from corn rather than petroleum
- Successful startup at Loudon, Tennessee
- Sorona® expansions



First Commercial Shipment November 27, 2006

The Dawn of Industrial Biotech



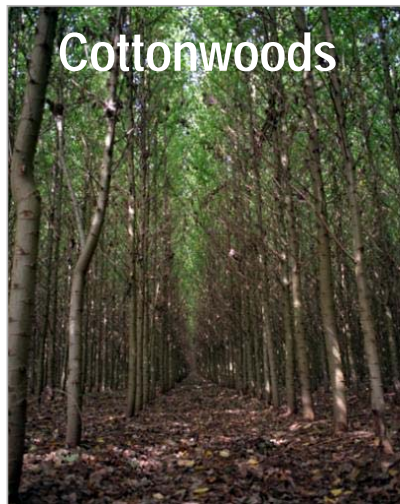
DuPont Biofuels Strategy: 3 Segments

1. Seeds and Crop Protection: Commercial Products + Strong Pipeline

2. Cellulosic Ethanol: Developing new enabling technology

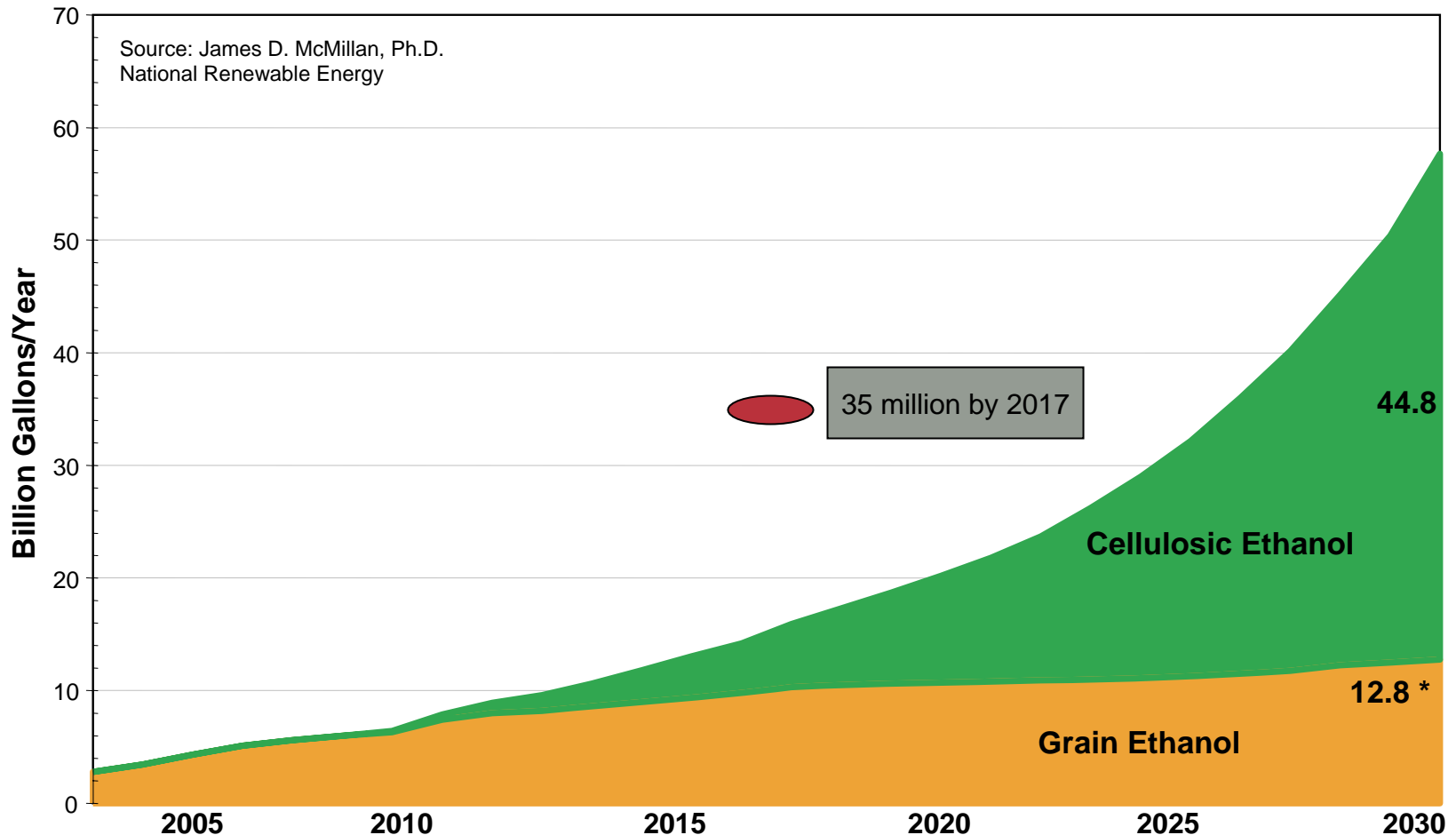
3. Bio-butanol: Supplementing ethanol with a high energy density, user-friendly fuel

Multiple Feedstocks are in the Future of Biofuels Production



Reaching 60 Billion Gallons of Biofuels by 2030

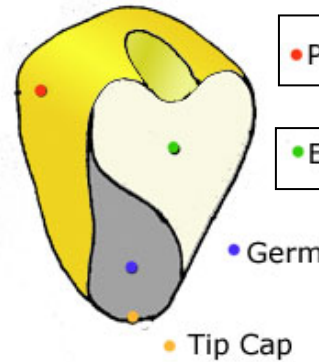
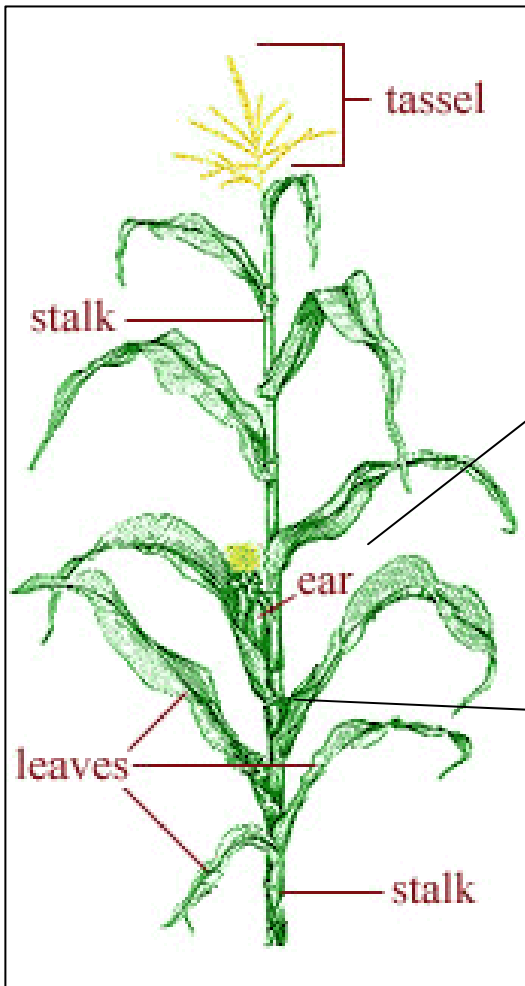
A Scenario for Growth of Ethanol to Supply 30% of 2004 U.S. Gasoline Demand by 2030



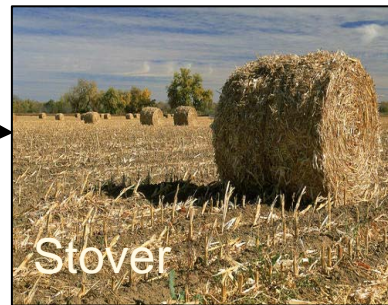
* Note: This number could be higher. The National Corn Growers Association predicts that as much as 15 -18 billion gal/yr could be produced from grain. Major changes to land use, exports, etc could also have substantial impacts. Regardless, significant cellulosic ethanol will be required to meet the 2030 goal and future national needs.

Cellulosic Ethanol From Corn Stover:

Developing Enabling Technology, Employing Existing Infrastructure



Pericarp → **40 Gal/Acre**
Endosperm → **391 Gal/Acre**

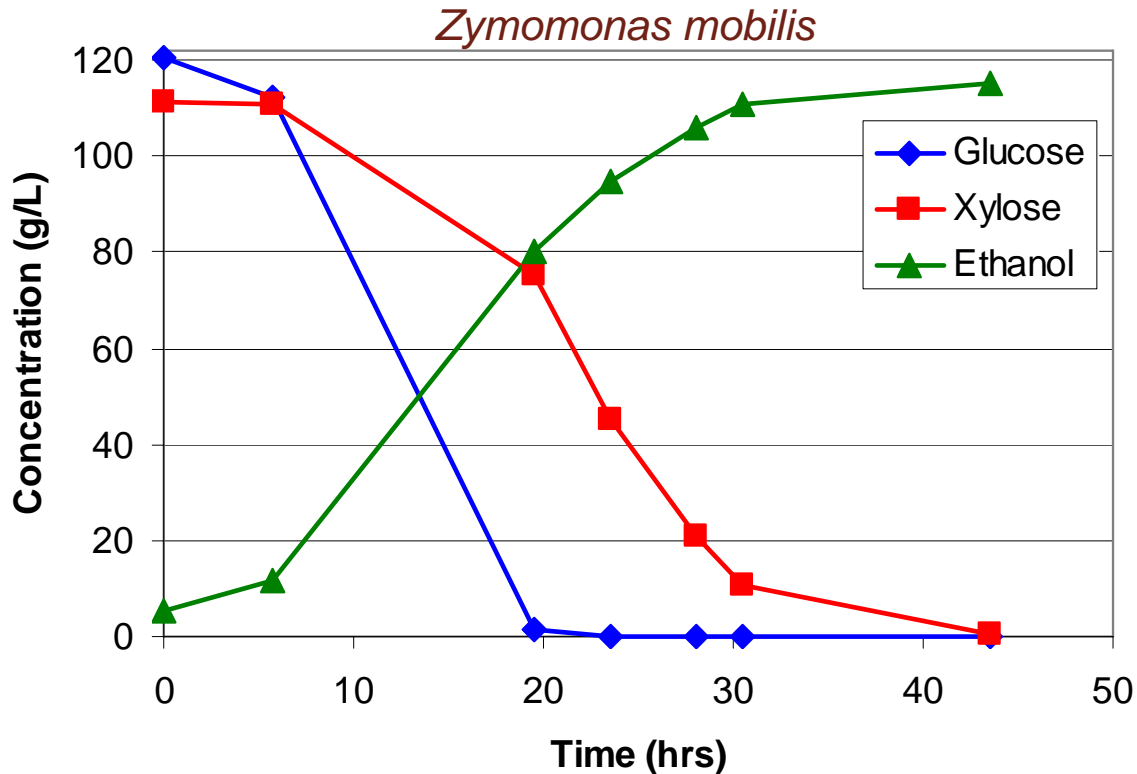


at 50%
removal
rate → **155 Gal/Acre**

310 Gal/Acre



Advancing Cellulosic Ethanol Fermentation



Enabling Technology: Conversion of C5 (xylose) and C6 (glucose) sugars at cost effective yields, rates and concentrations

Biobutanol: Next Generation Biofuel

Start with a blank sheet of paper – what would you want an advanced biofuel to be?

- High energy density?
- Easy to handle and blend?
- Less corrosive?
- Produced from many feedstocks?
- Cost competitive with ethanol?

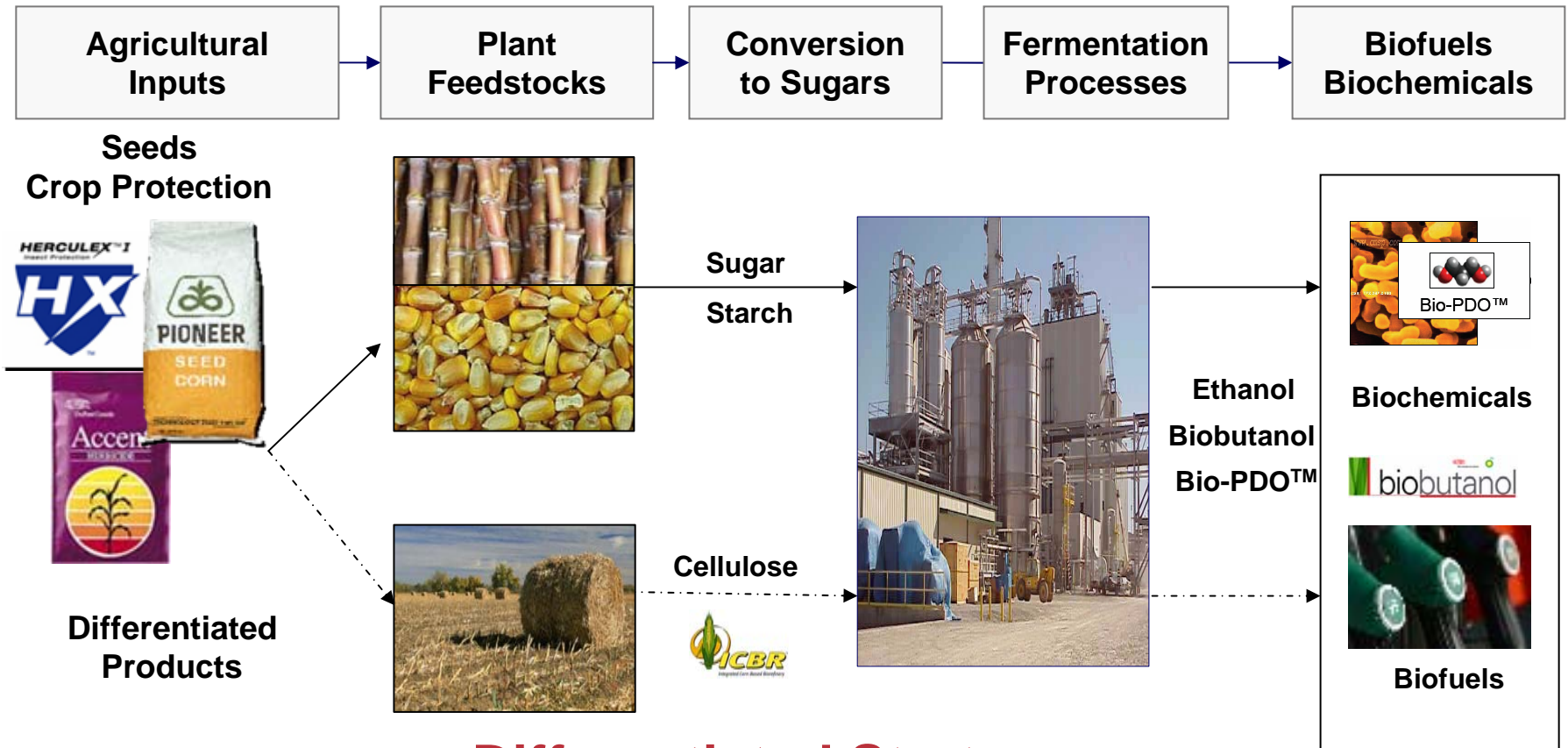
Biobutanol



And biobutanol is entirely compatible with ethanol.

DuPont BioFuels Strategy

Carbohydrates to Fuels & Chemicals



Differentiated Strategy: Unique Technologies Across the Value Chain

