

UNIVERSITY OF MINNESOTA

EXTENSION

From Non-Food Feedstock to Fuel: “Here and Now”

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Fueling the Future:

The Role of Woody Biomass for Energy Workshop

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Ponsford

Sponsored by:

University of Minnesota Extension, White Earth Tribal College, Natural Resource Conservation Service, Soil and Water Conservation District – Becker County

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Central Minnesota Cellulosic Ethanol Partners

From Non-Food Feedstock to Fuel

“Here and Now”

SunOpta BioProcess Inc.

renewable biofuels

Disclaimer



- SunOpta Bioprocess, Inc. is a subsidiary of SunOpta, Inc. a publicly-traded company
- This presentation contains forward-looking statements
- These forward-looking statements speak only as to management's current expectations
- Forward-looking statements involve risks and uncertainties
- SunOpta BioProcess Inc. and SunOpta, Inc. disclaim any obligation to update or revise any forward-looking statements made in this presentation

Central MN Cellulosic Ethanol Partners (CMCEP)



CMCEP include:

- **SunOpta Bioprocess, Inc.** – Experienced cellulosic ethanol company with leading pre-treatment technology
- **Central MN Ethanol Co-op (CMEC)** – 21.5 million gallons per year corn ethanol plant located in Little Falls, MN. CMEC is also part owner of Renewable Products Marketing Group, a pooled ethanol and DDGS marketing company
- **Bell Independent Power Corporation** – Experienced independent power producer with a well regarded track record in renewable and clean energy production

CMCEP Little Falls, MN Project



- SunOpta Bioprocess proprietary end-to-end cellulosic ethanol solution
- Sustainable feedstock supply from locally sourced hardwoods: poplar, aspen, birch, and other woodchips. All feedstocks will be non-food based
- Co-located with Central Minnesota Co-op ethanol plant in order to create synergies between the corn ethanol plant and the cellulosic ethanol plant
- 475 dry tons per day, but process uses wet woodchips and therefore is “water positive”
- 10 MM gallons per year initial nameplate capacity
- 100% sustainable energy using a biomass boiler

SunOpta Inc.

SunOpta, Inc. is a rapidly growing, vertically integrated company with extensive global expertise in sourcing, processing, packaging and distribution of natural, organic and specialty foods.

- Located: Toronto, Ontario
~90% of operations in US
- Publically-held: NASDAQ: STKL; TSX: SOY
- 2008 Revenue: \$US1.05 billion (projected)



SunOpta Business Units



SunOpta Food Group
~90% of Revenue



Opta Minerals, Inc.
TSX: OPM (66.3% ownership)
~9% of Revenue



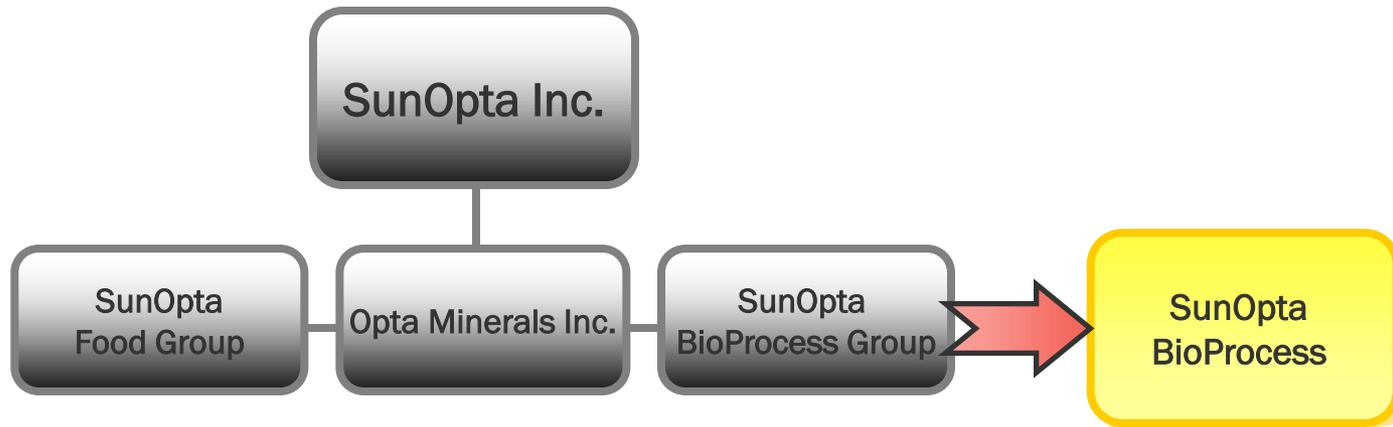
SunOpta BioProcess Inc.
(88% ownership)
~1% of Revenue



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SBI Overview

- In June 2007, SunOpta BioProcess was spun-out as a stand-alone entity.
- Raised \$30 million private placement
- \$20+ million cash reserve on-hand



SunOpta BioProcess Inc.

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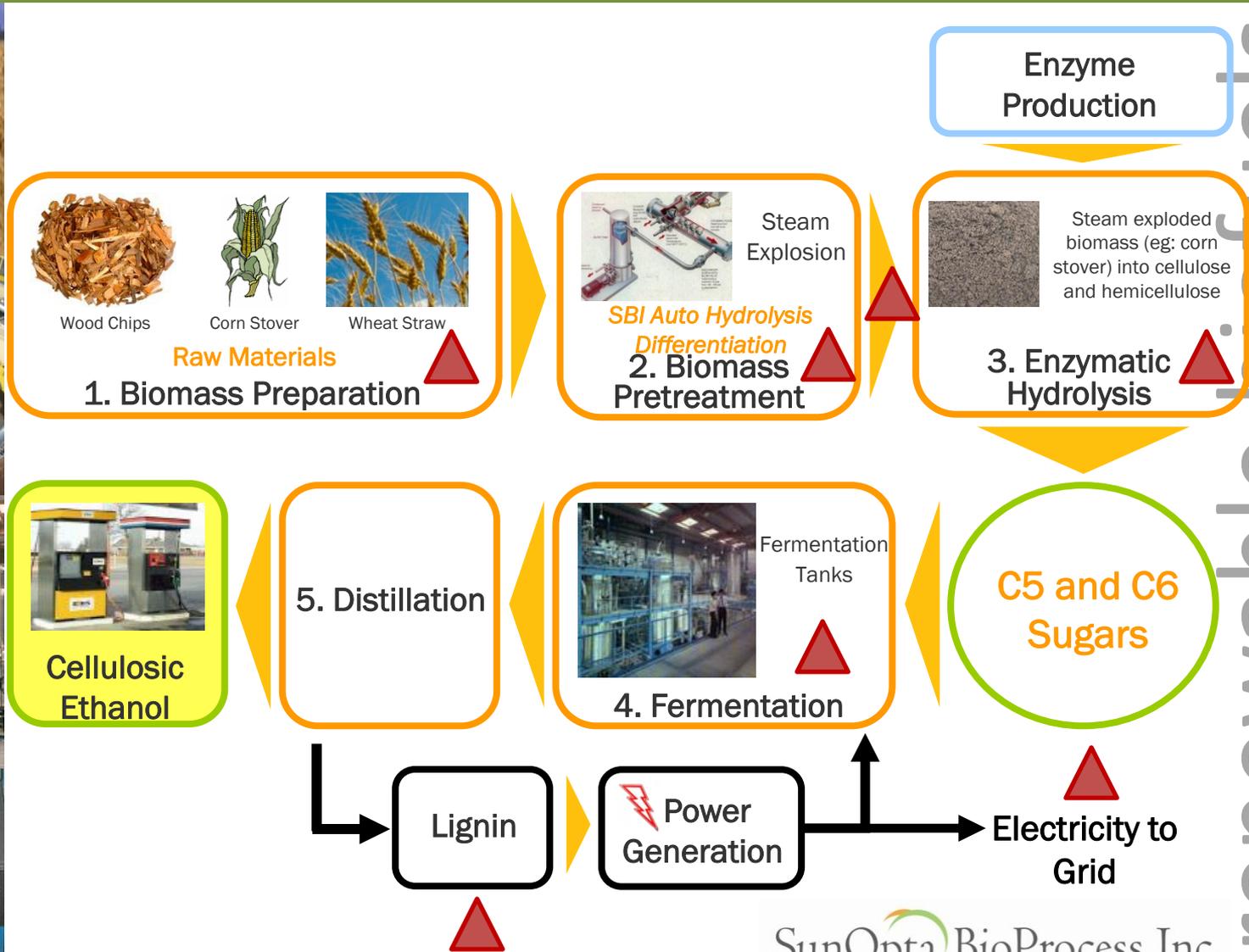


SBI Capabilities



- Key SBI technologies and know-how
 - Proven biomass preparation and pretreatment (from 25 to 300 tons per day)
 - Feedstock preparation and pretreatment designs for over 1,000 tons per day
 - Experienced with processing a wide variety of feedstocks
 - Cereal straws
 - Corn stover
 - Hardwoods
 - Oat hulls
 - Energy crops
 - 14 issued patents and 10 patent applications

SBI Cellulosic Ethanol Production Process



SBI Project History

- 1973 Biomass to Cattle Feed
- 1976 Entry to CE R&D
- 1978 Commercial Cattle Feed from Bagasse, Florida
- 1983 Xylitol from Oat Hulls and Birch Fines, Finland
- 1985 Cellulosic Butanol Straw/Wood Waste for Road Fuel, France
- 1987 CE R&D P&P Waste Streams, Canada
- 1990 Hydro Mulch from Orchard Wood Trimmings, California
- 1991 Published Hallmark Paper: *Fractionation of Populus Tremuloides – Cellulosic Ethanol*
- 1992 Cellulose, Hemicellulose, Lignin Fractionation, Italy
- 1993 Ammonia Pretreatment of Cellulose, Canada
- 1995 Rye Grass Straw to Liner Board, Oregon
- 1999 Dietary Fiber for Human Consumption from Oat Hulls, U.S.
- 2003 Wheat Straw to CE, Canada
- 2006 Corn Stover to CE (operational), PR of China
- 2008 Sugarcane Bagasse to Ethanol (operational), Louisiana
- 2009 Wheat Straw to CE, Spain

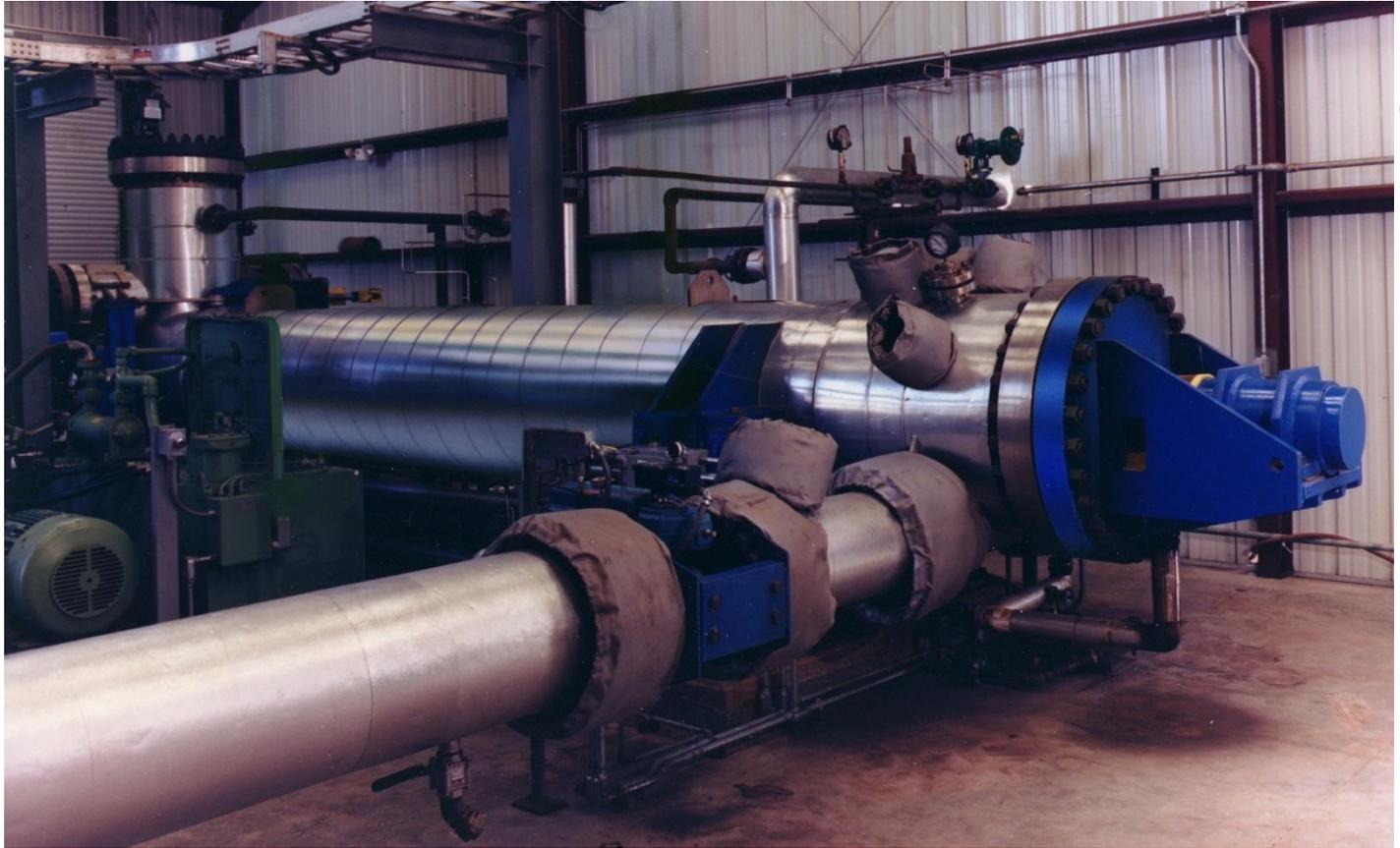


Typical Industrial-Scale Projects



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Autohydrolysis Vessel



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Integrated Plant



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COFCO Plant, China



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CMCEP Project – Key Attributes



- SunOpta proprietary end-to-end solution
- Co-located with Central Minnesota Co-op ethanol plant
- Bell IPC is an experienced renewable energy developer providing expertise in boiler development and operations
- Sustainable non-food feedstock supply from local sources
- Rapid development will help meet RFS targets for advanced biofuels and cellulosic ethanol

Difficult to find financing for demonstration plants

Takeaway

- Near-term, cellulosic feedstocks must come from existing crops. Non-food wood chips are an excellent source
- Project economics are very dependent on the technology used to convert non-food feedstocks to ethanol
- Cellulosic ethanol *can be* price competitive with petroleum gasoline if the right technology is used
- We believe that SunOpta BioProcess and the CMCEP Partners have proven technology to get the job done

The CMCEP Little Falls, MN project needs government assistance to build the plant





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