Metabolix®

Advanced Bio-Materials: A Platform for Growth

16th Annual Needham Growth Conference

January 15, 2014

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Oliver Peoples, Founder and CSO

www.metabolix.com @MetabolixInc



Safe Harbor Statement*

Our presentation includes, and our response to various questions may include, forward-looking statements about the Company's future plans and objectives. Any such statements are subject to risks and uncertainties that could cause the actual results and the implementation of the Company's plans and operations to vary materially. These risks are discussed in the Company's filings with the S.E.C.

*Under the Private Securities Litigation Reform Act of 1995

Metabolix Snapshot:

A World Leader in Industrial Biotechnology

- Spin out from MIT in 1992
- Headquarters in Cambridge, MA, USA
- Approximately 100 employees worldwide
- Approximately 500 patents issued and pending
- PHA technology leader for advanced biomaterials
- Transition from JV structure to 100% Metabolix business strategy targeted at high-value applications
- Solid foundation based on extensive technology, product and market knowledge
- Shares traded on the NASDAQ as MBLX



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Investment Highlights



Differentiated Performance Bio-Materials Portfolio



Well Positioned Relative to Key Market Trends



Proven Technology and Customers in High-Value Applications



Capital-Efficient Business Model



Extensive IP Portfolio



Metabolix Mission

Growth Through Advanced Bio-Materials

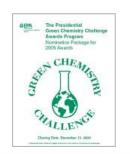
Metabolix deploys leading edge bioscience and innovative capabilities to address the growing demand for sustainable materials

















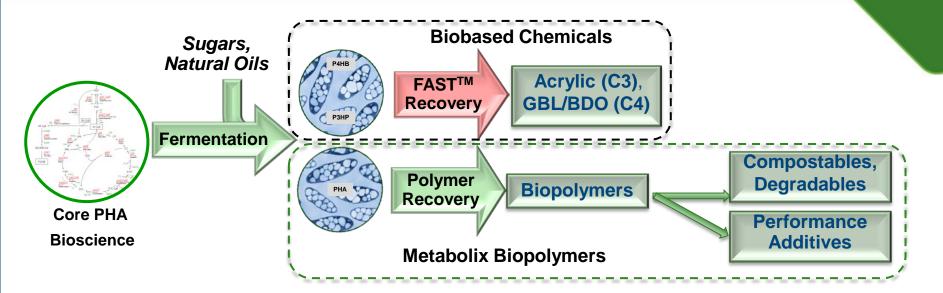
2013 Accomplishments

- Launched three new biopolymer products
 - Mvera B5010 compostable resin (film/bags)
 - Mvera B5011 transparent compostable resin (film/bags)
 - I6003rp performance additive for PVC recylate
- Enhanced commercial position in biopolymers business
 - Signed supply agreement with Samsung Fine Chemicals for compostable resins
 - Evaluating sites for biopolymers manufacturing
 - Multiple repeat customers in film, focused on growing customer base
 - Strategically managing existing inventory to focus on key prospects
- Key technical advances in polymers, biobased chemicals and crops programs
- Filed new patent applications on strategically important technologies; allowed/granted 19 new patents



Metabolix Core PHA Technology

Versatile Technology Addresses Chemicals and Polymers Markets



- Manufacturing technology proven
- Biopolymers: Developments with more than 100 customers for compostables (\$0.4 B market); Gaining traction in the performance additives market (\$1 B market)
- Biobased Chemicals: Leverage PHA platform and breakthrough FASTTM process for chemicals. Anticipate advantaged purity/cost in bio-chemicals (\$10 B market)
- Transformational crop science program: Aligned with key trends



Our Products Address Critical Issues

Key Societal and Customer Needs

- 1. Global migration away from fossil fuels
 - Bio-based raw materials
- 2. Enhancing the management of waste
 - Biodegradable polymers
- 3. Improving the performance of existing materials
 - > Versatile, differentiated chemistry



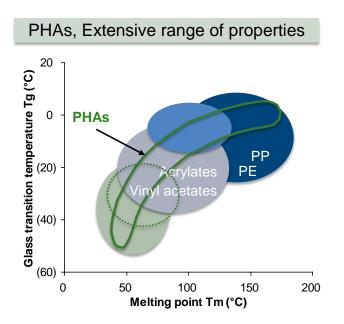


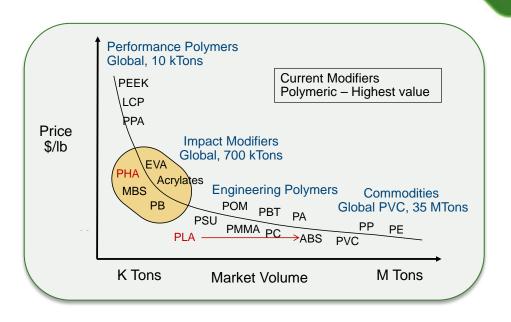




Market Opportunity

PHAs Match a Wide Spectrum of Polymer Performance Properties





- A significant portion of the global market for polymers is addressable with PHAs
- Focused on segments where price/performance profile delivers value



Biopolymers Focus: Biodegradable Films

Strong Societal Growth Drivers; Rich Product Pipeline

Growth driven by need to improve organic waste management

器 \$400 million market growing 20% p.a.

MBLX launching range of products to meet customer needs

Rich pipeline of Metabolix products:

- Compostable bags (B5010, B5011)
- Packaging films
- Barrier films
- Super strong films
- Agricultural mulch films









Biopolymers Focus: Performance Additives

Improving Performance of PVC and PLA Plastics

PVC: A \$70 B Industry

- Metabolix Additive products can create value: Plasticization without phthalates; Improved UV stability; Enhanced use of recycled PVC; Improved strength
- Metabolix Additive products also increase "permanence" of other PVC additives – improving properties and reducing migration

PLA: The Predominant Bioplastic

- Leading bioplastic growing at 20% p.a.
- Metabolix Additive products improve strength and flexibility, enable film __ applications











Biopolymers Focus: Functional Degradation

PHA Polymers Naturally Biodegrade in Soil, Lakes and Oceans

- PHA biopolymers are naturally degradable in oceans, streams, soil and anaerobic digestion
- Highly differentiated numerous high-valued opportunities
 - Anaerobic digestion
 - Agriculture/Horticulture
 - Fishing/Shellfish industry
 - Water treatment
 - Marine degradable bags

Mirel Biopolymers: Marine Biodegradation

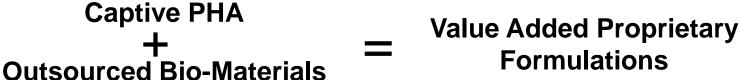


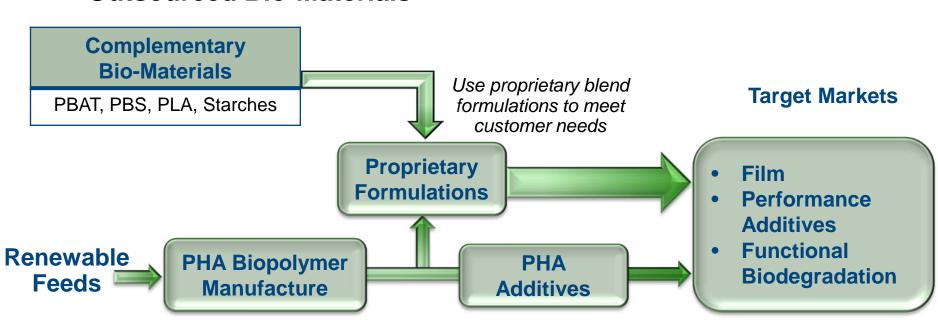


Biopolymers: Business Model

PHA Additives and Proprietary Formulations

Capital Efficient Strategy:







Building Global Relationships

Establishing Partnerships Based on our Differentiated Position

Collaboration with Samsung Fine Chemicals (Announced July 2013)

- Goal of expanding the global market for biodegradable polymers
- Products designed to deliver best performance and value to targeted customer applications
- Complementary products
 - Metabolix: PHA
 - Samsung: PBAT, PBS
- Complementary regional positioning
 - Metabolix: US, Europe
 - Samsung: Asia





Biopolymers: Clear Roadmap

Foundation Established; Building Momentum



- **Develop Attractive Product Portfolio:** Film, Performance Additives, Functional Biodegradation
- **Build Customer Relationships:** Established first annual contract; Developments ongoing with leaders in compostables and PVC

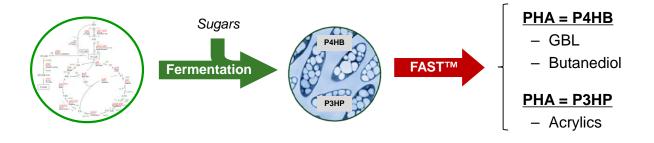
The Next Priorities: What are Investors Looking For?

- Establish manufacturing
- Develop and commercialize business to baseload new plant



Biobased Chemicals

Utilizing Metabolix Platform Technology to Produce Specialty Products



"C3" Chemicals Acrylates: > Market size ~\$7 B Applications: Paints / coatings, diapers, personal care products, pharmaceuticals

"C4" Chemicals GBL/Butanediol: > Market size ~\$3 B Applications: Automotive (PBT), textiles (spandex), solvents, personal care products, pharmaceuticals

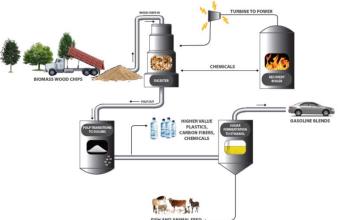
- Metabolix differentiation: proven fermentation process and simple FASTTM recovery process; High purity product
- Recent technological advances: ultra-high purity, deuterated C4, 2nd generation sugars as feedstock
- Currently transitioning from laboratory to scale-up



Recent Technological Advance

Use of Second Generation Cellulosic Sugar



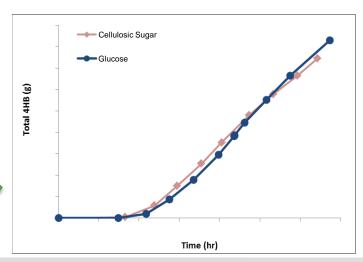




- Leverage existing sources of biomass
- Leverage feedstock costs









Metabolix Crop Research CO₂ Feedstock: *Industrial Oilseed and Biomass*

- Research activity leverages Metabolix PHA platform technology
- Genetically modify crops to produce PHB polymer directly in non-food crops
- Low cost pathway to plastics, chemicals, and fuels / numerous commercialization options
- Building tool set and IP around enhanced photosynthetic capacity of plants core capability for improved crop yield

Oilseeds

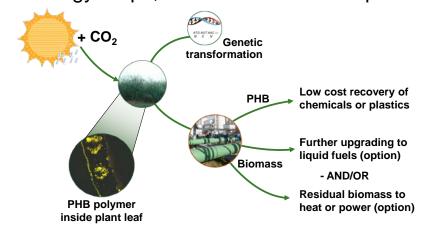
- Co-production of bioplastics along with vegetable oils and meal
- Leverage existing infrastructure
- Target crop: Camelina sativa





Biomass

 Switchgrass/Sugarcane, high density energy crops; favorable carbon footprint





Financial Results

In Millions (except per share amounts)*

	Q3 2013	Q3 2012	Nine Mo. 2013	Nine Mo. 2012
Revenue	\$0.9	\$0.7	\$4.5	\$40.9
R&D Expense	\$4.6	\$4.9	\$14.4	\$16.0
SG&A Expense	\$3.0	\$3.2	\$9.7	\$11.0
Net Income	(\$7.3)	(\$7.7)	(\$21.9)	\$13.1
(Loss) Per share	(\$0.21)	(\$0.23)	(\$0.64)	\$0.38
Cash Balance	\$25.7	\$43.8	\$25.7	\$43.8

Cash Usage: ~\$6 million/qtr

No Debt – Committed to Maintaining Strong Balance Sheet



^{*}Numbers subject to rounding.

Metabolix: Key Success Drivers

Unique Combination of Differentiated Technology and Global Trends

Unique, differentiated technology aimed at large global markets

- PHA platform enables access to advanced bio-materials
- Multiple end use markets / cost advantages in renewable chemicals

Portfolio positioned to address global trends:

- Improving the effectiveness of waste management addressing regulations
- Improving the performance of commodity materials
- Replacing petroleum intermediates with lower cost drop-in replacements

Compelling business model

- Low-capital entry strategy for biopolymers leveraging formulation
- Establishing partnerships for chemicals
- Longer term crop program offers considerable upside

Substantial IP



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