Policy Initiatives for the Bioeconomy in Ontario, Canada

Biopolymers Symposium 2012

Session: Policy Drivers for the Growth of Biopolymers Globally and Their Real Life Effects

October 16, 2012 San Antonio, Texas

Farm Associations

- Dairy Farmers of Ontario
- · Grain Farmers of Ontario
- Ontario Federation of Agriculture
- Ontario Fruit and Vegetable Growers' Assoc.
- Ontario Pork
- · Ontario Processing Vegetable Growers
- Ontario Soil & Crop Improvement Assoc.

Industry

- Advanced Micro Polymers
- Ag Energy Co-operative Ltd.
- BASF Canada Inc.
- Bayer CropScience Canada
- Bioenterprise Corporation
- BIOMAR Inc.
- BIOX Corporation
- · Canadian Seed Trade Assoc.
- Casco Inc.
- Dow AgroSciences
- · GreenField Ethanol
- Guelph Junction Railway Co.
- IGPC Ethanol Inc.
- · INAC Services Limited
- Life Sciences Ontario
- Monsanto Canada Inc.



Universities/Colleges

- · Brock University
- · Conestoga College
- Greater Peterborough Innovation Cluster (Trent University)
- The Research Park (University of Western Ontario)
- · University of Guelph

Government

- · City of Guelph
- · City of Port Colborne

- Pioneer Hi-Bred Limited
- Royal Bank of Canada
- SPB Solutions Inc.
- Sevita International
- Sylvite Group of Companies
- Syngenta Crop Protection Canada
- Vertichem Corporation
- WhiteCloud Innovations

Affiliates

- Agriculture and Agri-Food Canada
- Ontario Ministry of Agriculture, Food and Rural Affairs
- Ontario Ministry of Research and Innovation



Special thanks to OMAFRA and AAFC

OAFT's mission

- To ensure that Ontario agriculture has access to the latest technologies to compete in a global economy.
- To create market opportunities for the business of agriculture beyond traditional food and feed markets.

Biopolymer Policy – Ontario, Canada

- There is none, specifically
- Opportunity has no label
- Third party delivery by government is a policy
- Industry-led, multi-sector elected
- Industry decides on funding
- Agricultural Adaptation Council, Ontario BioAuto Council, Sustainable Chemistry Alliance

"Don't let science and engineering get in the way of selling."

Rapid Response to Business Opportunities Program

This program will provide up to \$10,000 to cover direct costs for sales meetings concerning agricultural products from Ontario.

- Rapid a decision will be made within two working days upon receipt of final proposal.
- Process a 2-3 page overview describing the purpose of the sales trip and what you hope to accomplish (note: we recognize this may involve several trips).
- Notes (1) The program does not cover consultants, sales agents, product/brand representatives, trading houses, tradeshows and exploratory marketing/prospecting (there must be prior contact); and (2) we can also pay for clients to come to your facility (to close sales).
- Priority is given to innovative products.

Rapid Response to Business Opportunities program

Rapid Response to Business Opportunities has been very successful and heavily subscribed. There were 25 requests approved for 2011-12 and we have already received five for this fiscal year.

Through our Rapid Response to Business Opportunities Program, we have provided funding for commercial sales meetings for Canadian companies using agriculture-based products and technologies. It can also be used for incoming business opportunities. Ted Pidgeon of Agriculture and Agri-Food Canada and Bill Harvie of Ontario Ministry of Agriculture, Food and Rural Affairs will continue to aid in the selection and can be contacted relative to the value of the program.

We estimate **\$54.5 million** in sales from the 25 missions in 2011. In 2012, we will fund approximately 30 sales missions for other companies subject to budgetary approval.

Actual direct sales are difficult to quantify, but I have asked clients for realistic estimates of sales. This number is \$55 million. Much of that is 10% of tentative sales by WhiteCloud Innovations. Please note that several projects are in initial phases, but that many past projects continue to demonstrate results (i.e. EcoSynthetix, who we have sent on three missions, went public in August 2011 at over \$100 million TSX). The sales record was a big part; and Hendrick Seeds who we sent on five missions and increased annual sales by \$14 million, amalgamated with Hendrick AgriFoods, PRO Seeds and AgWorks to create Sevita International. Sevita is now capable of serving China and contracting 80,000 tonnes of identity preserved soybeans, representing \$6 million annually in grower premiums. This past year, they picked up an additional \$2.5 million in sales to Japan and had \$300,000 in sales to SE Asia (Singapore, Indonesia). This was the first time they broke into that market.

As a result of Rapid Response, we have created a loose coalition of eight companies involved in farm input supplies (i.e. genetics, data management, pre-mixers, grain storage, milk replacer, irrigation). They now are all helping each other on their missions and see each other's proposals and cross-link customers.

Rapid Response – what's being said

"Rapid Response funds made it possible for us to engage with "platinum customers' across North American, secure firm orders/distribution and quick-to-market Canadian manufacturing opportunities...."

-- Catherine Tredway, WhiteCloud Innovations

"We could not have succeeded thus far without the contribution and cooperation of Gord Surgeoner and Rapid Response. It is integral in our plans for phase two and important to the success of our China project that the program is continued."

-- Bill Thomas, Thomas Canning (Maidstone) Limited

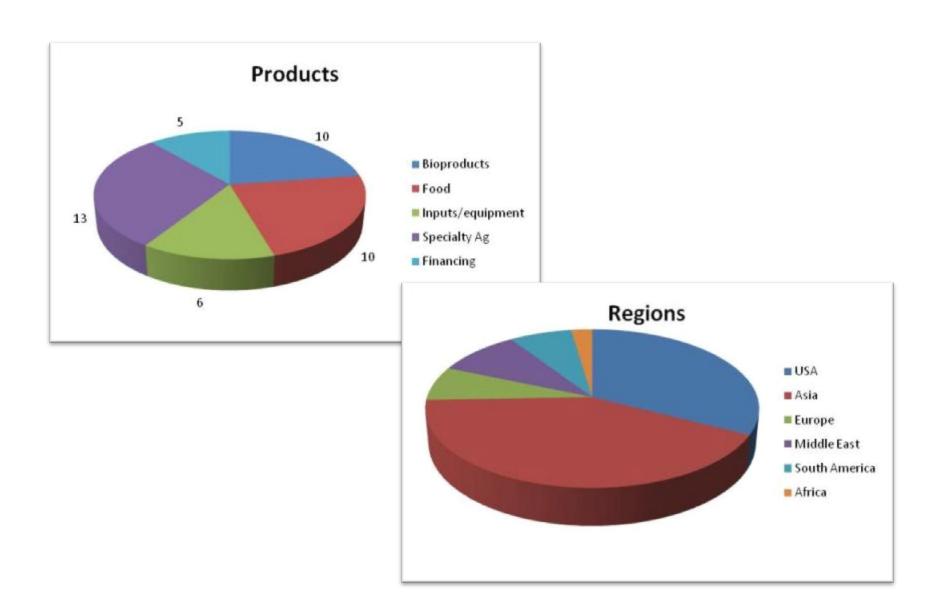
"Such a wonderful and refreshing experience compared with other programs."

- -- Mike McMorris, Beef Improvement Ontario (BIO)
- "...The meetings were fruitful and important for the future of Performance Plants....Thanks OAFT for the continuous support."
- -- Jiangxin Wan, Performance Plants Inc.

"Thank you! You are amazing!"

-- Lisa Armstrong, Niagara Natural Fruit Snack Co.

Breakdown of Rapid Response



It's not just the money

- Speed 48 hour decision
- Simplicity of application
- Simplicity of reporting
- Speed of payment

Grant Writing

- Two+ writing groups
 - Jayeff Partners farm organizations
 - INAC Services Limited companies
- Up to \$10,000 for writing of proposal
- Payment on completion
- Decision to proceed within 24 hours
- Information available on our website <u>www.oaft.org</u>

Grant Writing program

Small and medium sized companies can't keep up with the plethora of government programs, nor do they have in-house capabilities of writing proposals. Through our Grant Writing program, we funded Jayeff Partners and INAC Services to write proposals on behalf of companies and agricultural organizations.

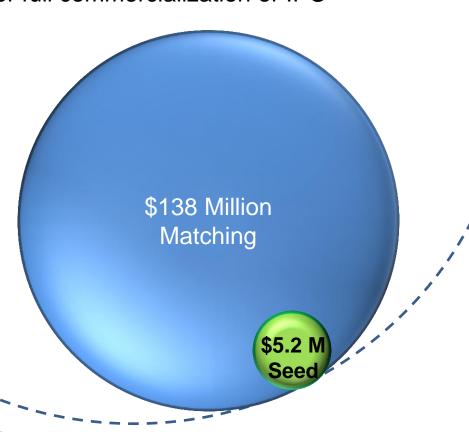
Our Grant Writing program for companies and institutions numbered 16 proposals for 2011-12, which received **\$7.3 million** in funding. There was also an additional \$2.2 million in private sector investment. Please note that a number of proposals are pending due to delay in announcements for the Agriculture Innovation program. These proposals included:

- Gay Lea Corporation product development received \$997,000
- Monaghan Mushrooms product expansion received \$1 million
- Nestle Waters product import/replacement received \$450,000
- Armstrong Milling birdseed expansion received \$497,000
- Yorkshire Farms organic chicken expansion received \$105,000
- LVB Milling Ltd. flour mill received \$1.5 million
- Exeter Produce (Veri Hydroponics) greenhouse pepper exports received \$567,500
- Switch Energy and Competitive Green Technologies FedDev
- WhiteCloud Innovation received \$150,000 from CAAP
- OAFT-Biomaterials Database received \$120,000 from CAAP
- OSCIA new high value food crops CAAP
- Sunrise Greenhouse pygmy grape, new ornamental AIP
- Cargill LVB site development, Horizon Mills CAAP
- GFE Inc./Canadian Oil Seed Innovation Centre (Soy 20/20) FedDev
- University of Guelph Bioproducts Discovery and Development Centre received \$1.92 million from FedDev, for total value of \$3.84 million
- Willowgrove Farms Omega 3 Pork AIP Traceability \$2.7 million (request)

Third party delivery <u>is</u> a public policy experiment - in innovation, it's working.

Our investments in sustainable chemistry

\$500+ M expected follow-on investment for full commercialization or IPO



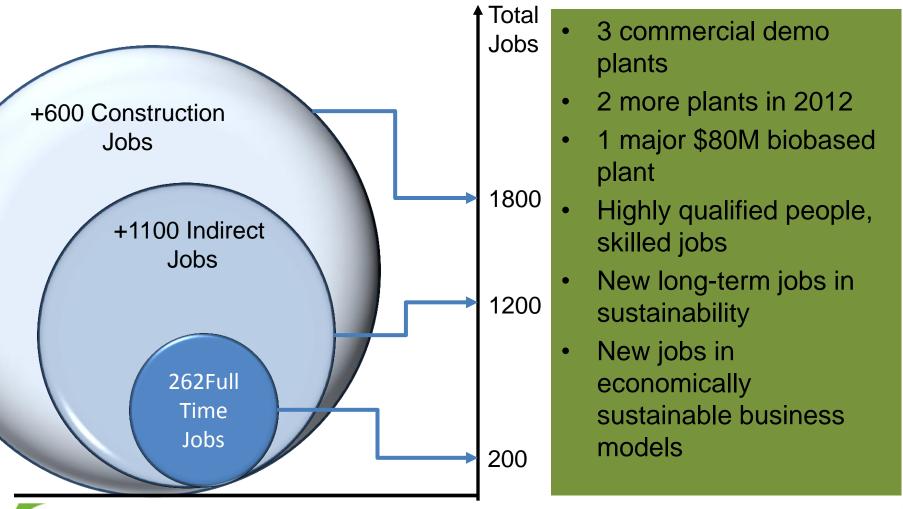
- \$100 million IPO by EcoSynthetix
- 1 more IPO in 2012 (S4CO2)
- 4 more IPO's
 expected within next
 two years (Vive,
 BioAmber, CORE
 BioFuel, Woodland)
- Providing connectivity to deliver commercialization project execution!





"...successful innovation depends on people with the right talent, training and attitudes, working quickly and nimbly in a culture of commerce."

Sustainable job creation and retention





A. Investing in Sustainable Chemistry

British Columbia

- 1 investment
- 4 in pipeline

Alberta

• 5 in pipeline

Prairies

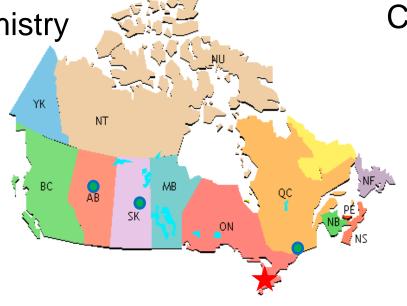
• 5 in pipeline

Ontario

- 10 investments
- 27 in pipeline
- 3 commercial demo plants
- 2 more demos in 2012
- 1 major \$80M biobased plant
- Sarnia BioHybrid Cluster

Quebec and Atlantic

• 3 in pipeline



Developing global leadership, converging fossil and bio-based industry, focusing on long term sustainability

> Nation Wide Focus Global Reach

B. Creating BioHybrid Chemistry Clusters

Edmonton

- CO2 Capture + Conversion
- Upgrading and Energy Infrastructure
- · Agri and Forest Biomass

Saskatoon

- Internationally Renown Agricultural Reputation
- Potash Mining and Energy Infrastructure
- Agri Biomass

Sarnia Lambton



- First BioHybrid Chemistry Cluster
- Petrochemical, Energy, Manufacturing Infrastructure
- · Close to Markets
- · Agri and Forest Biomass

Montreal

- · Abundant Hydro Power
- Energy, Manufacturing Infrastructure
- · Close to Markets
- Forest Biomass



