



THE BIOBUSINESS ALLIANCE OF MINNESOTA
FINAL GRANT REPORT JULY 1, 2011- JUNE 30, 2012
STATE OF MINNESOTA
DEPARTMENT OF EMPLOYMENT AND ECONOMIC DEVELOPMENT
BUSINESS AND COMMUNITY DEVELOPMENT DIVISION
Re: Special Appropriation Grant Agreement
SPAP-11-0005-P-FY12

Report Date: February 15, 2013
Organization: BioBusiness Alliance of Minnesota

Total estimated cost of salaries, printing and supplies in
developing/preparing this report is \$1,230
(reported as required by Minn. Stat. 3.197)

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AGENCY	VENDOR NUMBER	OBJECT CODE	TOTAL AMOUNT
B22100			\$538,200

INTRODUCTION:

The BioBusiness Alliance of Minnesota (BBAM) has fulfilled the agreed upon deliverables. The detailed progress is spelled out in this report. Per the reporting requirements of the contract, the report will cover specific requirements and special conditions regarding use of funds and metrics.

To fulfill the agreed upon deliverables, BBAM uses business principles to understand and grow Minnesota's economy. The three stages are:

- Assess: Accomplished through the Statewide Industry Assessment and through utilization of inventory tools like BIOMAP.
- Plan: Accomplished through developing and implementing a 20-year strategic plan and roadmap, Destination 2025. As will be discussed, this plan became the starting point for many regional strategies throughout Minnesota and across the biobusiness industries.
- Implement: Accomplished through the Business Resource Network.

OVERVIEW:

The current partnership with the State of Minnesota, Department of Employment and Economic Development (DEED), has led to several key accomplishments and partnerships which will be expanded upon later in the report:

- Assessment Report Update: In 2006, BBAM released the first Statewide Industry Assessment Report, with the goal of providing factual information to clarify Minnesota's national competitiveness in the six bioscience industries in which the state participates: (1) Animal Health, (2) Biologics/Biopharmaceuticals, (3) Food, (4) Medical Devices, (5) Renewable Energy and (6) Renewable Materials. This report provided data that pointed out Minnesota negative trend lines and led to the creation of Destination 2025. The 2006 findings were also used to break down barriers between life science businesses, organizations and communities across the state to work together to increase Minnesota's competitive position.

On February 7, 2011, BBAM released an update of the assessment, *Minnesota's Competitive Position in the Biobusiness Technology Industries*. The independent third party report, conducted by Dr. Kelvin Willoughby, utilized U.S. Census Bureau data from 2002-2007. The report

demonstrated a generally strong improvement in Minnesota's biobusiness position nationally and compared to 10 competitor states. BBAM will continue to update this report every five years as the data is available.

- **Destination 2025 Implementation:** Destination 2025 (D2025), launched in January 2009, is the overarching strategic plan for BBAM to realize its charter: "The BioBusiness Alliance of Minnesota is an industry-led, action-based 501(c)(3) not-for-profit organization dedicated to the advancement of bioscience-related industries to create jobs for the citizens of Minnesota and to bring together all related areas of the biosciences in a coordinated effort to ensure the long-term health and success of Minnesota's bioscience industry."

The implementation of D2025 gained momentum in 2011 - 2012 and many of the projects made strong advances to fill critical gaps and better leverage existing assets in Minnesota.

- **The Business Resource Network (BRN):** the BRN connects the state's life science and business resources to help companies start, expand and relocate in Minnesota.

JULY 1, 2011 – JUNE 30, 2012 DELIVERABLES / GENERAL HIGHLIGHTS:

BBAM's current partnership with DEED led to several key accomplishments and partnerships in 2011-2012, many of which are continuations of projects introduced in previous reports.

Business Resource Network:

The Business Resource Network (BRN) is the implementation mechanism for BBAM. The BRN has two parts: projects and support to companies. Between July 1, 2011 and June 30, 2012, the BRN worked with 149 companies from across Minnesota and internationally.

At the end of each calendar year, BBAM conducts a survey of our client companies. Between January 1, 2008 and December 31, 2011, BBAM supported 272 companies. The client companies from 2008 through 2011 created 3,147 direct and indirect jobs based on the findings of the 2011 survey. These companies raised \$208,657,000 over the same period of time. The 272 companies reported that they expect to add 2,776 jobs in the next three years. The annual survey of clients to determine results from calendar year 2012 was in process as of the date of writing this report. BBAM will include the calendar year 2012 results in the 2014 report.

The BRN also develops and implements projects to help companies start, expand, and relocate in Minnesota and develop industries in the state. The following updates are a sampling of projects:

- Minnesota Angel Network
- International Business Support Center (IBSC)
- Applied Business Training Program
- Ag/Bio Industry Development

Minnesota Angel Network

BBAM launched the Minnesota Angel Network in August 2011 to better prepare companies for the rigors of fundraising and create a statewide network of angel investors.

The Minnesota Angel Network was the result of two years of planning and is supported by BBAM and a consortium of regional investor networks, Minnesota Initiative Foundations, economic development

groups, universities, and business leaders. The goals of the program are to increase the number of companies funded and increase the dollar amount of angel investments throughout Minnesota. It will also be a critical companion to boost development of start-up companies and to maximize the utilization of the Minnesota Angel Investor Tax Credits on a statewide basis.

Companies applying to the Minnesota Angel Network training program are reviewed by a selection committee of business experts before being invited to participate in the process. Client companies' business plans and investor pitches are then reviewed by 6-8 senior business leaders and expert service providers. Once the senior business leaders and expert service providers agree that the company has met their standards of quality and excellence, the client companies become "Minnesota Angel Network-Certified." This brand signifies to potential investors that the company has been reviewed by experts and deemed ready to talk with investors.

Over FY2012, 15 companies have moved through the advisory process and become "Minnesota Angel Network-Certified." Of these 15 certified companies, two had commitments for full funding and an additional seven had commitments for partial funding. Ultimate success will be achieved when Minnesota Angel Network-Certified companies obtain full funding. On a national average, only one company out of 10 is successful in achieving funding, and in this environment it normally takes six months or more to do so. Most of the companies involved with MNAN have or will seek Minnesota Angel Tax Certification.

Over 2,000 hours were donated by the senior business leaders and expert service providers during FY 2012 to review and advise client companies.

As of June 30, 2012, the Minnesota Angel Network had 84 individual angel investors and 28 angel funds/angel networks as direct members, with an additional 48 angel funds from five states committed to helping syndicate Minnesota Angel Network-Certified Company deals.

International Business Support Center (IBSC)

BBAM has formed strategic relationships with other countries to mutually build each geographies' life science industry by leveraging each others strengths and capabilities. These partnerships foster business relationships, technology and knowledge transfer and economic expansion. In FY 2012, BBAM continued to foster relationships with Canada, Japan, Sweden and Saudi Arabia and launched a new relationship with Germany and Asia (excluding Japan).

Two examples:

- Asia (excluding Japan): BBAM formed a strategic partnership with Tractus Asia, Ltd. to help Minnesota companies find strategic partners, funding, and other business opportunities in Asia. As of the writing of this report, Tractus assisted a Minnesota company to raise over \$6M from an Asian investor and is also working with other Minnesota companies to find business opportunities in Asia.
- Sweden: Svebio (The Swedish Bioenergy Association) has teamed up with BBAM in the U.S. to jointly contribute to the optimal use of bioenergy in the state and develop biomass to energy demonstration sites in Minnesota utilizing both Minnesota and Swedish technology. The following projects are being supported in Minnesota, specifically in the northeast.
 1. Supporting the development of a master plan for a demonstration site for Renewable Energy Technologies at the developing Steger Center for Global Sustainability.

2. Demonstration site at Itasca Community College of effective use of modern energy conversion technology for statewide mid-sized commercial facilities and education institutions.
3. Development of pellet manufacturing capacity at the Fond du Lac Tribe of Ojibwe.

Applied Business Training Program

Started in FY 2012, the Applied Business Training Program provides experiential-based learning opportunities to technical and business students across a spectrum of educational levels including BS, MS, MBA, PhD, and MD. The goal of the program is to deliver the next generation of technology-based business leadership capable of identifying and realizing the commercial potential of novel technology.

The Applied Business Training Program employs an experience-based learning approach focused on the practical business education of a diverse student population. The cornerstone program is a one to two year post-doctorate fellowship program that trains highly technical PhD-level students in how to assess technologies for commercial potential. Novel technologies and early stage companies needing technical diligence and business assistance function as the primary component of the curriculum. Under the guidance and support of an industry mentor team and academic partners, the students gain experience and provide benefits to clients through practical company support, technology evaluation, and new venture creation. Pre-doctorate level students work in the center under internship programs assisting in the basic support processes for companies and technologies.

Ag/Bio Industry Development

BBAM continued to implement tactics from the 'Northeast Minnesota Strategy Study' completed by BBAM in 2009, and a further detailed action plan for bioscience development in the Northeast. BBAM is currently working with local leaders to implement five projects: (1) a woody biomass sustainability value chain analysis, (2) a demonstration site for renewable energy technologies, (3) create a sustainable system for the commercialization of biomass combustion technology to provide heat and electricity, (4) provide a pathway for manufacturers to expand their capabilities into the medical device market and (5) expand medical device manufacturing capability.

A follow-on study "Minnesota's Forest Biomass Value Chain: A System Dynamics Analysis" was published by BBAM in late 2010 confirming and refining the focus of the 2009 report. This white paper can be found at: http://www.biobusinessalliance.org/Northeast_Forest_Biomass.asp, and largely confirmed the importance of a healthy forest as well as the need to grow combustible biomass, biofuels, and biobased chemicals markets.

In 2012, BBAM published "The Minnesota Roadmap: Recommendations for BioIndustrial Processing" study which is an expansion of the forestry biomass study into a focused roadmap for the entire state's advanced biofuels and bio-chemicals industry.

The roadmap includes recommendations for the growth of the industry that include:

- Ensure availability of funding options for bioindustrial processing
- Communicate Minnesota's competitive advantages to the global industry
- Enable production and development of end markets for bioindustrial processing
- Organize industry-led efforts to develop a voice for the industry

The Great Plains Institute was leveraged as a partner in this effort. The project's sponsors included Minnesota Corn Growers Association, Blandin Foundation, Great River Energy, Fredrikson and Byron,

Southwest Initiative Foundation, Amec, Eide Bailey, Boise, Butrolix, and the Kandiyohi Economic Development Commission.

In 2011 and 2012, BBAM convened The BioIndustrial Partnership of Minnesota, a group of industry leaders, academics, and government officials who are committed to realizing Minnesota’s potential as the world leader in the advanced biofuels and bio-based chemicals industry. This project’s focus is statewide, as the metro area, agricultural, and forestry regions all stand to benefit from the industry’s growth. It is the genesis and implementation arm of the final report recommendation to organize industry-led efforts to develop a voice for the industry.

An example of a specific convening activity related to the industry development work was “The Renewable Materials Summit: Emerging Markets for the Upper Midwest” on April 26, 2011 in Moorhead, Minnesota. The planning committee included representatives from BBAM, The Fergus Falls Economic Improvement Commission, The Minnesota Department of Employment and Economic Development (DEED), The Agriculture Utilization and Research Institute (AURI), North Dakota State University (NDSU), and Becker County Housing and Urban Development.

There were 130 business, NGO, and government leaders from across the region in attendance to discuss opportunities for growth in the industry. This provided a forum for education and networking to drive businesses forward.

Additionally, several businesses have been supported in their interest in the application of renewable materials around the Fergus Falls area. To date, one company is actively developing a product line that uses bio-based materials in their product. The company is set to use bio-based foam as an insulator in a current product line.

FINANCIAL SUMMARY¹

BioBusiness Alliance of Minnesota

Cash Donations: July1, 2011 through June 30, 2012

Donor	Amount
AgStar Financial Services	\$10,000
AMEC E&C Services, Inc.	\$2,500
Argenta Advisors	\$5,000
Augsburg College	\$1,000
Blandin Foundation	\$60,000
Boise Paper Holdings, LLC	\$1,000
Boston Scientific Corporation	\$50,000
BioAmber	\$500
Butrolix	\$1,000
City of Fergus Falls	\$25,000
City of Hutchinson	\$25,000
Corn Council, North Dakota	\$1,500
Eide Bailly	\$2,000
Ethanol Council	\$500

¹ This report constitutes BBAM’s work for the State of Minnesota fiscal year 2012, beginning July 1, 2011 and ending June 30, 2012. BBAM did receive funds under a different grant from the Minnesota Department of Employment and Economic Development for the state fiscal year beginning July 1, 2012. Results of this grant will be reported in the 2014 report to the Legislature.

Fredrikson & Byron, P.A.	\$2,000
Gray, Plant, Mooty Foundation	\$2,500
Great River Energy	\$500
GVL Polymers	\$500
Individuals	\$2,146
Kandiyohi County	\$25,000
Kruskopf Coontz	\$5,000
Life Science Association of Manitoba	\$3,500
Minnesota Corn Growers Association	\$25,500
Minnesota Soybean Growers Association	\$2,000
Natureworks, LLC	\$1,500
North Dakota Department of Commerce	\$500
North Dakota Soybean Council	\$500
North Dakota State University	\$500
Oppenheimer, Wolff & Donnelly LLP	\$8,500
Reluceo, Inc.	\$1,000
Southern Minnesota Initiative Foundation	\$45,000
Southwest Initiative Foundation	\$45,000
State of Minnesota Department of Employment and Economic Development	\$500
Stoel Rives	\$1,000
SWM	\$500
University of Minnesota	\$60,000
Wipfli	\$8,500
Xcel Energy	\$15,000
TOTAL	\$441,646

BioBusiness Alliance of Minnesota

Work-In-Kind: July1, 2011 through June 30, 2012

Volunteer Name	# of Hours	Fair Market Value	Donation Amount
Denise Logeland	100.25	\$80	\$8,020
Strategem LLC	160	\$150	\$24,000
Schwegman Lundberg & Woessner	9	\$450	\$4,050
Schwegman Lundberg & Woessner	4	\$225	\$900
Dave Wagy	1,083.75	\$200	\$216,750
Dave Wagy	269.5	\$125	\$33,688
		TOTAL	\$287,408

Client Name	Amount
Greater MSP	\$1,000
International Renewable Energy Technology Institute - Minnesota (Minnesota State University Mankato)	\$1,695
Institute for Technology Transfer	\$4,500
Life Science Association of Manitoba	\$600
Minnesota Angel Network Client Fees ²	\$43,580
Osaka Chamber of Commerce and Industry	\$4,633
Saitama Industrial Development Corporation	\$8,167
Svebio	\$86,081
TOTAL	\$150,256

Cash Donations	\$441,646	
Work-In-Kind Donations	\$287,408	
Earned Income	\$ 150,256	
	\$879,310	TOTAL MATCHING FUNDS

SUMMARY

This report demonstrates significant progress towards the stated goals in our contract with DEED.

BBAM’s work is having positive impact in every region of the state. The three stage approach to BBAM’s work, “assess, plan, and implement” is paying off with real jobs being created by the companies supported and projects led.

BBAM continues to find ways to work with partners across the state. Many organizations and individuals have volunteered their time or have provided significant discounts for their services because they believe in the work BBAM is doing in Minnesota.

² The Minnesota Angel Network is a program of The BioBusiness Alliance of Minnesota.