Cultivating Opportunities in the Biobased Marketplace

Instructors:
- Ron Buckhalt, USDA BioPreferred® Program
- Bill Wiley, Manufacturing Extension Partnerships
- Edsel Brown, Small Business Administration
- Lisa Wood, Procurement Technical Assistance Centers

Agenda

- The U.S. BioPreferred® Program
- The market for biobased products
- Federal resources to support business
  - GSA
  - PTACs
  - MEP
  - SBA

The What and Why of Biobased Products
Legislative Definition of a Biobased Product

A product composed of recent biological components
Agricultural, forestry, and marine materials

Why New Biobased Products?

• Reduce use of fossil fuels
• Reduce climate change impacts
• Create new uses for agricultural products
• Foster economic development
  - Agricultural jobs
  - Small business growth

Businesses with biobased products registered with USDA BioPreferred® program
The USDA BioPreferred® Program

- Managed by USDA
- Established by the 2002 Farm Bill
- Identifies and seeks new markets for biobased products
- Two major program elements
  - Federal Procurement Preference
  - Voluntary Labeling Program

Bi-Partisan Support Continues

Congressional Support Demonstrated in 2002 and 2008 Farm Bill
- BioPreferred included in drafts of 2012 Farm Bill

2012 Presidential Memorandum - Promotion of Biobased Markets
- Increase categories of designated products by 50% next year
- Conduct specification reviews
- Meet 95% acquisition goal for biobased (improve compliance)
How Does Procurement Preference Work?

The Federal Procurement Preference program for biobased products currently:
- Stipulates that Federal agencies and contractors must give preference to products in “designated categories”
- Includes 77 designated, diverse categories – and more are on the way!

The Federal Procurement Preference at Work:
- Image Group of Georgia is selling bioplastic bins to many agencies
- Navy Gateway Inn and Suites buying biobased bedding and linens
- Defense Logistics Agency (DLA) offering soy-biobased penetrating lubricants and a spill biobased sorbent
- Fort Belvoir Army Base using biobased foam insulation
- Statue of Liberty uses biobased hydraulic fluid for elevators
- Fort Lee using biobased paint strippers
What is the Voluntary Labeling Program?

The USDA Certified Biobased Label
- Launched February, 2011
- Unbiased indicator of biobased content
- Independent third party certification partnership with ASTM International
- FP on label indicates Federal Procurement Preference

Growing Markets for Biobased Products
Some Growing Markets for Biobased Products

- Fiber based materials
- Bio-plastics
- Surfactants/Cleaning
- Bio-solvents
- Bio-lubricants
- Bio-chemicals
- Inks
- Enzymes
- Cosmetics

Increasing environmental awareness on the part of product manufacturers and the desire to reduce dependency on oil are the leading drivers behind the $2.4 billion global market for biorenewable chemicals in 2010.

Biobased chemicals and plastics represent a historic opportunity to reverse (U.S. job outsourcing) through the creation of a new generation of renewable, sustainable products developed and produced in the United States.™

(Bio 2012)
Biobased Composites

- Biobased composites consist of resin and fibers made from agricultural and forestry products.
- The global composite materials industry reached a total value of $17.7B (USD) in 2010 and, despite a still‐sluggish world economy, its growth rate was 10.3%.

Norm Tenison, Lucintel

John Deere tractor with bio‐composite panel

Biobased Cleaning Products


Acmite Market Intelligence

Biobased Products gaining traction in both consumer and commercial markets.

According to ISSA – the Worldwide Cleaning Industry Association

Biobased Lubricants

The world annual consumption of lubricants is 40 million tons and is projected to continue to rise by 1.6% annually.

TransWorld News

With the government’s lead‐by‐example initiative, advocacy by growers associations, and advances in lubricant research and biotechnology of oilseeds, the U.S. market will progressively see more biobased lubricants.

Machinery Lubrication website
Federal Resources for Businesses Pursuing Biobased Products Markets

Resources for Marketing Biobased in the Federal Sector
- GSA Schedules and GSA Advantage®
- GSA establishes long-term government-wide contracts to provide access to commercial products
- Can be ordered directly from GSA Schedule contractors or through the GSA Advantage® online shopping and ordering system
- State and local governments can now use GSA Advantage®
- Biobased products flagged for easy recognition

Federal Support to Small Businesses
- The Small Business Act established the Office of Small and Disadvantaged Business (OSBDU) in each Federal Executive Agency
- Goal of each OSBDU is to advocate for and manage the small business utilization programs
Lisa Wood
Director
Ohio PTAC

Buy BioOhio

- Ohio Biobased Products Preference
- Ohio Senate Bill 131 was signed into law May 2010
- Mandates state purchasing preferences for bioproducts
- Includes state government agencies and state colleges and universities
- Followed the guidelines of USDA BioPreferred Program

Buy BioOhio

- Criteria for procurement preference
- Must be equal in quality, similar in price
- 5% price preference
FromTheEarth-Bioproducts.com
Developed to support
Ohio Senate Bill 131
Structured after the
USDA BioPreferred® Program

Examples of Bioproducts Produced in Ohio
GoJo Industries Purell Hand Sanitizer
Green Paper Products Disposable Tableware
Renewable Lubricants Degreasers and Lubricants
USA Soy Solutions Road Maintenance
Spartan Chemical Janitorial Cleaners
Sherwin Williams Paints

Authorized by Congress in 1985
Provides technical assistance to businesses wishing participate in government marketplace
Administered by DoD’s Defense Logistics Agency
90+ PTACs operate in more than 275 locations across the U.S. in partnership with:
- state and local governments
- economic development organizations,
- other non-profit organizations
- SBA/SBDCs

To help businesses – especially small businesses – pursue government contracting

PTACs serve Small Business
- 185,000 Counseling sessions
- 75,000 active small businesses clients each year
- Over $13.5 billion in contract awards to PTAC clients annually

PTACs serve Prime Contractors
- Assistance in locating viable subcontractors
- Provide timely training on specific topics

PTACs serve the Federal Government
- SAM transition outreach
- VA verification outreach
- Work with FEMA to identify local contractors in disaster areas
- RFID/UID/WAWF

PTACs offer a wide range of services, including:
- One-on-one procurement counseling
- Training and outreach on a variety of procurement related topics
- RFID (Radio Frequency Identification)
- Basics of government contracting & payment
- Military packaging
- Proposal preparation and review
- Developing quality plans
- Bidder registrations and certifications
- Computerized bid-match service
- Technical specifications and procurement histories
Locate a PTAC near you

www.aptac-us.org
www.dla.mil/db/procurem.htm

Bill Wiley
Economic Development Consultant
Center for industrial services
University of Tennessee
Manufacturing Extension Partnership

MEP - MANUFACTURING EXTENSION PARTNERSHIP
National Institute of Standards and Technology
U.S. Department of Commerce
Overview of the NIST MEP Program

Partnership Model – Federal/State/Industry

59 centers with over 370 field locations:
Urban and rural – never more than 2 hours away

Serving small and mid-sized U.S. manufacturers
to help them create and retain jobs, increase
profits, and save time and money

Program started because of “market failures”
in terms of access to information,
technical expertise, and cost

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Partnership to Drive a National Program

- 326,000 Small & Medium Sized Manufacturers
- Over 2,300 Affiliated Services Providers
- Over 1,450 Center Staff
- Over 370 Service Locations
- 60 MEP Centers
- NIST
- Integration, Knowledge Sharing, & Evaluation

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Challenges our Clients are Facing

- Ongoing continuous improvement from industry
- Strategic partnerships
- Identifying new opportunities
- Productivity/Development
- Sustainability programs and practices
- Employee recruitment and retention
- Transitions
- Managing partners and suppliers
- Technology searches
- Exporting and global engagement
What NIST MEP Does

- Focus on meeting manufacturers’ short term needs, but in context of overall company strategy
- NIST MEP Center areas of common strength:
  - Engineering Services for products and processes
  - Growth Services – new or expanded market opportunities
  - Lean Manufacturing
  - Quality Systems
  - Environmental Services
  - Workforce Development
- Nearly 33,000 firms and over 10,000 projects per year

How Centers Work with Manufacturers

- Initial contact – group sessions, referral
- Assessment – informal walk-through, detailed company analysis
- Identify potential issues, define proposed project and approach for solving it
- Negotiate with company and sign project contract with fee paid to center
- Project execution – center staff, partner organization, and/or third party consultants
- After completion, project follow-up by center to assure customer satisfaction and explore further project opportunities

Service Characteristics by Type of Assistance
Where We Are Headed

Innovation

Connect with NIST MEPs

Facebook /nistmep
Twitter @nist_mep
Email mfg@nist.gov
Blog nistmep.blogs.govdelivery.com
Website www.nist.gov/mep

Edsel Brown
Small Business Administration
R&D in the bioscience field is high-risk and expensive in nature.
SBA recognizes the integral role that start-ups and small firms play in the bioeconomy.
Small businesses in the bioscience industry should take advantage of the core SBA programs:
- Capital Access
- Counseling Services
- Government Contracting

SBA's mission is to help U.S. small businesses start, grow, and succeed.
- $90B portfolio of loan guarantees; 5000 lenders
- $2.6B in growth capital through Small Business Investment Companies (SBIC)
- Ensure 23% of federal contracts go to small firms
- Free counseling
  - 78 field and regional offices
  - 1,000 Small Business Development Centers
  - 110 Women's Business Centers
  - 12,000 SCORE volunteers

SBA programs support small businesses seeking to research, develop, and commercialize new technologies.
- 3-Phase program providing funding to small businesses for R&D leading to commercialization
- Through FY2009, over 112,500 awards have been made totaling more than $26.9B
SBA programs support small businesses seeking to research, develop, and commercialize new technologies

**Cluster Initiative**
- 33 clusters in a variety of industries
- Linking research institutions, large organizations, and small business to foster innovation and spur commercialization

SBA guarantees loans on reasonable terms through financing partners to small businesses that are unable to obtain funding from conventional lenders

**SBA 504 Loan Program**
- Provides small businesses with long-term, fixed rate financing
- Used to acquire fixed assets for expansion or modernization
- The maximum 504 loan size is $5 million

**SBA 7(a) Loan Program**
- Provides financial help to small businesses with specific requirements
- These include loans to businesses in underserved communities, rural areas, and loans for businesses developing export programs

SBA's Office of Business Development and Government Contracting is responsible for getting federal contracting dollars into the hands of small and disadvantaged businesses

- By statute, 23% of all federal government prime contracting dollars must go to small businesses
The Office of Entrepreneurial Development manages national networks of well respected small business assistance service providers:

- Small Business Development Centers (SBDC)
- Women's Business Centers (WBC)
- SCORE

In addition, SBA has free online training courses on many topics at [www.sba.gov](http://www.sba.gov).

SBIR represents the single largest early stage investment tool in the government, and involves funding from 11 Federal agencies.

**PHASE I**

- Awards $150,000 for approximately 6 months to explore the technical merit or viability of an idea or technology

**PHASE II**

- Awards up to $1,000,000 for as many as two years in order to commercialize Phase I results

**PHASE III**

- In Phase III, small businesses pursue commercialization objectives resulting from R&D activities in Phases I/II

Small Business Technology Transfer Program

- STTR requires the small business to formally collaborate with a research institution in Phase I and II
- Include joint venture opportunities for small businesses and non-profit research institutions
- Bridges the gap between basic research and science and commercialization of resulting innovation
- Five Federal agencies provide funds
Clusters

- Geographic concentrations of interconnected companies and institutions in a field
- Foster a synergistic network of businesses, university researchers, regional economic organizations, stakeholders, and investors – to develop and grow a particular industry or set of industries
- Provide targeted matchmaking, business training, counseling, and mentoring, among other industry-specific services

SBA Direct is a helpful first resource

- SBA.gov also has industry-specific sites dedicated to the Biotechnology, Pharmaceuticals, and Agriculture industries

http://www.sba.gov/content/pharmaceuticals-biotechnology
http://www.sba.gov/content/agriculture

Biopreferred.gov

Contains business resources
Guide to working with the Federal Government
Label application and resources
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<th>Phone Number</th>
<th>Email Address</th>
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<tr>
<td>Edsel Brown</td>
<td>U.S. Small Business Administration 202.205.7343</td>
<td><a href="mailto:Edsel.brown@sba.gov">Edsel.brown@sba.gov</a></td>
<td></td>
</tr>
<tr>
<td>Lisa Wood</td>
<td>Ohio PTAC Director 614.644.1637</td>
<td><a href="mailto:Lisa.Wood@development.ohio.gov">Lisa.Wood@development.ohio.gov</a></td>
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<tr>
<td>Bill Wiley</td>
<td>NIST Manufacturing Extension Partnership 865.974.8464</td>
<td><a href="mailto:bill.wiley@tennessee.edu">bill.wiley@tennessee.edu</a></td>
<td></td>
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<tr>
<td>Ron Buckhalt</td>
<td>USDA BioPreferred Program 202-205-4008</td>
<td><a href="mailto:ronb.buckhalt@dm.usda.gov">ronb.buckhalt@dm.usda.gov</a></td>
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<td>Program Manager</td>
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