

Office of the Chief Economist



Office of Energy Policy and New Uses

USDA Policies for Biobased Products

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Bioproducts/Biofuels

- Developments in biofuels and bioproducts are intertwined
- To achieve cost effectiveness production of both bioproducts and biofuels will be necessary



What Are Biobased Products?

According to Section 9002 of FSRIA

Biobased products are **commercial or industrial products** composed, in whole or in significant part, of **biological products or renewable** domestic **materials, forestry or agricultural** (including plant, animal, and marine materials).



What Are Biobased Products?

- U.S. Department of Energy has identified 12 biobased chemicals as building blocks for a wide range of final products
- End use products include familiar products

| | EXAMPLES | |
|------------------|------------------|------------------------------|
| composite panels | hydraulic fluids | solvents |
| coatings | clothing | plastic films and containers |
| adhesives | cleaning agents | carpeting |



USDA Policies for Biobased Products

A close-up photograph of a green leaf, showing the intricate vein structure. The leaf is positioned on the left side of the slide, partially overlapping the white background.

BioPreferredSM



BioPreferredSM

Federal Biobased Products Preferred Procurement Program

→ <http://www.usda.gov/biopREFERRED>



BioPreferredSM

- A Preferred Federal Procurement Program for Biobased Products
 - Federal agencies must give purchasing preference to biobased products that belong to items designated by the program
- Authority for the program included in the FSRIA of 2002



So why the BioPreferredSM?

- Demand-Pull Policy to stimulate the Biobased Industry
- A strategy for enhancing biofuels and bioproducts must include both supply-push and demand-pull approaches



How does it work?

- Market analysis identifies products presently in the market.
- Products are classified into items, generic groupings of products
- The items are designated by rule making for preferred procurement by the federal government
- Once designated, all 'qualifying' products within a designated item are **eligible** for preferred procurement
- For **each designated item** USDA provides **information** to Federal agencies about relative price, performance, environmental and health benefits, and minimum biobased content.



A Qualifying Biobased Product

A Product Consistent with definition in statute that:

- Meets the assigned minimum biobased content
- Makes the following information available per an agency's request:
 - Biobased content (ASTM test)
 - Environmental and health effects of product use (BEES analysis or ASTM standard)
 - Product Life Cycle Costs (BEES analysis or ASTM standard)
 - Product performance, as tested against industry recognized standards



Benefits

- For Federal Agencies
 - Encourages the purchase of more environmentally sustainable products and helps agencies reduce environmental footprint
- For Manufacturers
 - Creates a preferred market for biobased products and provides large scale demonstration of biobased products performance



Status of the Program

- Published in the Federal register:
 - **Final rule establishing the program**— *January 2005*
 - Final rule designating 6 six items for preferred procurement— *March 2006*
 - Proposed rules for designation **Rounds 2 and 3** (10 items each)—*August 2006*
 - **Final Rules** in Formal USDA Clearance. *Expected to go to OMB soon.*
 - Proposed rules for **Round 4** (10 items)— *October 2006*
 - **Final Rule** is in Formal USDA Clearance. *Expected to go to OMB soon.*
- **Proposed Rounds 5 and 6** in formal USDA clearance soon.
- **Rounds 7, 8, 9, 10 of proposed designation** will undergo USDA clearance review next year.

Item Designation Down the Line

| Round 5 | Round 6 | Round 7 | Round 8 |
|------------------------------------|---|--------------------------------|--|
| Chain and Cable Lubricants | Water Turbine Bearing Oils | Air Fresheners and Deodorizers | Printing and Writing Paper |
| Corrosion Preventatives | Gasoline Fuel Additives | Animal Repellents | Slide Way Lubricant |
| Food Cleaners | Expanded Polystyrene Foam Recyclers | Bath Products | Thermal Shipping Containers |
| Forming Materials | Metal Cleaners | Blast Media | Corrosion Removers |
| Wood and Concrete Sealers | Ink Removers and Cleaners | Concrete and Asphalt Cleaners | Electronic Component Cleaner |
| Industrial Cleaners | Paint Removers | Dishwashing Detergents | Engine Crankcase Oil |
| General Purpose Household Cleaners | Multi-Purpose Lubricants | Floor Cleaners | Hydrocarbon Spill Remediation Material |
| Multi-Purpose Cleaners | Personal Insect Repellents | Hair Care Products | Interior Paints and Coatings |
| Parts Wash Solution | Specialty Precision Cleaners and Solvents | Herbicides | Skin Lotions and Moisturizers |
| Gear Lubricants | Disposable Tableware | Microbial Cleaners | Medical Care Products |



Biobased Products Market Place

Identified

187 items

1,908 companies

10,859 biobased products

- For the first 4 rounds (36 items): 2,268 biobased products (597 companies)- 1/4 of the market
- For the first 6 rounds (56 items): 3,394 biobased products (791 companies)- 1/3 of the market



Policy Interest in the BioPreferred

- Arkansas, Indiana, and Illinois enacted laws requiring their government to give preferred procurement to biobased products
 - In Arkansas and Indiana the laws are modeled after the BioPreferred.
 - The Illinois law provides preference to contracts using biobased products.
- Other States are considering similar legislation
- A number of countries are also reviewing the U.S. program as a guide.



www.biopreferred.gov

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USDA Policies for Biobased Products

Voluntary Labeling Program



Voluntary Labeling Program

- Authorized by the FSRIA of 2002
- Demand-Pull Policy to stimulate the Biobased Industry
- Independent of the designation program
- Will provide use of **U.S.D.A. Certified Biobased Product** label and logo
 - Authority to use label granted for limited number of years with re-authorization
- Applicable to biobased products from mature markets, as well as from new and emerging markets



Voluntary Labeling Program

- Proposed rule to establish the labeling program in formal USDA clearance and expected to be published in the next months.
 - Public Comments will be very valuable
- For the Labeling Program to operate a minor statute change in the biobased definition will be required



Public Perception for Biobased Products

USB public opinion survey

- Consumers' knowledge of biobased products is weak (25%), but interest is strong (63%).
- The public looks to the federal government:
 - educate consumers
 - promote biobased products through education and funding
 - lead by example as a purchaser of these products.



Success Stories in the Federal Government

- Biobased Products in USDA in an effort to make buildings 'environmentally sustainable'
- The NPS Pictured Rocks National Lakeshore comprehensive Bio-Fluids/Lubricants Program shared with DOI facilities
- Naval Air Depot uses an alternative biobased product for metal working fluid
- US Postal Service happy with biobased mastic remover
- U.S. Coast Guard averts environmental clean up with biobased hydraulic fluid

<http://www.biobased.oce.usda.gov/fb4p/CaseStudies.aspx>



Conclusions

- There is private and public sector interest the biobased industry
- This effort is underwritten by a supportive public policy foundation
- Biofuels and bioproducts will fill growing roles in the U.S. economy
- The BioPreferred Program is an innovative effort to spur bioproduct market development
- The labeling program will spur more widespread development and demand.