2002 FARM BILL UPDATE

- Activities in CSREES, other USDA Agencies
- Funding Opportunities FSA, FAS, RD
- 2002 Farm Bill Title IX Energy
Current Scope in CSREES

National Research Initiative – competitive

Small Business Innovative Research Program – competitive

Agricultural Materials Program

• Formula funds - Hatch projects
• Special Research Grants - Earmarks
• Other – Biodiesel Fuel Education Program
• IFAFS 2000, 2001 - competitive
<table>
<thead>
<tr>
<th>USDA AGENCIES</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Biobased Products Bioenergy Coordination Council</td>
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<tr>
<td>Agricultural Research Service</td>
<td>Natural Resources Conservation Service</td>
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<td>Forest Service</td>
<td>Agricultural Marketing Service</td>
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<tr>
<td>Office of Energy Policy and New Uses</td>
<td>Cooperative State Research, Education, and Extension Service</td>
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<tr>
<td>Foreign Agricultural Service</td>
<td>Rural Utilities Service</td>
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<td>Office of the Assistant Secretary for Administration</td>
<td>Farm Service Agency</td>
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<tr>
<td>Rural Business - Cooperative Service</td>
<td>Office of Budget and Program Analysis</td>
</tr>
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<td></td>
<td>Office of the Under Secretary for Research, Education and Economics</td>
</tr>
</tbody>
</table>

www.ars.usda.gov/bbcc/
FUNDING OPPORTUNITIES

Foreign Agricultural Service  www.fas.usda.gov/mos/mapping.html
• Market Access Program
  competitive funding to state regional groups, cooperatives and U.S.
  ag trade organizations
  organizations to share the costs of overseas marketing
  $110M awarded in FY 03

Rural Business Cooperative Service  www.rurdev.usda.gov/rbs/coops/
• Value-Added Agricultural Product Market Development
  $ competitive grants to independent producers of value-added
  agricultural commodities and products
  $ strategies for ventures to create marketing opportunities
  $40M program, up to $500,000/grant

• Agricultural Innovation Center Demonstration Program
  $ Technical and business development assistance to rural businesses,
    farmers, ranchers
  $10M awarded in 2003 to assist states in value-added ventures
FARM SECURITY AND RURAL INVESTMENT ACT OF 2002

Title IX Energy

- Creative new set of programs
- Appropriations action required to implement some provisions
- New opportunities for biobased products, power, fuels
Title IX Energy

- Section 9002. Federal Procurement of Biobased Products

- Section 9003. Biorefinery Grants – competitive grant program to convert biomass into multiple products; authorizes appropriations as necessary for FY 2003-2007

- Section 9004. Biodiesel Fuel Education Program

- Section 9005. Energy Audit and Renewable Energy Development Program – competitive grant program to administer energy audits and renewable energy development assessments for farmers, ranchers and small businesses; authorizes appropriations as necessary FY 2002-2007

- Section 9006. Renewable Energy Systems and Energy Efficiency Improvements
Title IX Energy

- **Section 9007.** Hydrogen and Fuel Cell technologies – MOU between USDA and DOE regarding technology applications for producers and rural communities

- **Section 9008.** Biomass Research and Development

- **Section 9009.** Cooperative Research and Extension Projects – competitive grants for research on carbon fluxes and exchange of greenhouse gases from agriculture; authorizes appropriations as necessary for FY 2002-2007

- **Section 9010.** Continuation of the Bioenergy Program
Title IX Energy
Section 9004. Biodiesel Fuel Education Program

- Competitive Grant Program
- Education on Benefits of Biodiesel Fuel Use
- $1M FY 2003-2007
- 2 continuation grants made in September 03 to National Biodiesel Board and University of Idaho
- Grants jointly administered by Office of Energy Policy and New Uses and CSREES
Title IX Energy
Section 9006. Renewable Energy and Energy Efficiency

- Loan guarantee and grant program
- Assist in purchasing renewable energy systems and efficiency improvements
- $23M annual funding, FY 2003-2007
- $21.2M awarded for wind, anaerobic digesters, solar, ethanol, direct combustion, fuel pellet systems
- Lead agency: Rural Business-Cooperative Service
  www.rurdev.usda.gov/rbs/
Title IX Energy
Section 9010. Continuation of the Bioenergy Program

Increase domestic consumption of ag commodities by expanding domestic markets

- Up to $150M per year 2003-2006

- Cash payments to bioenergy companies that increase purchase of corn, soybeans, other commodities, or a cellulosic commodity

- Higher payments to small and new-to-market processors, including cooperatives

Lead agency: Farm Service Agency

www.fsa.usda.gov
TITLE IX ENERGY
Section 9008. Biomass Research and Development

- Authorizes $14M per year FY 2003 through FY 2007
- USDA/DOE joint solicitation
- Natural Resources Conservation Service is lead agency for implementation
- Total of $23M awarded in FY 2003

www.nrcs.usda.gov
www.bioproducts-bioenergy.gov
FY 2003 USDA mission-related priorities:
- impact on agriculture
- rural economy, rural-based processing/manufacturing
- lifecycle perspective
- distributed power generation utilizing animal manure
- barriers to connections to commercial grid

FY 2003 DOE mission-related priorities:
- energy/oil displacement
- biorefineries
- cellulose/hemicellulose conversion to sugars
- metabolic engineering
- catalytic processing
- separation technologies
- gasification/gas cleanup and conditioning
<table>
<thead>
<tr>
<th>INPUT MATERIALS</th>
<th>Funding*</th>
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<tbody>
<tr>
<td>Lignocellulosic materials, corn</td>
<td>$13.3</td>
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<tr>
<td>Oils</td>
<td>$4.0</td>
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<tr>
<td>Animal manure</td>
<td>$3.0</td>
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<tr>
<td>New crop development</td>
<td>$2.0</td>
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<tr>
<td>Crosscutting</td>
<td>$0.7</td>
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<tr>
<td>TOTAL</td>
<td><strong>$23</strong></td>
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<table>
<thead>
<tr>
<th>OUTPUTS</th>
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<tbody>
<tr>
<td>Biobased products/chemicals</td>
<td>$5**</td>
</tr>
<tr>
<td>Bioenergy</td>
<td><strong>$18</strong></td>
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<tr>
<td>TOTAL</td>
<td><strong>$23</strong></td>
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</tbody>
</table>

* estimates based on abstracts
** does not include products as secondary objectives
The intent of this section is to stimulate the production of new biobased products and to energize emerging markets for those products.

- **Guidelines**
  - USDA will designate items
  - Provide information about availability, price, performance, environmental and public health benefits, lifecycle costs, recommended biobased content

- **Label**
  - USDA will develop criteria for a “USDA Certified Biobased Product” label

Lead agency: Office of Energy Policy and New Uses


Cooperative Agreement with ISU

[www.ciras.iastate.edu/USDABIO.asp](http://www.ciras.iastate.edu/USDABIO.asp)
BIOBASED PRODUCTS LIST

Categories

• Inks
• Sorbents
• Adhesives
• Construction Materials/Composites
• Fuel Additives
• Lubricants/Functional Fluids
• Fibers, Papers, Packaging
• Solvents, Cleaners
• Plastics
• Landscaping Materials, Composted Livestock and Crop Residue
• Paints, Coatings

USDA will publish a list of designated items.
CRITERIA FOR PRODUCTS TO BE DESIGNATED BIOBASED

Draft regulation will be published for public comment on:

1. Biobased Content
   a. products must be manufactured with raw materials or wastes from domestic agricultural production – farming, ranching, forestry, aquaculture
   b. minimum content
      • by category/subcategory
      • verified by ASTM methodology – \(^{14}\text{C}\) dating

2. Performance and Manufacturer Specifications

3. Environmental Performance/Life Cycle
   a. National Institute of Standards and Technology “Building for Environmental and Economic Sustainability (BEES)” program
For Free BEES Resources...

www.bfrl.nist.gov/oae/bees.html

• Click “Download” for BEES 3.0

• Click “What’s the Buzz” for new BEES reports

• Click “BEES Please” to submit product data
Section 9002. Federal Procurement of Biobased Products

Federal Agencies will:

- give preference to products with highest biobased content relative to availability, performance standards, price
- ensure that biobased content is incorporated as a procurement specification
- develop a procurement preference program that will ensure biobased products are purchased to the maximum extent practicable
- develop an agency promotion program
- annually review and monitor the effectiveness of the preferred procurement program
OBSTACLES TO COMMERCIALIZING NEW PRODUCTS

- lack of awareness product is available
- higher price than the traditional product
- unsubstantiated performance
- lack of standards or specifications
- lack of interest
Title IX Energy

Section 9002. Federal Procurement of Biobased Products addresses obstacles to new products entering the marketplace:

- market acceptance/awareness – list of products
- cost competitiveness - procurement preferences, economies of scale; LCC evaluations
- validated performance – demos, new standards and specs
FARM SECURITY AND RURAL INVESTMENT ACT OF 2002
Title IX Energy

Promotes technology transfer of the public investment in R&D to address environmental and agricultural issues

- creates market push and pull
- new emphasis for agricultural research = new educational and career opportunities