



United States  
Department of  
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# BRDI and NIFA Updates on Biomass R&D Activities

August 2017

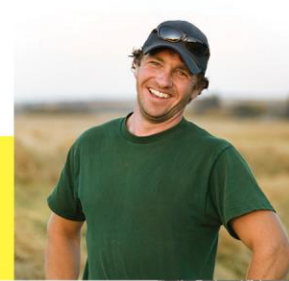
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BIOENERGY, CLIMATE,  
AND ENVIRONMENT



FOOD PRODUCTION  
AND SUSTAINABILITY



YOUTH, FAMILY,  
AND COMMUNITY



FOOD SAFETY  
AND NUTRITION



National Program Leader,  
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INTERNATIONAL  
PROGRAMS



# USDA NIFA

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The logo for the National Institute of Food and Agriculture (NIFA), featuring the letters "NIFA" in a large, white, sans-serif font. The letters are set against a background of stylized, overlapping shapes in shades of orange and yellow, suggesting a landscape or agricultural theme.

## **Agenda:**

- **BRDI Updates**
- **NIFA Competitive Programs**
- **Joint Solicitations**
- **Bioeconomy Action Plan**



## Biomass Research and Development Initiative

### Objectives

- Advanced Biofuels
- Bioproducts
- Biobased chemicals

### Technical Areas

- Feedstock Development
- Fuels/Product Development
- Development Analysis (LCA)

### 2017 Process

- Pre-application Review overseen by DOE
- Full Application Review overseen by USDA
- Awards made by each Department
  - No comingling of funds between Departments



## **Biomass Research and Development Initiative**

### **Timeline:**

- FOA Publication: June 5, 2017
- Concept Paper: July 7, 2017
  - Strong response
  - Encourage/discourage letters have been sent (?)
- Full Application: Sept 22, 2017

### **Funding:**

- USDA: Up to \$6M
- DOE: Up to \$3M
- Individual awards: \$500k - \$2M in total (1-3 year projects)
- Cost share: 20% for R&D, 50% for demonstration



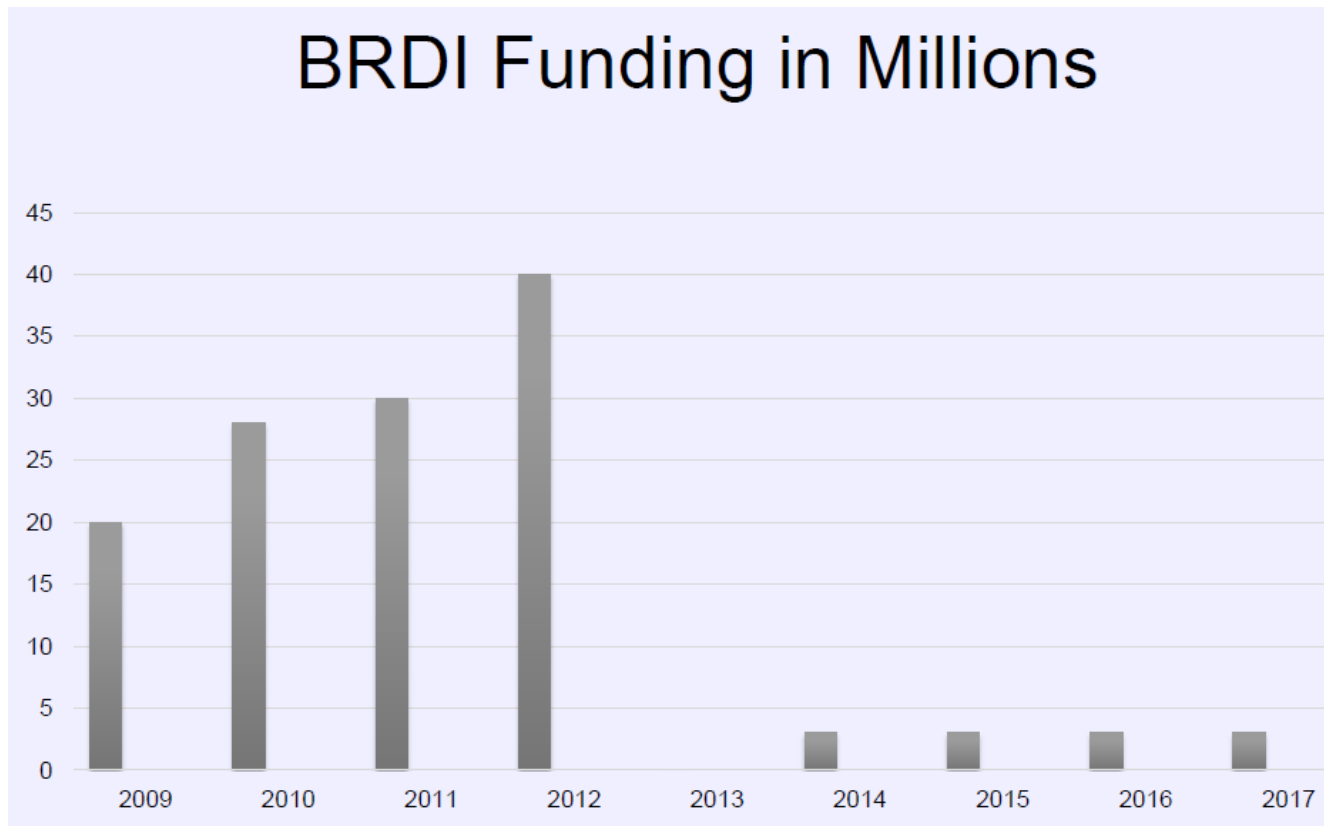
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## Biomass Research and Development Initiative

This year's FOA (FY17) will be the last under the existing Farm Bill





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## Other NIFA Competitive Programs

- AFRI
  - Bioenergy & Bioproduct Coordinated Agricultural Projects (CAPs)
    - Two \$15M projects have been selected; announcements are expected later this month.
    - Brassica carinata to jet fuel (southeast)
    - Guayule to rubber, chemicals, jet fuel (southwest)
  - 2017 Sustainable Bioenergy and Bioproducts Challenge Area:
    - Lignin or Nanocellulosic Coproducts from Biomass (closed June 2017)
    - Biomass Feedstock Genetic Development and Evaluation (closed June 2017)
  - 2017 AFRI Foundational Program
    - Bioprocessing and Bioengineering (closed June 2017)
    - Integration of bioenergy systems into multifunctional landscapes (closed June 2017)



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## **Other NIFA Competitive Programs**

- Biodiesel Education Program
- Sun Grant Initiative

## **Joint Solicitations**

- Plant Feedstock Genomics for Bioenergy (with DOE)
- Innovation at the Nexus of Food, Energy, and Water (joint with NSF), 3 Tracks:
  - FEW System Modeling
  - Visualization and Decision Support for Cyber-Human-Physical Systems at the FEW Nexus
  - Research to Enable Innovative System Solutions
- Integrated Biorefinery Optimization FOA (with DOE)



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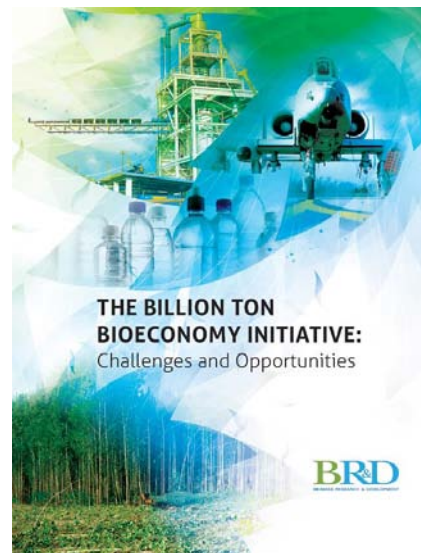
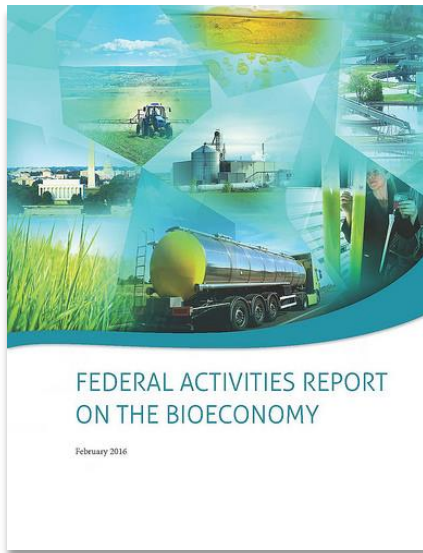
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## Joint Solicitations

- Integrated Biorefinery Optimization FOA (with DOE)
  - USDA contribution up to \$2.9M, DOE contribution up to \$19.8M
  - 4 Topic Areas:
    - Robust handling of solid materials and feeding systems to reactors
    - High value products from waste or other undervalued streams
    - Industrial separations within an IBR
    - Analytical modeling of solid materials and feeding systems to reactors
  - Concept Papers: Feb 2017
  - Full Applications: Apr 2017
  - Merit review is complete, decisions will be announced in Fall 2017



# A Path Forward for the Bioeconomy Initiative



## THE BILLION TON BIOECONOMY INITIATIVE: ACTION PLAN



### FARB

- Released in February 2016

### Challenges & Opportunities

- Released at Q4 TAC Meeting  
in November 2016

### Action Plan

- Coming very soon!

## Bioeconomy Initiative: Action Plan

- **Workshop, April 5-6, 2017**
  - Goal of Workshop: To develop a roadmap of cross-cutting federal activities and collaborative actions to catalyze the expansion of a sustainable domestic bioeconomy
- **Chapters on cross-cutting themes:**
  - Industry partnerships, Knowledge transfer, Project finance, Technology deployment
  - Stakeholder engagement
    - Engagement of participants in various bioeconomy supply chains
    - Communication to the general public, industry, the press regarding the presence and value of the bioeconomy
- **Action Plan to be released soon (Late Summer or early Fall)**



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# Thank you!

# Questions?

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