BRDI and NIFA Updates on Biomass R&D Activities

August 2017

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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
Biomass Research and Development Initiative

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

FARB
- Released in February 2016

Challenges & Opportunities
- Released at Q4 TAC Meeting in November 2016

Action Plan
- Coming very soon!

THE BILLION TON BIOECONOMY INITIATIVE: ACTION PLAN
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)
Thank you!

Questions?

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