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Renewable Natural Resources Foundation Congress on Assessing America's Renewable Energy Future

The Biomass Research and Development Board

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William F. Hagy III
Special Assistant - Director for Alternative
Energy Policy
USDA



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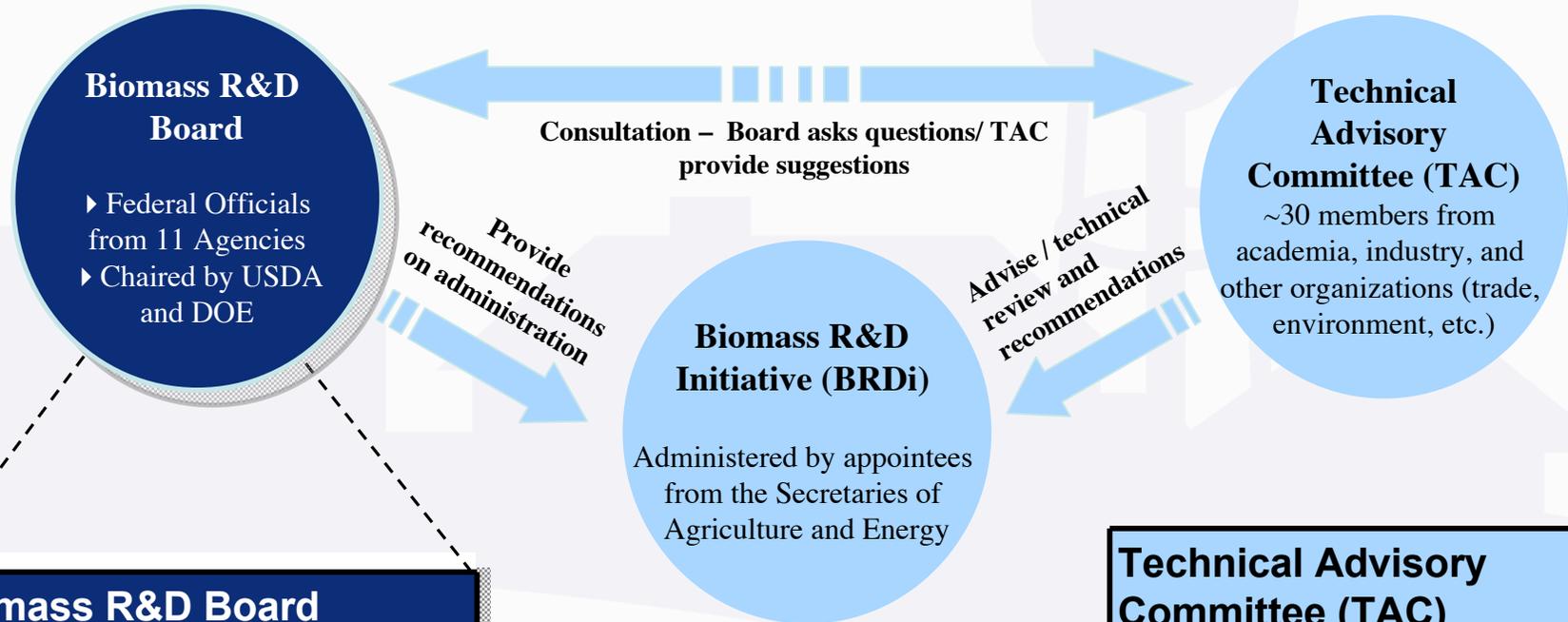
The Biomass R&D Board is tasked to coordinate research and development and demonstration activities relating to biofuels and biobased products

Charter and Leadership

- ▶ The Biomass R&D Board is mandated by Section 9001 of the 2008 Food, Conservation, and Energy Act (FCEA) to:
 - Coordinate R&D activities relating to biofuels and biobased products
 - Between the Departments of Agriculture and Energy
 - With other departments and agencies of the Federal Government
 - Provide recommendations to the points of contact concerning administration of the Board
 - Ensure that [BRDi] solicitations are open and competitive with awards made annually, and objectives and evaluation criteria of the solicitations are clearly stated and minimally prescriptive, with no areas of special interest
 - Ensure that the panel of scientific and technical peers to review proposals is composed predominantly of independent experts selected from outside USDA and DOE
- ▶ The Board is co-chaired by Presidential-appointed, Senate-confirmed officers from USDA and DOE, selected by the Secretaries of Agriculture and Energy, respectively



The Board provides a venue for Federal agencies to interface with the Technical Advisory Committee (TAC), and the BRDi

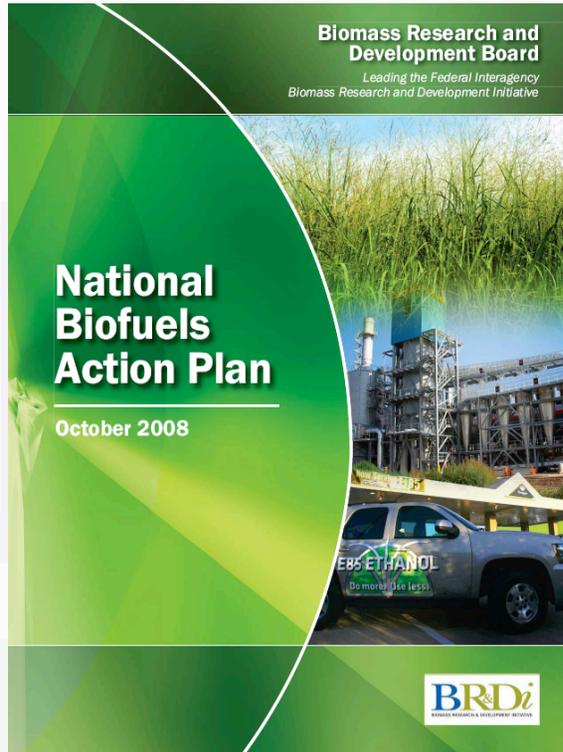


Biomass R&D Board (Board)	
Roles	<ul style="list-style-type: none"> Coordinate R&D activities relating to biofuels and biobased products (meetings at least quarterly) Provide recommendations to the points of contact concerning administration of the BRDi
Public Document	<ul style="list-style-type: none"> The Board released the National Biofuels Action Plan (NBAP) in October 2008

Biomass R&D Initiative (BRDi)	
Purpose	<ul style="list-style-type: none"> Award competitive grants, contracts, and financial assistance are provided to, or entered into with, eligible entities to carry out research on and development and demonstration of biofuels and biobased products
Public Document	<ul style="list-style-type: none"> The BRDi publishes at least 1 request for proposal (RFP) each year

Technical Advisory Committee (TAC)	
Roles	<ul style="list-style-type: none"> Advise the Secretaries of Energy and Agriculture, and the POCs on <ul style="list-style-type: none"> The technical focus and direction of the BRDi RFPs Procedures for reviewing and evaluating the proposals Evaluate and perform strategic planning on BRDi activities Facilitate partnerships
Public Document	<ul style="list-style-type: none"> All TAC meetings (at least quarterly) are public

The Board released the National Biofuels Action Plan in October 2008 to improve interagency R&D coordination



- ▶ **The NBAP identifies key research challenges and defines clear interagency actions critical to developing the science and technology needed to make advanced biofuels cost competitive in order to grow the nation's biofuels' industries in a sustainable manner.**

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National Biofuels Action Plan Summary

Board Action Area	Actions and Milestones
Sustainability	<ul style="list-style-type: none"> ▶ Develop key sustainability criteria and indicators ▶ Host internal and external workshops to inventory relevant research, models and gaps
Feedstock Production	<ul style="list-style-type: none"> ▶ Conduct feedstock availability and cost study ▶ Formulate long-term interagency research plan
Feedstock Logistics	<ul style="list-style-type: none"> ▶ Identify R&D needs to facilitate cellulosic feedstock logistics systems demonstrations and commercialization
Conversion Science and Technology	<ul style="list-style-type: none"> ▶ Inventory and coordinate interagency R&D activities ▶ Develop 10 year interagency research plan
Distribution Infrastructure	<ul style="list-style-type: none"> ▶ Assess feasibility of pipeline use for biofuels transport ▶ Integrate GIS mapping capabilities across federal agencies
Blending	<ul style="list-style-type: none"> ▶ Oversee intermediate blends testing ▶ Formulate blends policy statement
Environment, Health and Safety	<ul style="list-style-type: none"> ▶ Inventory Federal activities ▶ Identify supply chain risks & mitigation options

The Technical Advisory Board (TAC) meets quarterly to advise the Board and consult regarding administration of the BRDi

Current TAC Members

Member	Affiliation	Term Ending
Gil Gutknecht	co-chair	November 2010
W. Henson Moore	co-chair	November 2009
Robert Ames	Tyson Food	November 2009
William Berg	Dairyland Power Cooperative	November 2009
David Bransby	Auburn University	November 2011
Ralph Cavalieri	Washington State University	November 2009
Pamela R. Contag	Cygnnet Biofuels	November 2011
Bob Dinneen	Renewable Fuels Association	November 2010
Scott Faber	Food Products Association	November 2009
Richard Hamilton	Ceres Inc.	November 2010
Douglas Hawkins	Rohm & Haas	November 2010
Dermot Hayes	Iowa State University	November 2011
E. Alan Kennett	Gay & Robinson Sugar	November 2011
Charles Kinoshita	University of Hawaii	November 2010
Craig Kvien	University of Georgia	November 2011
Eric Larson	Princeton University	November 2010
Jay Levenstein	FL DofAg & Consumer Services	November 2010
Mark Maher	General Motors	November 2011
Timothy Maker	Biomass Resource Center	November 2009
James Mann	Arborgen	November 2011
Jim Martin	Omni Tech International	November 2010
Jim Matheson	Flagship Ventures	November 2011
Mary McBride	CoBank	November 2009
Shirley Neff	Association of Oil Pipe Lines	November 2010
Mitchell Peele	North Carolina Farm Bureau	November 2011
Michael Powelson	Nature Conservancy	November 2011
Glenn Prickett	Conservation International	November 2011
Tom Simpson	Railway Supply Institute	November 2010
J. Read Smith	Agriculture Energy Work Group	November 2011
Richard Timmons	Am SLRR Association	November 2010
David V. Griend	ICM	November 2011
Edwin White	State University of New York	November 2010
Rodney Williamson	Iowa Corn Promotion Board	November 2011

TAC Roles and Activities

- ▶ Official functions of the Advisory Committee include:
 - ▶ To advise the Secretary of Energy, the Secretary of Agriculture, and the points of contact concerning
 - The technical focus and direction of requests for proposals issued under the Initiative; and
 - Procedures for reviewing and evaluating the proposals;
 - ▶ To facilitate consultations and partnerships among Federal and State agencies, agricultural producers, industry, consumers, the research community, and other interested groups to carry out program activities relating to the Initiative; and
 - ▶ To evaluate and perform strategic planning on program activities relating to the Initiative.
- ▶ The TAC holds quarterly, public meetings. The committee receives an update on the Board's actions and suggests future Board activities/directions for Board work.

The Biomass R&D Initiative (BRDi) is a mechanism to fund important biofuels and biobased products RD&D

- ▶ **The BRDi was created by legislation to ensure competitively awarded grants, contracts, and financial assistance are provided to, or entered into with, eligible entities to carry out research on and development and demonstration of**
 - ▶ Biofuels and biobased products; and
 - ▶ The methods, practices, and technologies, for the production of biofuels and biobased products. the methods, practices, and technologies, for the production of biofuels and biobased products.
- ▶ **The objectives for the BRDi is to develop:**
 - Technologies and processes necessary for abundant commercial production of biofuels at prices competitive with fossil fuels
 - High-value biobased products
 - To enhance the economic viability of biofuels and power;
 - To serve as substitutes for petroleum-based feedstocks and products; and
 - To enhance the value of coproducts produced using the technologies and processes
 - A diversity of economically and environmentally sustainable domestic sources of renewable biomass for conversion to biofuels, bioenergy, and biobased products

BRDi Technical R&D Focus Areas

Technical Area	Brief Description
Feedstocks Development	▶ Feedstocks and feedstock logistics relevant to production of raw materials for conversion to biofuels and biobased products.
Biofuels and Biobased Products Development	▶ The development of diverse cost effective technologies for the use of cellulosic biomass in the production of biofuels and biobased products; ▶ Product diversification through technologies relevant to production of a range of biobased products that potentially can increase the feasibility of fuel production in a biorefinery.
Biofuels Development Analysis	▶ Strategic Guidance – Analysis of the application of biomass technologies to improve sustainability and environmental quality, cost effectiveness, security, and rural economic development.
	▶ Energy and Environmental Impact - Evaluations of the impact of expanded biofuel production on the environment and on the food supply, including development of tools for LCA.
	▶ Assessment of Federal Land - Assessments of the potential of Federal land to increase the production of feedstocks for biofuels and biobased products.



Biomass Research and Development Initiative

- **Purpose:**
Support of research, development and demonstration on biobased products, biofuels, and biopower.
- **Eligible Recipients:**
Institutions of Higher Learning; National Laboratory; Federal Research Agency; State Research Agency; Private Sector Entities and Nonprofit Organizations or a consortium of two or more of entities described above.



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Biomass Research and Development Initiative- FY 09 Funding Results

- Over 900 pre-applications received
- 135 were invited to submit a full application
- 12 applications totaling \$24.4 million were awarded

Biomass Research and Development Initiative- FY 09 Funding Results (continuation)

Technical Areas:	Number and Dollar Amount	Targeted Percent	Actual Percent
Biofuel and Biobased Products	6 - \$10,891,506	50%	44%
Feedstock Development	3 - \$8,511,263	35%	35%
Biofuels Development Analysis	3 -- \$ 5,079,425	15%	21%
Totals:	12 -- \$24, 482,194	100%	100%



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Biofuels Interagency Working Group

On May 5, 2009, President Obama signed the directive establishing a new working group to be chaired by the Secretaries of Energy and Agriculture and the Administrator of the EPA.

The group will work with the National Biomass Research and Development Board on:

- Creating a *biofuel market development program* to boost next-generation biofuels, increase use of flex-fuel vehicles, and assist retail market development
- Coordinating infrastructure policies
- New policy options to promote sustainability



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Any Questions?

