

# Energy Efficiency, Renewable Energy, The Bioeconomy

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# ND Biomass Energy Task Force

## (ND Department of Commerce)



- Convene a Task Force of representatives from agencies and organizations associated with or interested in biomass for energy in North Dakota
  - Review biomass energy activities, development and potential in North Dakota
  - Examine current state policies/programs related to biomass energy development
  - Propose action items to promote using biomass as an energy source including possible legislation for the 2007 legislative session.

# North Dakota Biomass Energy Task Force Participants

## North Dakota Agencies

- Kim Christianson & William Huether, ND Dept. of Comm., Renewable Energy
- Patrice Lahlum, ND Dept. of Ag.; Jackson Bird, ND Forest Service
- Steve Tillotson, Kent Belland & Tom Helland, ND Dept. of Health, Division of Waste Mgmt

## Business

- Dan Bernhardson, American Crystal Sugar; James Flaherty, Sr., Federal Machine
- Richard Irish, ADM - Northern Sun; Mike Gustafson, Northern Great Plains Biofuel Systems
- Dan Skolness, Biomass Products, LLC; Pat Downs, Dakota Enterprise Center-Cooperative Development

## Cities

- Mike Williams, Fargo City Commissioner; Galen Bren, City of Bismarck; Bruce Grubb, Fargo Public Utilities

## Electric Utilities

- Al Christianson, Great River Energy; Mark Remer, Keith Kelly & Loren Laugtug, Ottertail Power Company
- Richard Peterson, Xcel Energy; Ron Rebenitsch, Basin Electric Power Coop.; Jeremy Mahowald, Cass County Electric Co-op
- Duane Steen, Montana Dakota Utilities

## Conservation Interests

- Brad Crabtree, Great Plains Institute; Karen Kreil, Keith Trego, Arnold Kruse & Terry Allbee ND Natural Resources Trust
- Randy Renner, Scott McLeod & Jim Ringelman, Ducks Unlimited

## Farm Organizations

- Dan Delahoyde, ND Farm Bureau; Mindi Grieve, ND Farmers Union

## North Dakota State University

- Tim Faller, Cole Gustafson, Ken Hellevang, Vern Hofman, Larry Leistritz, Dwain Meyer, Paul Nyren, Scott Pryor, Kathy Tweeten

## Energy & Environmental Research Center, UND

- Christopher Zygarlicke, Darren Schmidt, & Kerryanne Leroux,
- Cal Thorson & Kris Nichols, USDA Northern Great Plains Research Laboratory
- Mark Wax, USDA Rural Development

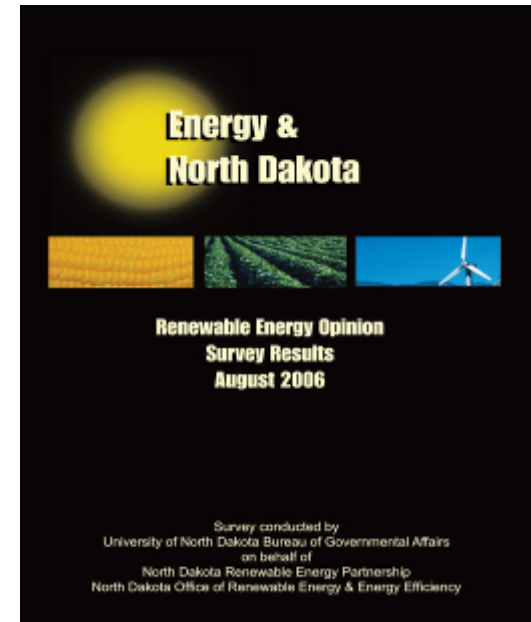
# North Dakota Biomass Energy Action Plan

- ❑ Establish a “Biomass Energy Center” consisting of a multidisciplinary group lead by NDSU research and extension faculty to research biomass production, harvesting, storage, transportation and conversion for the production of biomass energy and value-added co-products. (SB 2288)
- ❑ An incentive program to help the agricultural community demonstrate production, harvest, storage and delivery of a biomass feedstock on a commercial scale to a private sector end user. (HB1515)
- ❑ Develop materials highlighting biomass success stories in the state, including the use of biomass in lieu of coal (ADM Enderlin)
- ❑ Develop and support legislation to establish a PACE loan program for biomass similar to that currently in place in North Dakota for the biodiesel industry. (SB2180)



# ND Renewable Energy Partnership

- The NDREP promotes ethanol, biodiesel, wind and biomass energy production in North Dakota through development and expansion of markets for renewable energy and through support of state and federal legislation enhancing the industry.
- 50+ members including ADM (Velva), ND Dept. Of Commerce, ND Dept. of Agriculture, Cass County Electric Coop., ND Barley Council, ND Biodiesel Task Force, ND Corn Growers Assn., ND Farmers Union, ND Assn of Rural Electric Cooperatives, ND Natural Resources Trust, ND Soybean Growers Assn., Northern Canola Growers Assn., Ottertail Power Co., Wind Energy Council, Xcel Energy, Blue Flint Ethanol, EERC, Great Plains Institute, & Great River Energy.





# Energy Conservation Education Program

(ND Dept. of Commerce - Office of Energy Efficiency & Renewable Energy)

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- ❑ **Agricultural Energy Conservation** – Presentation on CDs & web distributed to extension agents and high school agricultural educators
- ❑ **Farm Energy Audit** – for FFA and 4-H members, and by farmers
- ❑ **Grain Drying Energy Conservation** – News Releases, consultations & seminars
- ❑ **Reduced Tillage** – Revise publication Reduced Tillage Seeding Equipment
- ❑ **Energy Conservation in Structures** – Presentation on web: What You Can Do to Combat High Energy Costs for Home Heating, Publication: Home Energy Audit using Infrared Thermometers,
- ❑ Ten infrared thermometers will be purchased and made available for the public to borrow from their local county office of the NDSU Extension Service.
- ❑ **Biofuels** – Continue educational efforts
- ❑ **Energy Conservation in Irrigation** – Irrigation workshops & pump tests

# Regional Biomass Working Group

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- ❑ **State Policies for Promoting the Next Generation of Biomass Technologies**
- ❑ Iowa, Minnesota, North Dakota, South Dakota & Wisconsin

**<http://www.biomassworkinggroup.org/>**



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# NDSU Extension Service Energy Task Force

- Program planning & coordination
  - Campus & field staff



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