

Final Report for
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Final Report

US Wind Farmers Network

Windustry and the Institute for Agriculture and Trade Policy would like to thank the Department of Energy for its support over the past three years. This funding has allowed us to significantly expand the knowledge base for wind energy opportunities among windy landowners and communities around the Midwest and around the country. Through this program we have produced widely used and distributed new materials and have participated in a wide variety of wind energy events, meetings, and conferences. In this work we have sought to reach a broad audience and grow interest and enthusiasm for wind energy. At the same time, we have sought to provide tools, detailed case studies, and other technical resources that deepen our constituency's knowledge of wind energy options. All of this has served to facilitate development of many actual wind energy projects, particularly projects that emphasize local and community benefits.

Overall, Windustry has significantly grown our programs and capacity over the course of this project. Through our participation in a wide variety of wind energy events and conferences and the wide dissemination of our educational materials, our contact database has grown from about 2,500 to over 6,000 names. These contacts are largely farmers and residents from rural communities who are either actively participating in wind development or interested in the possibly. This group regularly receives our newsletter and other communications. Similarly, our online audience has exploded since 2001. During the first quarter of this project (September 2001 through November 2001), the Windustry website average just over 4,000 visitors per month. During the final quarter of this project (June 2004 through August 2004) www.windustry.org averaged more than 16,000 visitors per month. The Windustry website was previously funded by the Department of Energy and although it was not among the priorities for this contract, many of the new materials we produced found their widest distribution online. These dramatic expansions of our audience can be attributed to the growing interest in wind energy around the country in general, the particular rise in interest in community and locally owned wind projects, and Windustry's on-going position as a leader in providing sound information and technical resources.

Below is a more detailed listing of our accomplishments and activities related to this project.

New Materials:

Over the past three years, we have produced a wide variety of new materials and tools for landowners and rural communities interested in wind energy opportunities. These materials range from official Windustry Newsletters and Conference Proceedings made freely available on our website, to customized fact sheets and articles for wind energy meetings. Over the course of this contract, we have developed an extensive set of new materials and resources that have significantly expanded our ability to provide high quality, detailed information on wind energy and wind energy options for windy landowners and communities.

The following is a more detailed list of some of the materials and publications produced for this project:

Windustry Newsletters:

Windustry Newsletters focus on providing detailed information on funding opportunities for wind projects, wind energy policy developments, wind energy events, and especially, innovative wind energy projects. Most of our newsletters feature a detailed case study of a particularly successful project that has the potential to be replicated.

2002

- Publication of Spring 2002 Windustry Newsletter featuring the 2002 U.S. Farm Bill's historic energy title that created the U.S. Department of Agriculture's Renewable Energy and Energy Efficiency Grant program.
- Publication of Fall 2002 Windustry Newsletter featuring Minwind I & II, innovative farmer-owned wind projects.

2003

- Publication of Spring 2003 Windustry Newsletter, featuring school wind energy projects, and specifically a case study of the Eldora-New Providence School District wind project in Eldora, Iowa.
- In October, Windustry published the Fall 2003 Windustry Newsletter, featuring the Rosebud Sioux Tribe's pioneering wind energy project.

2004:

- We researched and began preparing several other Windustry Newsletter articles during the period of this project. They have not been published yet because the featured wind projects are not yet complete or have some outstanding issue or question that we would like to see resolved before we publicize them as example projects. These articles will be published as projects progress. Some of the project currently being researched are:
 - Carleton College wind project.
 - Rural Electric Cooperative wind projects in Illinois and Minnesota that received USDA grant funding in 2003.
 - Hull, Massachusetts municipal wind project. The town of Hull successfully installed one wind turbine in late 2001, but is currently considering plans for a second turbine.
 - Southwest Minnesota transmission upgrade for wind energy and the resulting 60 MW community wind set aside.

Conference Proceedings:

Windustry hosted and organized two major conferences from 2001 to 2004. The events themselves were not in the scope of this contract, but producing both sets of conference proceedings was an important part of this project. The conference proceedings are rich sources of information that allow the connections and discussions begun at the events to live on.

2003:

- Windustry's Wind Energy: New Economic Opportunities Conference Proceedings. Published on the Windustry website, www.windustry.org/conferences/november2002/nov2002_proceedings, in January, 2003 following our November 2002 conference in Minneapolis that featured information on Minnesota and the Midwest. The proceedings include visual presentations, audio clips and session descriptions from the conference that featured topics such as What makes a good

wind site? Financing Wind Projects, Small-scale Wind Systems, Wind Rights: a negotiable asset, Interconnection and Transmission, and Steps to Build a Utility-scale Wind Project.

2004:

- In 2004 we produced a large set of new informational materials in the form of Conference Proceedings from the national Community Wind Conference. Visual presentations, audio clips, and session summaries are available for the many topics covered at the conference, including: financing, working with a utility, case studies, public policy, project developing, siting and permitting, specific community project opportunities, USDA grants and funding options, and much more. The proceedings are available online through our Wind Farmers Network at www.windfarmersnetwork.org or directly at <http://windfarmersnetwork.org/eve/ubb.x?a=tpc&s=9131011&f=56410342&m=4860062272&r=4860062272#4860062272>.

Other publications and resources:

2001:

- Began the process of thoroughly updating Windustry materials and identifying needs for new materials.

2002:

- Thoroughly updated Windustry “Wind Basics” fact sheets and other materials frequently used at events and wind energy meetings.

2003:

- In Spring 2003, Windustry developed new fact sheets on the economic development impacts of wind energy in Minnesota with The Minnesota Project and the Southwest (MN) Regional Development Commission.
- Completed a major update and re-organization of our WindProject Calculator, a tool for performing economic analysis on potential wind sites that is made freely available on our website.

2004:

- In response to fast growing interest in community wind we created two new vehicles for sharing community wind information: 1) A list serve to facilitate discussion and dissemination of community wind news and ideas and 2) a new section of the Windustry website to serve as a community wind information clearinghouse (www.windustry.org/community). We are continually posting new materials to this section of our website, including an electronic version of the poster we presented at Global Windpower, new project case studies, presentations from the many wind energy workshops we participated in so far in 2004, as well as links to other reports and information sources on community wind.
- Through the Wind Farmers Network, we began publishing a new feature in 2004 called Expert Q&A. Each session allows Network members to submit questions to different wind energy experts. Our first featured expert was Keith Bolin, the lead organizer of the Bureau Valley School wind project in Illinois. The goal of these “Q&As” is to provide regular access to wind energy experts in between large conferences and events.

Outreach Efforts: Meetings, Events and Speaking Engagements

Windustry has participated in a wide variety of wind energy events over the past 3 years. We have used these opportunities to distribute our new materials and build connections with windy landowners, farm organizations, utilities, potential wind energy investors, the wind industry, state and federal agencies, local officials and community leaders. Since 2001, Windustry has grown significantly by expanding its full time staff from one to four and greatly increasing the depth of our resources and materials. Below are some of the highlights of events we have participated in as organizers, exhibitors, presenters, and attendees during the course of this contract.

2001:

- Participated in wind energy meetings in Utah, Montana, Idaho, South Dakota, and Illinois during the fall quarter. Windustry made presentations and provided informational materials at all of these meetings and contributed to planning and organizing several of them. All were well attended by rural landowners, community leaders, and local utilities.

2002:

- Participated in planning the Renewable Energy and Agriculture Summit held in St. Paul in February. The event was sponsored by the McKnight Foundation and the Energy Foundation to pursue regional strategies for growing the contribution of renewable energy to the economy of the Upper Midwest.
- Presentation and participation at the Oklahoma Wind Energy Conference, including providing extensive follow-up information to an OK state legislator working to engage the OK business community in wind power.
- On-going participation in efforts to implement the 2002 Farm Bill Energy title, working with the Minnesota USDA Rural Development office and other partners.
- June- Midwest Renewable Energy Fair, attended by more than 10,000 people, plus several other smaller sustainable agriculture and renewable energy events over the course of the summer.
- Presentation of *Wind Energy: New Economic Opportunities* conference: November 21-22, 2002. Featured Citizen and Landowner Workshops: What makes a good wind site? Financing Wind Projects, Small-scale wind systems, Wind Rights: a negotiable asset, Interconnection and Transmission, and Steps to build a utility-scale wind project. This event was not directly part of this work program, but it was highly related.
- From September-November 2002, Windustry participated in other wind meetings held primarily in the Midwest. In October, Windustry prepared and delivered wind energy economic development information at the wind energy meetings in Lawrence, Kansas. The meetings were held over three days, each day with a different emphasis ranging from small wind to large wind and working with public power entities.

2003:

Windustry participated in an increasing number of events in 2003 as our staff grew and interest in wind energy opportunities expanded to more communities and states.

- In the early spring of 2003, Windustry worked with the University of Minnesota Extension Service and the Southwest Regional Development Commission to organize three wind energy information meetings for farmers in southern Minnesota. Windustry also participated

in similar wind meetings organized by other groups, including events in Adrian, Worthington, and Dodge Center, Minnesota. Altogether, nearly 1,000 people, mostly farmers and residents of rural communities, attended these meetings.

- Missouri: Windustry Executive Director Lisa Daniels gave two presentations at Growing the Rural Economy with Renewable Energy: Windfarming and Bioenergy - New Crops for Missouri Farms on March 6 in Columbia, Missouri.
- North Dakota: On March 24, Windustry had an exhibit at the Wind Energy and Rural Development in North Dakota IV Conference in Bismarck, North Dakota.
- Wisconsin: On April 11, Windustry presented at a Utility-Scale Wind Development Workshop for farmers and landowners in Janesville, Wisconsin.
- Texas: Two Windustry staff members attended the national American Wind Energy Association conference in Austin, Texas in late May. Building and maintaining connections in the wind industry is central to our ability to provide detailed, accurate information on the wind development process and options for farmers and windy communities. Also participated in the Wind Powering America's Wind Working Group State Summit.
- Oklahoma: Windustry participated in planning the Oklahoma Wind and BioEnergy conference in Norman, Oklahoma. Windustry Executive Director Lisa Daniels presented on "Economic Development for Landowners and Communities" and gave an "Introduction to the Wind Farmers Network" in a session focused on economic development in a track called Business and Research Opportunities.
- In July, Windustry's work gained international exposure when Executive Director Lisa Daniels traveled to Segovia, Spain to give a presentation at the Solar-Wind-Hydrogen International Conference. This international work was continued when Windustry Program Association Sarah Johnson presented at the World Wind Energy Association conference in Cape Town, South Africa in November. (These trips used other funding sources, but they contributed substantially to growing the audience for our work.)
- In August, Windustry participated in a central Minnesota renewable energy fair (Windy River Sustainable Agriculture and Renewable Energy Fair) organized by the Minnesota Sustainable Farming Association. Windustry's Wes Slaymaker gave a presentation on opportunities for large-scale wind energy development.
- Utah: Lisa Daniels presented at the Utah Wind and Solar Workshop in October.
- South Dakota: Windustry participated in a series of wind energy meetings in South Dakota in October including the National Wind Coordinating Committee's Business meeting, Wind Powering America South Dakota statewide meeting, and the National Rural Electric Cooperative Association meeting.

2004:

- National Community Wind Energy Conference: Windustry's major effort for 2004 was presenting our national conference, *Community Wind Energy*, June 23-24 in Minneapolis, Minnesota. This work was not specifically funded by this program (although Department of Energy/Wind Powering America were official sponsors), but this effort was directly related to our wind energy outreach and education work. The conference was very well received and attended. More than 400 hundred people from 35 states attended, joined the discussion, and learned about what it really takes to put together a successful community wind project. We had a wide variety of participants, sponsors and exhibitors, including farmers, community leaders, bankers, wind energy equipment and service companies, legal experts, financing experts, wind project developers, policy experts, students, advocates, utilities, state and federal agencies, and many others.

- Montana: Windustry Executive Director participated in a highly successful series of USDA renewable energy program outreach meetings in Montana in early February. Over 400 people attended 4 meetings over the course of 2 days in Billings, Glendive, Havre and Great Falls.
- North Dakota: Windustry exhibited at Wind Energy and Rural Development in North Dakota V, the annual conference sponsored by U.S. Senator Byron Dorgan. Program Associate Sarah Johnson was also part of a Farm Bill workshop held in conjunction with the conference.
- Illinois: Windustry participated in a series of wind energy seminars in Illinois organized by the Illinois Institute for Rural Affairs based on a guidebook prepared by Windustry called “Harvest the Wind”.
- Chicago, Illinois: Windustry staff participated in the largest wind energy conference ever held in North America, Global Windpower 2004. Presented at poster titled “Community Wind Energy: an emerging market force in the U.S.” and worked to bring farmer issues and community benefits into the conference dialogue.
- Chicago, Illinois: Participated in Wind Powering America’s Wind Working Group State Summit. At this meeting, Lisa Daniels received a Regional Wind Advocacy Award for regional leadership, creativity, and commitment to wind energy development.
- Minnesota: In early May, Windustry participated in the Living Green Expo at the Minnesota State Fair Grounds. This annual event draws more than 10,000 renewable energy-minded people from all over Minnesota.
- Kansas: Project Engineer Wes Slaymaker also participated in two USDA renewable energy grant workshops in Kansas in conjunction with the Kansas State USDA Rural Development office.
- Participated in a variety of summer agriculture/renewable energy events around Minnesota and the Midwest. The main highlight was an invitation to be a guest host for the Minnesota Department of Agriculture’s renewable energy exhibit at the Minnesota State Fair.