



NextGen Energy Board

2011 Report to the Legislature

Quinn Cheney, 651-201-6180
Christina Connelly, 651-201-6220
625 Robert St. N., St. Paul, MN
www.mda.state.mn.us

February 1, 2011

Table of Contents

Executive Summary	3
Background.....	4
NextGen Energy Board Role and Composition.....	5
NextGen Energy Board Strategic Vision.....	6
Recommendations and Action Items	7
NextGen Energy Grant Program	9
Appendix A: NextGen Energy Board Legislation.....	13
Appendix B: 2010-2011 NextGen Energy Board Activities.....	15

Pursuant to Minn. Stat. § 3.197, the cost of preparing this report was approximately \$7,000.

In accordance with the Americans with Disabilities Act, an alternative form of communication is available upon request. TDD: 1-800-627-3529

An Equal Opportunity Employer

Executive Summary

The NextGen Energy Board was created by Governor Tim Pawlenty and the Minnesota Legislature in 2007. By law, the Board's purpose is to explore policies and opportunities for the state "to most efficiently achieve energy independence, agricultural and natural resources sustainability, and rural economic vitality." The Board is comprised of 20 members—7 of whom are appointed by the governor—from state government, the legislature, industry and other stakeholder groups.

In 2010, changes to policies and the economic climate for biofuels at both the state and federal level led the Board to modify its scope to focus on three high-level goals: 1) decrease reliance on fossil fuels in Minnesota; 2) encourage energy self-reliance and security in the state; and, 3) promote environmental and economic sustainability in the production and use of homegrown renewable fuels. The Board's strategies and objectives related to these goals.

The Board also updated its recommendations to include actions centered on coordinating state and federal efforts, improving public perception through better access to information and reducing regulatory barriers.

In 2008, the Board provided approximately \$3 million in grants to eight bioenergy projects across the state. Two projects have completed work; two have terminated early due to an inability to finish during the grant timeframe and another has indicated likely early termination as well. Three other projects are ongoing and anticipate completion by May 1, 2011 or sooner.

Introduction

This report is submitted pursuant to Minnesota Statutes §41A.105, subd.3:

NextGen Energy Board; Duties.

The board shall research and report to the commissioner of agriculture and to the legislature recommendations as to how the state can invest its resources to most efficiently achieve energy independence, agricultural and natural resources sustainability, and rural economic vitality. The board shall:

(1) examine the future of fuels, such as synthetic gases, biobutanol, hydrogen, methanol, biodiesel, and ethanol within Minnesota;

(2) develop equity grant programs to assist locally owned facilities;

(3) study the proper role of the state in creating financing and investing and providing incentives;

(4) evaluate how state and federal programs, including the Farm Bill, can best work together and leverage resources;

(5) work with other entities and committees to develop a clean energy program; and

(6) report to the legislature before February 1 each year with recommendations as to appropriations and results of past actions and projects.

Background

Minnesota is a recognized national leader in policies that promote biofuels and other biomass-based energy while ensuring local production benefits. The state was first in the nation to implement statewide 10 percent ethanol and 2 percent biodiesel blending requirements, as well as a producer payment program to incentivize homegrown ethanol production. Minnesota continues to lead with mandates for 20 percent ethanol and biodiesel blends in 2013 and 2015, respectively, and a goal of producing 25 percent of the state's ethanol from cellulosic materials by 2015.¹ Minnesota is also a national leader in "E85" infrastructure with over 350 fueling stations for flex-fuel vehicles throughout the state.²

In recent years, the biofuels industry as a whole has enjoyed enormous support—coupled with significant challenges. The federal Energy Independence and Security Act of 2007 established the current Renewable Fuel Standard (RFS2), which guarantees a market for current and future biofuels by mandating 36 billion gallons of renewable fuels by 2022.³ Additional federal support for biofuels—such as grants, loans and tax breaks—demonstrated further optimism at the national level. The biofuels industry has experienced rapid growth among existing plants seeking to innovate and in cellulosic and other advanced biofuel developments.

At the same time, however, public perception of biofuels has waned with the emergence of debates about food and fuel, land use, and other potential social and environmental impacts. In addition, cellulosic technology—while continuing to advance—is still not commercially viable, causing enthusiasm to dissipate. Market and technological feasibility has also been called into question in terms of the availability of blender pumps for mid-level biofuel blends, the reliability of those fuels in conventional vehicles, and the logistics of transporting and storing large amounts of bulky biomass to

¹ Cellulose is the main component of the cell walls of plants. Cellulosic materials that can be made into energy products include wood waste, corn stover (leaves, stalks, and cobs), native prairie grasses (switchgrass, Miscanthus, etc.) and non-edible parts of plants, among others.

² E85 is a blend of 85 percent ethanol and 15 percent gasoline; flex-fuel vehicles are specially designed to run on gasoline or any blend of up to 85 percent ethanol.

³ P.L. 110-140.

cellulosic biofuel production sites. Declining perceptions coupled with the ongoing economic slump has led to a reduction in both state and federal support for biofuels, straining the current industry and hampering the development of advanced biofuels.

NextGen Energy Board Role and Composition

In 2007, Governor Pawlenty and the Minnesota Legislature established the Next Generation Energy Board (NextGen) to ensure Minnesota’s continued leadership in bioenergy policy and development. The Board’s primary focus is to examine the use of the state’s resources to decrease our reliance on fossil fuels; to increase our use of homegrown energy sources; to work towards agricultural and natural resources sustainability; and to ensure rural economic vitality.⁴ The Board is specifically tasked with developing recommendations and building consensus for the development of “next generation” of biofuels in the state, as defined in statute (see Appendix A).⁵

The NextGen Energy Board was formed during a period of relative optimism and with a focus on the Minnesota market. However, the increased attention on biofuels and other biomass-based energy at the national level—both in terms of optimistic support and negative perception—presents a unique opportunity for the Board to hone its strategy and continue working to steer Minnesota in a positive leadership direction.

In 2010, the Board was comprised of 20 members, seven of whom were appointed by Governor Pawlenty*. The total membership includes:

- State Senator Ellen Anderson (District 66)
- Wayne Brandt*, Minnesota Forest Industries
- Robert Elde*, University of Minnesota Initiative for Renewable Energy and the Environment (IREE)
- John Frey*, Minnesota State Colleges and Universities (MnSCU)
- William Grant*, Izaak Walton League
- State Representative Bill Hilty (District 8A)
- Commissioner Mark Holsten, Minnesota Department of Natural Resources
- Commissioner Gene Hugoson, Minnesota Department of Agriculture
- State Representative Al Juhnke (District 13B)
- State Representative Doug Magnus (District 22A)
- Kelly Marczak*, American Lung Association
- Commissioner Dan McElroy, Minnesota Department of Employment and Economic Development
- Commissioner Paul Eger, Minnesota Pollution Control Agency
- Thom Petersen*, Minnesota Farmers Union
- State Senator Julie Rosen (District 24)
- Teresa Spaeth, Agriculture Utilization Research Institute (AURI)
- Paul Stark*, Minnesota Farm Bureau on
- Douglas Tiffany*, Minnesota Institute for Sustainable Agriculture (MISA)

⁴ Although not directly germane to the NextGen Energy Board’s charge, the Board acknowledges the importance of energy conservation and the use of renewable energy sources other than biomass, such as solar, wind, geothermal, to supplement biomass energy initiatives. Placing biomass energy initiatives in this context will help ensure that these initiatives remain consistent with sustainable, available biomass and environmental needs.

⁵ MS §41A.105.

* Denotes NextGen Energy Board members appointed by Governor Pawlenty.

- State Senator Jim Vickerman (District 22)
- Commissioner Glenn Wilson, Minnesota Department of Commerce

As a result of the November elections, membership of the NextGen Board may change under Governor Mark Dayton.

NextGen Energy Board Strategic Vision

Strategic Vision

The NextGen Energy Board supports policies for the production and use of biomass-based energy and fuels to replace fossil fuels and provide maximum benefit to the state’s economy. These policies are guided by the principles of rural economic vitality, environmental sustainability, and energy security through energy conservation, increased use of homegrown renewable resources, and reduced reliance on fossil energy.

Minnesota's bioenergy policies have created prosperity for Minnesota farming communities, improved air quality, reduced carbon emissions, displaced petroleum use and encouraged public acceptance of biofuels for widespread use. The NextGen Energy Board’s policies promote the continued improvement of existing biofuels industries and support innovation in the next generation of bioenergy feedstocks and technologies while ensuring local benefits and sustainable solutions.

The NextGen Energy Board has identified three high-level goals that guide the objectives and strategies for meeting its strategic vision: 1) decrease reliance on fossil fuels in Minnesota; 2) encourage energy self-reliance and security in the state; and, 3) promote environmental and economic sustainability in the production and use of homegrown renewable fuels.

Objectives

Through a series of facilitated discussions, the NextGen Energy Board narrowed its focus on meeting the following objectives to promote the goals of the strategic vision.

- 1) To decrease reliance on fossil fuels:
 - Prioritize investments and incentives for fossil fuel replacements that capitalize on Minnesota’s resources, talents and technologies while ensuring sustained benefits to the state.
- 2) To encourage energy self-reliance and security:
 - Strengthen Minnesota’s current biofuel industries—including corn-based ethanol and soy-based diesel—to sustain first generation and increase next generation biofuels production;
 - Expand renewable fuel economic opportunities for Minnesota communities and individuals.
- 3) To promote sustainability:
 - Ensure the efficient, innovative and sustainable use of energy and natural resources as well as continued improvement in air quality;
 - Support the development of bioenergy feedstocks and systems;
 - Increase public awareness about the benefits of developing and maintaining biofuels in Minnesota.

Strategies

To help achieve the stated objectives, the Board adopted the following strategies.

- 1) To decrease reliance on fossil fuels:
 - Promote policies and programs for displacing fossil fuel use with energy conservation and the production and use of homegrown renewable resources.
- 2) To encourage energy self-reliance and security:

- Build on existing biofuels industries to increase technological capacity for producing next generation biofuels;
 - Integrate research and development, education initiatives, technology transfer, production incentives, and market creation focused on current and next generation fuels;
 - Create and retain local community and other investments in current and new biofuels enterprises;
 - Create market-based policies that allow farmers, loggers, landowners, and producers to benefit economically from the next generation of bioenergy production.
- 3) To promote sustainability:
- Encourage the evolution of current biofuels production technology toward processes that are more energy efficient, use less water, and consume less fossil energy;
 - Develop sustainable production systems for bioenergy crops, crop residues and materials that minimize fossil and other resource inputs while maximizing environmental benefits.

Recommendations and Action Items

In 2010, the NextGen Energy Board adopted updated recommendations to meet its strategic vision and objectives.⁶ The following provides a brief summary of these recommendations and proposed action items:

Recommendation #1: Coordinate efforts and programs in support of biofuels development

A. Action Item: Work across agencies to create an inventory of state, federal and utility programs and other organizations focusing on bioenergy development; outline roles and responsibilities; identify synergies and/or duplication; recommend potential partnering and/or coordination efforts/programs.

Status: This is a new recommendation; action has not yet been taken.

B. Action Item: Research programs and policies for biofuels development in other states and identify potential benchmarks or models for Minnesota.

Status: This is a new recommendation; action has not yet been taken.

C. Action Item: Build on and leverage Minnesota’s assets and strengths in entrepreneurship and state agency resources.

Status: During the 2009 legislative session, Minn. Stat. 116J.438 created the Green Enterprise Assistance (GEA) and directed the Minnesota Department of Employment and Economic Development (DEED) to lead a multiagency project including the Minnesota Departments of Agriculture, Commerce, Natural Resources, Transportation and the Minnesota Pollution Control Agency “to advise, promote, market, and coordinate state agency collaboration on green enterprise and green economy projects” by utilizing “existing state resources to expedite the delivery of grants, licenses, permits, and other state authorizations and approvals for green economy projects.” To date, state agency staff from these agencies and from Iron Range Resources has coordinated assistance and guidance in Minnesota to

⁶ The Board’s 2008 recommendations are no longer outlined here. Please reference reports from 2008, 2009 and 2010 for details and updates on those recommendations.

approximately 60 companies on regulations, processes and opportunities for starting or expanding “green” businesses in the state.

In addition, DEED’s nine regional Small Business Assistance Centers are available to assist entrepreneurs with loan applications or business plans that may be smaller or more local in nature—for example, starting a home solar installation business.

Recommendation #2: Leverage federal programs that support the Board’s strategic vision

A. Action Item: Align federal resources—such as Federal Farm Bill grants and loans, and the federal Renewable Fuel Standard—with state programs and policies to capitalize on opportunities for Minnesota.

Status: State agency staff work to target federal opportunities for Minnesota by staying apprised of program details and deadlines and disseminating information to clients and stakeholders. Agencies have also provided letters of support to endorse various Minnesota entities applying for federal funds, as well as technical assistance during the grant application process. Staff also plans to continue working with industry and landowners to establish program areas in Minnesota for projects to benefit the state under opportunities like the Biomass Crop Assistance Program.

The Minnesota Department of Agriculture and Minnesota Office of Energy Security recently analyzed all U.S. Departments of Agriculture and Energy grant and loan opportunities to determine how Minnesota compares to other states in receiving these funds. These analyses will help inform staff on how to help Minnesota entities increase their competitiveness in applications for federal funding.

State agencies have discussed potential legislative changes to allow advanced renewable fuels—such as biobutanol—to qualify under the state’s biofuels mandates. Such action would better align Minnesota’s policies with federal renewable fuel requirements.

Recommendation #3: Improve public awareness/perception of biofuels through better and more current information

A. Action Item: Create a catalog of existing, current research and/or data on biofuels development and issues; identify knowledge gaps.

Status: This is a new recommendation; action has not yet been taken.

B. Action Item: Undertake research/data collection gaps identified by Action Item A.

Status: This is a new recommendation; action has not yet been taken.

C. Disseminate current, sound science on biofuels issues such as land use change, energy balance, food and fuel, etc.

Status: The Minnesota Department of Agriculture’s Agricultural Marketing Services Division is engaged in outreach and promotion of the state’s biofuels mandates and programs. Staff regularly attend and present at industry and policy events both locally and nationally; produce and distribute brochures, reports and other marketing materials on Minnesota’s ethanol and biodiesel industries; and work with industry to stay up-to-date on noteworthy developments.

Recommendation #5: Engage in efforts to overcome regulatory barriers in bioenergy development

A. Action Item: Ensure state agency coordination throughout the permitting process.

Status: The Agricultural Utilization Research Institute is working with the Minnesota Pollution Control Agency, University of Minnesota, Minnesota State Mankato, and industry to compile information and assess renewable biomass feedstock emissions for heat and energy production that will assist in biomass project air permitting. This effort could be supported by the NextGen Board.

B. Action Item: Establish outreach efforts to inform bioenergy developers of permitting requirements/processes at an early stage.

Status: The Minnesota Pollution Control Agency created a team of experts to assist Minnesota's ethanol industry with its environmental compliance issues beginning in early 2010. This team was comprised of three experienced staff members dedicated for one year to assist and educate the industry on its environmental responsibilities, practices and policies with the goal of increasing compliance rates. Assistance was offered through a variety of strategies such as voluntary audits, monthly newsletters, monthly web chats and in-person training.

C. Action Item: Pursue legislative action to accelerate and facilitate the permitting process to avoid hindering bioenergy development in Minnesota.

Status: This is a new recommendation; action has not yet been taken.

NextGen Energy Grant Program

The 2007 Minnesota Legislature appropriated \$3 million for NextGen Energy grants to bioenergy projects.⁷ The following spring, the Minnesota Department of Agriculture issued a request for proposals and a technical review committee made recommendations to the NextGen Energy Board from a total of 28 submitted proposals.⁸ In November of 2008, the Board approved and Governor Pawlenty announced eight projects to receive NextGen Energy grants.

To date, most NextGen Energy projects have progressed steadily and some have completed their work—but others experienced unanticipated delays and changes due to the general economic downturn. As a result, the 2010 Legislature extended the grant timeframe for one year, until May 1, 2011. Nonetheless, two projects terminated their contracts with the state early because they were unable to complete their projects within the grant timeframe.

The following is a description of each project and its current status.

Central Minnesota Cellulosic Ethanol Partnership – Little Falls

The Central Minnesota Cellulosic Ethanol Partnership (CMCEP)—a joint venture between the Central Minnesota Ethanol Cooperative, SunOpta BioProcess, and Bell Independent Power Corporation—was awarded \$910,000 to conduct the final stage of a study to determine the feasibility of building, owning

⁷ Following additional actions taken by the Minnesota State Legislature in 2008, approximately \$2.7 million was available for the 2008 NextGen Energy Grant program.

⁸ The technical review committee consisted of staff from the Minnesota Departments of Agriculture, Natural Resources, Commerce, Employment and Economic Development and the Pollution Control Agency.

and operating a 10-million-gallon-per-year cellulosic ethanol plant. The plant would be co-located with the existing Central Minnesota Ethanol Partners corn ethanol plant.

Status: CMCEP has completed its feasibility study and is in the process of finalizing its report to the NextGen Board. The CMCEP partners are reviewing results as well as additional financing options to make a decision about moving to the next step. In September 2010, SunOpta merged with Mascoma Corp.; both partners are reviewing project outcomes and options for the future.

Chippewa Valley Ethanol Company – Benson

The Chippewa Valley Ethanol Company (CVEC) was awarded \$700,000 to introduce new biomass gasification technology to its approximately 48-million-gallon-per-year corn ethanol plant. The technology would allow the facility to use farm or woodland biomass to power plant operations, replacing up to 90 percent of its current dependence on natural gas, and to eventually transition from corn-based to cellulosic ethanol production.

Status: CVEC conducted trials on its pilot gasification system to validate process performance and reliability, but due to a variety of issues, commercialization of the process was significantly delayed. In January of 2010, the NextGen Board approved a request from CVEC to reallocate grant funding to studying densification of biomass char, a byproduct of gasification. CVEC began densification trials in 2010 but ultimately determined that the project could not be completed within the grant timeframe; CVEC's grant contract with the State of Minnesota has been mutually terminated. Approximately 5 percent of grant funds were expended.

Minnesota Valley Alfalfa Producers – Raymond

The Minnesota Valley Alfalfa Producers (MnVAP) was awarded \$400,000 to demonstrate biomass "pelletizing," in which a variety of biomass materials—such as crop waste, grasses and woodland biomass—are processed into uniform-sized pellets that can be more easily stored and transported.

Status: MnVAP has signed contracts with equipment, construction and electricity companies and is ready to order and install pelletizing equipment. Completion of the project is anticipated for February 2011.

Rick Neuvirth Farm – Elkton

The Rick Neuvirth Farm was awarded \$220,000 to construct and install an anaerobic digester and electric generator to produce and use biogas, heat and electricity. The anaerobic digester will use methane gas produced from the farm's swine manure and other organic residues to generate electricity, replacing nearly 100 percent of the farm's annual electricity and propane consumption and eliminating the need for manure hauling by truck.

Status: Throughout 2009 the Neuvirth Farm conducted feedstock assessments to determine biogas production levels at the facility. The Farm also began preliminary engineering and integration work through site design and equipment specifications. However, due to adverse economic conditions and the loss of several sows from local diseases, Neuvirth Farm has suspended further work on the anaerobic digester project for an undetermined length of time. As such, the grant contract between the State of Minnesota and the Neuvirth Farm was mutually terminated. No grant funds were expended.

Northern Excellence Seed – Williams

Northern Excellence Seed was awarded \$200,000 to construct a 100-kilowatt-per-hour gasifier. This project will demonstrate the viability of burning waste biomass such as grasses to produce electricity, and is potentially replicable throughout the state.

Status: This project is complete. Northern Excellence implemented initial startup of the gasifier and successful syngas production in November 2009; however, the need for additional equipment was identified and the gasifier has since been inoperable. Nonetheless, all tasks under the grant contract were completed within the grant timeframe and budget. Northern Excellence continues to work with its contractor on addressing equipment needs/issues to restart the gasifier in the future.

University of Minnesota Department of Forestry – St. Paul

The University of Minnesota's Department of Forestry was awarded \$100,000 to study the sustainability of the state's approximately 16 million acres of forests, as well as the long-term availability of biomass in the state. The study will identify sustainable forest management practices that may serve to increase the volume of forest biomass available for expanding bioproduct industries.

Status: The Department of Forestry completed the project and delivered its [final report](#) to the NextGen Board in October 2010.⁹

Central Lakes College Ag Center – Staples

The Central Lakes College Ag Center (CLCAC) was awarded \$100,000 to establish and evaluate five perennial energy crops, including four native prairie plants (Switchgrass, Intermediate Wheatgrass, Survivor False Indigo, Prairie Cordgrass, and a Siberian strain of Miscanthus). The project is a partnership between a MnSCU campus, local farmers, and University of Minnesota faculty, and will demonstrate best-management practices for growing and harvesting perennials for use as cellulosic energy crops.

Status: CLCAC has established approximately 30 acres of research plants with a variety of perennial energy crops. Preliminary harvest data suggests that Wheatgrass produced the highest yields, while Miscanthus has demonstrated the ability to withstand cold-weather conditions. Economic modeling on Camelina suggests that using the most cost effective strategies would yield a price of \$2.39 per gallon of biodiesel with this feedstock.

University of Minnesota-Morris

The University of Minnesota at Morris is in the process of installing a biomass gasifier to provide campus heating and help reduce campus energy costs. The campus partnered with the West Central Research and Outreach Center to form the University of Minnesota Renewable Energy Research and Demonstration Center at Morris. This Center was awarded \$50,000 to assess the potential for a biomass servicing company to handle the logistics of collecting, transporting, and storing the large amounts of biomass needed for energy production. The project will also lead to the development of a contract with a biomass producer and establish a model for biomass production.

Status: Due to technical difficulties, installation and operation of the biomass gasifier at Morris has been put on hold. The campus has been conducting feedstock processing and densification trials for agricultural biomass, which will ultimately be used in conjunction with the biomass aggregator research to develop a business model. However, Morris does not believe the project

⁹ The report can be accessed via the following link:

http://www.forestry.umn.edu/prod/groups/cfans/@pub/@cfans/@forestry/documents/asset/cfans_asset_260126.pdf.

can be completed within the grant timeframe and had indicated that it may seek to terminate its contract with the State. No grant funds have been expended.

Appendix A: NextGen Energy Board Legislation

2010 Minnesota Statutes §41A.105

(created by Minnesota Session Laws 2007, Chapter 45, Sec. 47)

NEXTGEN ENERGY.

Subdivision 1. **Purpose.** It is the goal of the state through the Department of Agriculture to research and develop energy sources to displace fossil fuels with renewable technology.

Subd. 2. **NextGen Energy Board.** There is created a NextGen Energy Board consisting of the commissioners of agriculture, commerce, natural resources, the Pollution Control Agency, and employment and economic development; the chairs of the house and senate committees with jurisdiction over energy finance; the chairs of the house and senate committees with jurisdiction over agriculture finance; one member of the second largest political party in the house, as appointed by the chairs of the house committees with jurisdiction over agriculture finance and energy finance; one member of the second largest political party in the senate, as appointed by the chairs of the senate committees with jurisdiction over agriculture finance and energy finance; and the executive director of the Agricultural Utilization Research Institute. In addition, the governor shall appoint seven members: two representing statewide agriculture organizations; two representing statewide environment and natural resource conservation organizations; one representing the University of Minnesota; one representing the Minnesota Institute for Sustainable Agriculture; and one representing the Minnesota State Colleges and Universities system.

Subd. 3. **Duties.** The board shall research and report to the commissioner of agriculture and to the legislature recommendations as to how the state can invest its resources to most efficiently achieve energy independence, agricultural and natural resources sustainability, and rural economic vitality. The board shall:

- (1) examine the future of fuels, such as synthetic gases, biobutanol, hydrogen, methanol, biodiesel, and ethanol within Minnesota;
- (2) develop equity grant programs to assist locally owned facilities;
- (3) study the proper role of the state in creating financing and investing and providing incentives;
- (4) evaluate how state and federal programs, including the Farm Bill, can best work together and leverage resources;
- (5) work with other entities and committees to develop a clean energy program; and
- (6) report to the legislature before February 1 each year with recommendations as to appropriations and results of past actions and projects.

Subd. 4. **Commissioner's duties.** The commissioner of agriculture shall administer this section.

Subd. 5. **Expiration.** This section expires June 30, 2014.

Minnesota Session Laws 2007, Chapter 45

Sec. 3. DEPARTMENT OF AGRICULTURE ...

Subd. 4. Bioenergy and Value-Added Agricultural Products...

\$3,000,000 the first year is for grants to bioenergy projects. The NextGen Energy Board shall make recommendations to the commissioner on grants for owners of Minnesota facilities producing bioenergy, organizations that provide for on-station, on-farm field scale research and outreach to develop and test the agronomic and economic requirements of diverse stands of prairie plants and other perennials for bioenergy systems, or certain nongovernmental entities. For the purposes of this paragraph, "bioenergy" includes transportation fuels derived from cellulosic material as well as the generation of energy for commercial heat, industrial process heat, or electrical power from cellulosic material via gasification or other processes. The board must give priority to a bioenergy facility that is at least 60 percent owned and controlled by farmers, as defined in Minnesota Statutes, section 500.24,

subdivision 2, paragraph (n), or natural persons residing in the county or counties contiguous to where the facility is located. Grants are limited to 50 percent of the cost of research, technical assistance, or equipment related to bioenergy production or \$500,000, whichever is less. Grants to nongovernmental entities for the development of business plans and structures related to community ownership of eligible bioenergy facilities together may not exceed \$150,000. The board shall make a good faith effort to select projects that have merit and when taken together represent a variety of bioenergy technologies, biomass feedstocks, and geographic regions of the state. Projects must have a qualified engineer certification on the technology and fuel source. Grantees shall provide reports at the request of the commissioner and must actively participate in the Agricultural Utilization Research Institute's Renewable Energy Roundtable. No later than February 1, 2009, the commissioner shall report on the projects funded under this appropriation to the house and senate committees with jurisdiction over agriculture finance. The commissioner's costs in administering the program may be paid from the appropriation.

Appendix B: 2010-2011 NextGen Energy Board Activities

July 21, 2010: EverCat Fuels Site Visit; Updates on Federal Greenhouse Gas Reporting Requirements, 2010 Legislative Session

The Board met at the EverCat Fuels site in Isanti; members heard a presentation on the McGyan biodiesel production process and received a “virtual tour” of portions of the facility. David Thornton from the Minnesota Pollution Control Agency provided information on EPA’s proposed rule for greenhouse gas reporting. Thornton and Quinn Cheney, Minnesota Department of Agriculture (MDA), provided an update on the 2010 legislative session. Christina Connelly from MDA updated the Board on the status of NextGen Energy Grant projects.

September 2, 2010: DOE Funding to States; DEED Programs; DriveAlternatives Presentation; GHG Reporting Rule Comment Letter; “Strategy Session”

Ken Brown, Minnesota Office of Energy Security, provided analyses on Minnesota’s performance on U.S. Department of Energy bioenergy grants. Kevin McKinnon from the Minnesota Department of Employment and Economic Development (DEED) presented on the Green Enterprise Assistance team and DEED’s Angel Tax Credit program. The Board heard a presentation from DriveAlternatives, a start-up focused on bringing E85 station info to iPhones and other applications. The Board reviewed a draft comment letter on EPA’s proposed greenhouse gas reporting rule. Mark Lindquist from the Minnesota Department of Natural Resources engaged the Board in a “strategy session” on reframing the Board’s direction.

October 26, 2010: AURI Update; “Strategy Session” continued

The Board heard an update from Teresa Spaeth on AURI activities as well as Kelly Marczak, American Lung Association in Minnesota, on E85, blender pumps and Minnesota’s SmartFleet program. Mark Lindquist then led the Board in a continuation of September’s strategy session to update the Board’s strategic vision, objectives, strategies and recommendations going forward.