ENVIRONMENTAL LAW & POLICY CENTER

AN AMERICAN SUCCESS STORY

THE FARM BILL'S CLEAN ENERGY PROGRAMS

NEW FARM INCOME

NATIONAL ENERGY SECURITY

RURAL ECONOMIC DEVELOPMENT

BETTER ENVIRONMENTAL QUALITY

CONGRESSIONAL SUPPORT FOR THE FARM BILL'S CLEAN ENERGY PROGRAMS

"American farmers and rural businesses are successfully using the Section 9006 clean energy program to leverage hundreds of millions of dollars in private investment for successful new renewable energy and energy efficiency projects. These new energy projects are good for rural economies, good for the environment, and good for our national energy security."

-Senator Tom Harkin (D-Iowa)

"Our insatiable appetite for energy, particularly that from outside our borders, represents one of our gravest security threats. The Energy Title of the 2002 Farm Bill recognized our nation's agriculture and rural sectors' ability to confront these risks. Solutions, such as the Section 9006 program, not only improve our nation's energy equation, but also provide an economic stimulus to our rural economy."

-Senator Richard Lugar (R-Indiana)

"Rural America possesses the resources and the innovative spirit that can lead our nation away from dependence on foreign oil and non-renewable sources of energy. The 2002 Farm Bill took the first steps to help farmers, ranchers and small businesses with energy conservation and production, and I expect we will continue and expand on these efforts in the new Farm Bill. Programs like Section 9006 provide the resources that are helping rural America make practical ideas to save or produce energy a reality. This kind of common-sense, practical program will help transform rural America into an energy resource for the entire nation."

-Representative Collin Peterson (D-Minnesota)

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A New Cleaner Energy Future

Agriculture can strengthen our nation's energy security. More clean renewable energy and energy efficiency in rural America helps to meet our nation's energy needs while boosting local economies, improving environmental quality and strengthening our energy infrastructure. Americans are looking for more clean energy choices, and agriculture can provide them.

The 2002 Farm Bill created programs to help farmers, ranchers and rural small businesses invest in wind power, biofuels, solar power, energy efficiency improvements and other clean energy technologies. These programs offer substantial grants and loan guarantees to jumpstart clean energy projects. Agriculture producers and rural businesses are responding enthusiastically, with applications far exceeding available funds.

These new clean energy programs are a win-win-win-win for farmers and ranchers, national energy security, rural economic vitality and the environment:

- Family farmers and ranchers gain new income streams.
- Energy security is strengthened with diverse, distributed and resilient energy systems. Renewable energy and energy efficiency reduce the risk from fuel supply disruptions and stabilize the power grid.
- Rural economic vitality is increased through investments in rural communities and new jobs in the manufacturing and service sectors.
- Environmental quality is improved by reducing air pollution through less wasted energy and more renewable energy development. Many of these energy sources also help to protect our soil and water resources.

Section 9006 – Cornerstone of the Energy Title

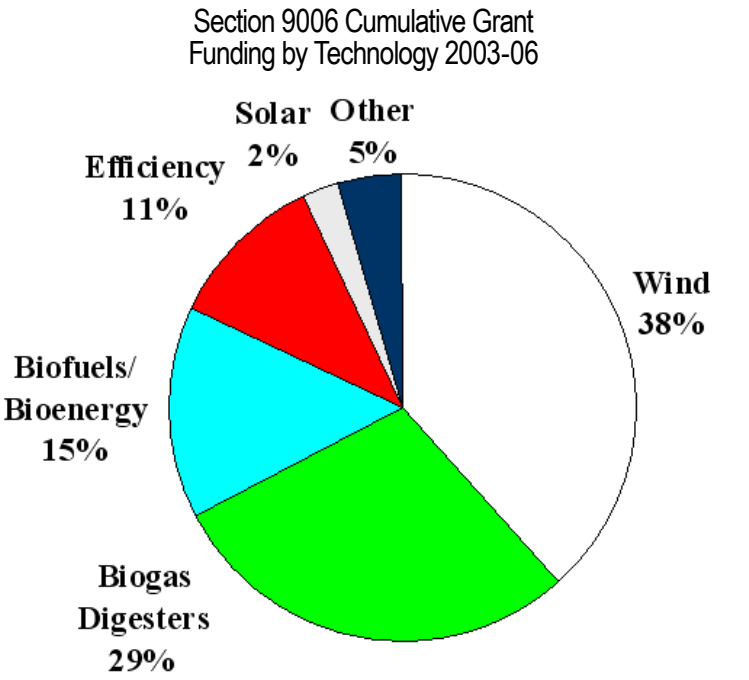
The Farm Bill's Successful New Renewable Energy and Energy Efficiency Program

The cornerstone of the 2002 Farm Bill's energy programs is the Section 9006 Renewable Energy Systems and Energy Efficiency Improvements Program. Section 9006 authorizes the U.S. Department of Agriculture to award $23 million in grants and loan guarantees each year to eligible farmers, ranchers and rural small businesses.

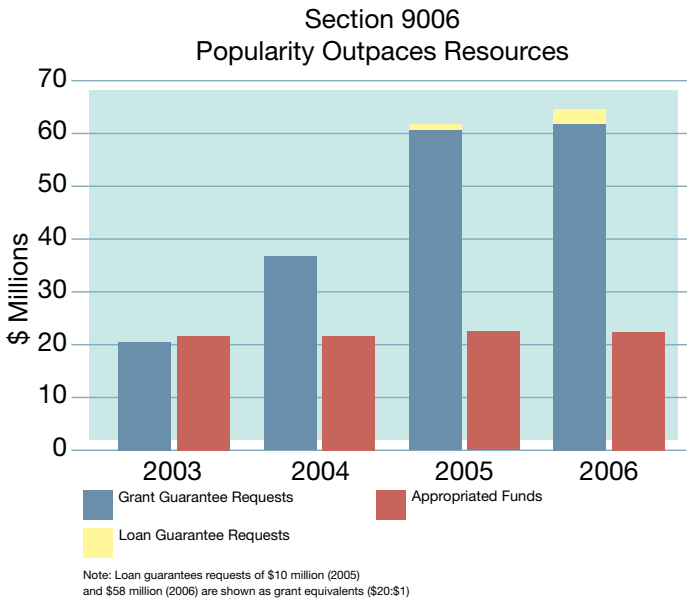
These competitive grants provide up to $250,000 for energy efficiency improvements or $500,000 for renewable energy systems (not exceeding 25% of total project cost). Loan guarantees can go up to $10 million. Eligible technologies must be proven and commercially available.

This program has produced strong results in its first five years. Between 2003 and 2007, the USDA has awarded over $100 million in grants and $91 million in loan guarantees to 1,271 projects in 42 states. These federal funds will leverage almost $1.2 billion in capital investments in rural communities for a range of projects, including small and large wind turbines, anaerobic digesters turning livestock manure into energy, ethanol and biodiesel production facilities, solar electric systems, and energy efficiency improvements at farms and small businesses.

When completed, these projects will boost economic activity in rural areas, create hundreds of new jobs and produce significant clean energy production and efficiency savings for the benefit of all Americans.



Note: 2007 Technology breakdown not yet available



On the following pages, you will read about some of the successful projects supported by grants from the Section 9006 program. They represent the leading edge of a rapidly growing demand for new clean energy choices and opportunities across rural America for the benefit of the entire country.

AN AMERICAN SUCCESS STORY

MinWind III-IX
Luverne, Minnesota

Utility-Scale Wind
Section 9006 Grant: $178,201 Each project
2003

The MinWind utility-scale wind projects on the wind-rich Buffalo Ridge in southwestern Minnesota are among the nation's most heralded examples of locally-owned "community" wind projects. The business model for MinWind III-IX is similar to that for the first two projects, which began producing power in 2002. Each of the seven projects is organized as a separate business, consisting of a single 1.75 megawatt (MW) wind turbine owned by 33 local investors.

Each project applied for and received a Section 9006 grant of $178,201, roughly 10% of the installed project cost. The projects also qualified for Minnesota's renewable energy production incentive.

These projects benefit from the economies of scale and professional management of a larger project. Yet their cooperative-type business structure brings the financial benefits of community wind ownership to a large number of local farmers and landowners.

Mark Willers, President of MinWind Energy, receives many visitors and fields phone calls from people wanting to replicate Minwind's success, and the small prairie town of Luverne is alive with happy wind farm owners.

Neppel Energy
Armstrong, Iowa

Utility-Scale Wind
Section 9006 Grant: $400,000
2003

Paul and Alice Neppel run a large, diversified grain and hog operation with their sons in western Iowa. Faced with an annual electric bill from their livestock buildings that exceeded $200,000 per year, the Neppels began to notice the two wind turbines that the nearby Spirit Lake School district had installed several years earlier. They decided that they, too, could benefit from the strong winds that passed over their property and decided to put up their own turbine.

They learned about the Section 9006 grant program shortly after the program was announced and applied for a grant. They also received an interest-free loan from the Iowa Energy Center and a loan for the balance from their local bank. The project went online in August 2004 and is now producing close to five million kilowatt-hours of electricity annually, enough for 400 Iowa homes. The electricity is being purchased by Alliant Energy under a long-term contract.

This was the first farmer-owned wind project in Iowa and has been a tremendous catalyst for other locally-owned wind projects there. Since the Neppels received their grant, more than two dozen other small locally-owned wind projects have begun in Iowa, many with the help of Section 9006 grants.

Verendrye Electric Cooperative

Minot, North Dakota

Solar Livestock Pumps
Section 9006 Grant: $100,800
2006

Verendrye Electric Cooperative serves 10,600 customers in a 6-county area surrounding Minot, North Dakota. Because it covers such a large area, its costs of maintaining 4,000 miles of distribution lines have always been high. Many of these lines support remote livestock-watering wells and pumps.

Starting in 1990, Verendrye began an innovative program of leasing small solar photovoltaic panels for powering stock-watering pumps to farmers as an alternative to paying for the cost of extending electric lines.

Since farmers pay the majority of costs of extending these lines (as much as $15,000 per mile) and the stock wells are only used in the summer months when the sun is strong, solar panels became a practical and cost-effective alternative.

Last year, Verendrye greatly expanded this program with the help of a Section 9006 grant. They will be using the grant to purchase high-efficiency pumps that are compatible with the solar panels. While farmers will continue to lease the panels, they will be eligible to receive the pumps at almost no cost.

This is a win-win for both the co-op and participating farmers. The co-op is able to reduce its maintenance costs by no longer having to maintain remote, underutilized lines. And farmers save money by having a dependable source of electricity at a lower cost than traditional electric service.

Illinois Rural Electric Cooperative

Pittsfield, Illinois

Utility-Scale Wind Turbine
Section 9006 Grant: $438,000
2003

Illinois Rural Electric Cooperative (IREC), with 10,000 electric customers in central Illinois, installed a 1.65 MW wind turbine that provides about 5% of the peak load for its members. IREC management was eager to build the turbine as a commitment to renewable energy and as a catalyst to encourage additional wind projects in Pike County. Since wind-generated power was more expensive than the co-op's power supply contract and the co-op did not want to pass this increased cost on to its members, it had to find additional sources of funding to support the investment. IREC was able to tap into three separate sources of funding that together covered 50% of the project's capital costs: in addition to a grant from the Section 9006 program, IREC received grants from the Illinois Department of Commerce and Economic Opportunity and the Illinois Clean Energy Community Foundation. The remaining project cost was financed through the Rural Utilities Service.

IREC received the 2005 Wind Cooperative of the Year award by the U.S. Department of Energy. Douglas Faulkner, Acting Assistant Secretary for Energy Efficiency and Renewable Energy, said, "IREC has been honored for its innovation and commitment to wind power. They have demonstrated that wind power can contribute to a cleaner environment and a stronger local economy, and can act as a hedge against rising fuel costs."

Lincolnland Agri-Energy, LLC
Palestine, Illinois

Ethanol Production Facility
Section 9006 Grant: $300,000
2003

Lincolnland Agri-Energy is a majority farmer-owned ethanol production facility located in Crawford County on the eastern edge of Illinois. The plant has an annual capacity of 40 million gallons of ethanol and 128,000 tons of dried distillers grains.

Lincolnland was formed as a new generation co-operative in 2001 with 453 farmer-investors. In addition to the Section 9006 grant, the cooperative found additional investors to help fund the proposed ethanol plant, which is organized as an LLC. Ethanol production began in 2004. Lincolnland is one of two farmer-owned ethanol plants in Illinois.

The plant is a triple-win for area farmers, the community, and energy security. The plant is buying 17 million bushels of corn (from area farmers) and providing a premium to farmers of 7-10 cents/bushel over market prices. Also, 33 local residents work there. The profits are being retained by local investors. Finally, the facility is producing 40 million gallons of renewable, domestically-sourced fuel.

Liquid Resources of Ohio
Medina, Ohio

Ethanol Production Facility
Section 9006 Grant: $500,000
2003

Liquid Resources of Ohio converts expired and spoiled soft drinks, juices and alcoholic beverages into ethanol. By contracting with beverage manufacturers and distributors to recycle spoiled and expired products, Liquid Resources helps to keep these products out of landfills and sewers and convert them into a renewable fuel. Liquid Resources also separates the beverage containers for recycling.

Liquid Resources is Ohio's first new ethanol production facility in 25 years. The privately-held firm is located in a rural area south of Cleveland and has a capacity of 6 million gallons per year.

In addition to the Section 9006 grant, Liquid Resources also received a loan guarantee from USDA's Business and Industry Loan Guarantee Program and a revenue bond from the Ohio Air Quality Development Authority. A commercial bank provided the remaining debt financing.

Tim Curtiss, CEO of Liquid Resources, said that "the 9006 program grant provided us with an important source of capital and credibility. Every dollar of this grant is a dollar of equity we don't have to raise. The loan guarantee provided valuable credit enhancement as we structured our initial financing. For an entrepreneur, that's incredibly valuable. We deeply value the support that USDA has provided to the launch of our company."

TC Biodiesel
Keokuk, Iowa

Biodiesel
Section 9006 Grant: $500,000
+ $2 million loan guarantee 2006

The local investors in Tri-City Energy formed a joint venture with three other Iowa companies to build and operate TC Biodiesel, located near the banks of the Mississippi River in southeastern Iowa. The plant, with an annual production capacity of 5 million gallons, went on line in early 2007. The plant is built in a former General Mills wheat processing facility which helped to lower construction costs and made great use of an abandoned building. TC Biodiesel was built with the assistance of a $500,000 Section 9006 grant and $2 million in Section 9006 loan guarantees. Recently, the plant has also begun to produce "technical grade" glycerin from the byproducts of biodiesel production at Tri City and other nearby plants. This glycerin has higher value use as a de-icing agent, further adding to the revenue of the plant. Future plans call for adding a soybean crushing facility and expanding the plant to 30 million gallons of production per year.

Cozad Alfalfa

Cozad, Nebraska

Bioenergy
Section 9006 Grant: $37,500
2004

Cozad, a southern Nebraska town of 4,000, is known as the "Alfalfa Capital of the World." The surrounding Dawson County grows and produces 25% of the dehydrated alfalfa in the United States. Cozad Alfalfa is one of two local producers of alfalfa pellets. Jon Montgomery, Cozad Alfalfa's owner, was searching for relief from the high cost of natural gas used in the mill's drying operations. That's when he learned about the Section 9006 grant program.

Cozad Alfalfa used its Section 9006 grant to help fund the purchase and installation of a new solid fuel burning system to replace its natural gas system. The project also received a grant from the Nebraska Litter Reduction and Recyling Grant Program administered by the state's Department of Environmental Quality.

The new system uses sawdust from a furniture manufacturer in Lincoln as the primary fuel. It became operational in May 2005 and now displaces over 90% of the natural gas requirements of the dehydration process. The project is expected to pay for itself in 5 years.

"We are a small family-owned ag business," Montgomery said. "The financial assistance provided by USDA was instrumental in making the decision to invest in the solid fuel burner. We also feel good about utilizing a waste fuel that otherwise would be placed in a landfill."

Beasley Forest Products, Inc.

Hazelhurst, Georgia

Bioenergy
Section 9006 Grant: $118,000
2005

Beasley Forest Products is a hardwood sawmill, producing lumber for flooring, siding, cabinetry and furniture. Because green hardwood lumber has a short shelf life before it begins to stain, Beasley had to either deliver it to customers or send it off-site to be kiln-dried. In order to grow as a business, Beasley wanted to be able to kiln-dry and warehouse its lumber on-site.

But the rising cost of natural gas forced the company to rethink its plan. Working with an energy specialist from Georgia Tech, the company decided to install a wood-fired boiler utilizing a portion of the sawdust produced at the facility. The capital costs of a wood-fired boiler are higher than a gas one, so Beasley applied for a Section 9006 grant to offset this cost difference.

The result is not just a boiler that's more economical to operate, but an opportunity to increase revenue by $3 million per year while utilizing a waste product that would otherwise be landfilled.

Darrell Beasley, Vice President of the company, said "this project was absolutely crucial to the future viability of the company."

Muscoda Protein Products

Muscoda, Wisconsin

Bioenergy
Section 9006 Grant: $420,322
2006

Muscoda Protein Products is a third generation family business that produces dried whey isolates and natural cheeses. Faced with rising natural gas prices, the Meister family decided to install a state of the art wood-fired boiler system to generate steam for both cheese and whey manufacturing. The boiler uses 27 tons of hardwood chips and sawdust per day. Each year the $1.7 million project is saving 600,000 therms and saving the company close to $400,000 in avoided natural gas costs.

The wood chips come from a nearby lumber mill, Nelson Hardwood Lumber, which itself also received a Section 9006 grant in 2005 to install a wood-fired kiln at its sawmill.

The boiler has been designed to burn a variety of feedstocks and the firm is experimenting with using its nutrient-rich wastewater to irrigate a field of switch-grass which could eventually fuel the boiler as well.

"We are delighted with the performance of our boiler," said Scott Meister, company president. "Not only are we saving money on our energy bill, we're utilizing wood waste that is literally at our back door. The Section 9006 grant was the springboard to putting this idea into action."

Mississippi Poultry Growers
86 Projects

Energy Efficiency
Section 9006 Grants: $3,000,000 for 86 projects
2003-07

The success of Mississippi poultry producers in using Section 9006 awards to improve the energy efficiency of their broiler houses is a great example of teamwork and the ability to replicate a project across many individual producers with similar energy efficiency opportunities.

Poultry and egg production is the largest agricultural sector in the state, with 2,800 producers generating $2 billion in annual sales. Because most of the poultry producers are contract producers, one of their only controllable costs is energy—and propane costs for heating these poultry houses are high, even in Mississippi. Energy costs consume almost 20% of broiler producers' gross revenue.

Mississippi State Poultry Science Department and the state poultry association held workshops to educate producers about the opportunities to save energy in their operations. The workshops identified the Section 9006 program as a key source of funding to help pay for these improvements. The Southwest Resource Conservation and Development Council then helped to prepare dozens of successful Section 9006 applications during the last four years.

Bennie Hutchins of Southwest RC&D said, "The need to be more energy efficient is especially critical for poultry producers that have older production houses. Most poultry producers with these older houses were already considering making energy efficiency improvements to remain competitive. The potential to offset up to 25% of the cost through a 9006 grant encouraged many of them to make the move."

Nebraska Irrigation Efficiency Projects
238 Projects

Energy Efficiency
Section 9006 Grants: $2,600,000 for 238 projects
2004-07

Irrigation is essential to farming in dry western Nebraska. Yet these large irrigation systems use tremendous quantities of both water and energy. Many of these irrigation systems are relying on diesel generators which became very expensive to operate when fuel prices shot up.

Nebraska Public Power District, the publicly-owned electric provider for the state, working in conjunction with USDA Rural Development staff, has helped over 200 farmers receive Section 9006 grants to replace diesel or propane-fueled irrigation motors with electric ones. At current prices, farmers can save 30% of their irrigation energy costs by converting from diesel to electric.

The success of the Section 9006 program in Nebraska is due to the close cooperation between Rural Development and NPPD. Rural Development did extensive outreach on the program, focusing in on irrigation projects while NPPD staff conducted the energy assessments needed to apply for the grants. Since the average Section 9006 grant for these irrigation efficiency projects was only $7,000, credit is also due to the farmers who worked through the application process.

Crete Food Mart
Crete, Nebraska

Energy Efficiency
Section 9006 Grant: $11,750
2004

Crete Food Mart is a 14,000 square foot family-owned grocery store located in southeastern Nebraska. Peter Clark, the store's owner, learned about the Section 9006 grant program through a newsletter from his grocery distributor. He was interested in cutting his energy costs, especially because some of the store's produce coolers were over 35 years old, and much of the store's other equipment was old and inefficient.

An energy audit of the store provided by Nebraska Public Power District identified energy savings opportunities. Clark then used the grant to help invest in new produce and milk coolers, a walk-in freezer, and high-efficiency lighting fixtures. The projected energy savings are nearly 50% with a payback of less than 5 years.

Apart from the energy savings, the investment is yielding other benefits for the store and the town. Refrigeration maintenance costs are down because the equipment is new. The store also looks better, which is increasing sales.

Overall, the project is improving the store's bottom line, protecting local jobs and helping to maintain a local grocer in Crete.

Value Added Products Co-operative
Alva, Oklahoma

Energy Efficiency
Section 9006 Grant: $82.394
2004

Value Added Products (VAP) is a farmer-owned cooperative that adds value to locally-grown wheat by producing a line of self-rising frozen dough products including pizza crusts, breads and pastries. The cooperative began from scratch just a few years ago and raised over $9 million in equity from over 900 different people. Working with the State of Oklahoma, USDA Rural Development which provided a loan guarantee through its B&I program and local banks, they raised the remaining funds and set out to convert an old Wal-Mart store into a processing facility.

VAP also has received, appropriately, a USDA Value Added Producer Grant, to meet initial working capital requirements.

All of this investment has gone to good use as VAP is now doing over $19 million in sales and has created 70 manufacturing jobs, making it a major employer in this town of 5,000.

Bonnie and Donald Vos
Oskaloosa, Iowa

Energy Efficiency/Grain Drying
Section 9006 Grant: $12,250
2004

Bonne and Donald Vos wanted to upgrade a 40 year-old grain drying facility on their Oskaloosa farm with more efficient equipment. They received a Section 9006 grant to help fund the replacement of the inefficient 3,000-bushel grain bins and drying fans with a new facility that is twice as large.

The Voses dry about 70,000 bushels of corn a year. They estimate that the upgraded equipment saves them over $17,000 in propane costs, or bout 22 cents per bushel, compared to their old system.

Since the Voses installed their new grain dryer, 150 other Iowa farmers have also been awarded Section 9006 grants averaging $25,000 for grain dryer replacements. This demonstrates how the program has served as a catalyst for energy efficiency improvements throughout the state.

Five Star Dairy
Elk Mound, Wisconsin

Anaerobic Digester
Section 9006 Grant: $180,000
2004

Five Star Dairy, an 800-head dairy farm owned by Lee Jensen, began operating its anaerobic digester in June 2005. The digester includes an engine generator set that will use the biogas to generate up to 775 kW of electricity, enough power to supply 600 homes. Microgy, Inc. constructed and will maintain Five Star's digester.

This project is appealing because it is a hands-free operation for Mr. Jensen. All that he needs to supply is the manure. Microgy will maintain the digester. Dairyland Power Cooperative, a large electrical cooperative based in western Wisconsin, is buying all of the biogas under a 30-year contract. Dairyland owns the on-site generator and will sell the power to its members.

The Five Star Dairy project demonstrates a replicable approach for a renewable energy technology that generates farm income while also reducing livestock waste problems. The anaerobic digestion process kills harmful bacteria and decreases odors from the manure. An outside company maintains the system so that the farmer can focus on what he knows best: raising and milking cattle. Finally, the local electric cooperative uses the biogas for electricity generation, lowering the project costs and complexity for the farmer.

Wisconsin, "The Dairy State," is a leader in promoting the use of anaerobic digesters. The state's Focus on Energy program and Biogas Development Group offer extensive outreach and technical assistance to the state's dairy farmers, and their work produces results: In the first five years of the Section 9006 program, USDA has awarded grants to 33 Wisconsin farmers to install anaerobic digesters.

Patterson Dairy Farms
Auburn, New York

Anaerobic Digester
Section 9006 Grant: $296,622
2005

Patterson Dairy Farms is a 7th generation farm with 1,700 dairy cattle and 2,400 acres of land. In 1999, the farm installed a manure treatment system as a first step in controlling odors but eventually decided that an anaerobic digester would be the best means of managing their manure while generating electricity at the same time. In addition to the Section 9006 grant, the farm also received grants from the New York State Energy and Development Authority and the Cayuga County Soil and Water District towards a total project cost of $1.4 million. The digester was completed in October 2005.

The digester handles not only the manure from the farm but also 18,000 gallons of cheese whey that is delivered daily to the farm from the Kraft Foods cream cheese plant located in nearby Lowville.

The biogas produced from the digester produces 4,500 kwh of electricity per day (enough electricity for over 100 homes). Electricity is sold to New York State Electric and Gas under a net metering arrangement, allowing the farm to offset its $75,000 annual electric bill.

"The digester helps us to be better neighbors and better stewards of our land while generating all of our farm's electric needs" said Connie Patterson. "But this project would not have happened without the support we got from USDA and other sources. Right now, the capital costs are just too high and the price we get for the electricity is too low."

Maple Hill Farms

Halowell, Maine

Solar Thermal and PV
Section 9006 Grant: $41,500
2005

Maple Hill Farm is a historic farmstead and Inn located near Augusta, the state capital. The inn has been focused on reducing its environmental impact since installing a 10 kw wind turbine in 2003. In 2005, the Inn was awarded Maine's first-ever Green Lodging Certification.

In 2006, Maple Hill furthered its commitment to renewable energy by installing the largest combined solar hot water and solar photovoltaic system in the state of Maine. The system will supply most of the Inn's hot water needs and, combined with the wind turbine, one half of its electric power.

Maple Hill is demonstrating that solar energy can be a viable investment for small businesses, even in New England. With the high cost of heating oil and electricity there, the owners anticipate a payback of around five years.

Scott Cowger, co-owner of Maple Hill Farm said, " the funding provided by USDA was key to this project moving forward, and we are grateful for its support of this commercial-scale renewable energy project."

Korina Farms

Tehama County, California

Solar Pecan Drying System
Section 9006 Grant: $25,250
2003

Dried fruits and nuts are a multi-billion dollar industry for California growers. The drying process requires natural gas or propane and has exacting standards to meet processor quality requirements. With the abundant sunshine in California, solar drying would seem to be a perfect fit.

Garry Vance farms 62 acres of pecans at Korina Farms, and he dries nuts from his farm and from other growers. Seeking to reduce his high propane costs, he built a new drying facility and incorporated a 5,000 square foot SolarWall™ system into its roof. This system is essentially a roof-mounted metal box which captures the radiant heat of the sun to warm the ambient air in the box. The system then circulates the warm air through the nuts. On sunny days, the system warms the outside air by 20 degrees, providing the optimal drying temperature of 80 degrees.

Korina Farms received a $25,250 Section 9006 grant to help fund the project, which cost a total of $200,000. Korina Farms also received support from the California Air Resources Board. At current propane prices, the project will save over $10,000 in energy costs per year.

This is the first solar pecan-drying facility in the country and is one of several demonstration solar fruit and nut drying projects in California. The challenge in making this investment pay off is the short, but critical, drying season for these crops. By adapting it to other nut crops grown on neighboring farms, Korina Farms maximizes the system's use during the year and also generates more revenue for the farm.

Other Clean Energy Programs

In addition to the Section 9006 Renewable Energy and Energy Efficiency Program, the current Farm Bill includes many other programs to boost farm-based clean energy production. These programs all help to increase our nation's energy security, protect the environment and improve rural economies. Several of these programs have seen their funding cut or were never implemented due to lack of funding. Among these programs are:

Biomass Research and Development Program (Section 9008)

This program, jointly sponsored by the Department of Energy, funds university and private-sector projects focused on utilization of biomass resources for energy production. The research and development supported by this program helps to transform biomass into an important part of America's energy mix.
www.ars.usda.gov/bbcc

Biorefinery Development Grants (Section 9003)

This program, unfunded since 2002, would help to commercialize technologies to convert biomass into a range of other fuels and chemicals. USDA grants could be made available to fund up to 30% of the development and construction costs of new biorefinery projects. This program would especially help to jump-start cellulosic ethanol production, which is now on the edge of commercialization.

Energy Efficiency Audit and Renewable Energy Development Program (Section 9005)

This program, unfunded since 2002, would help farmers and ranchers conduct audits and feasibility studies to determine their best energy efficiency and renewable energy options. This program would help to fill the gap left by states and utilities that have cut back on their energy audit programs, and would maximize the wise investment of public and private dollars for clean energy improvements.

Value-Added Producer Program (Section 6401)

This program provides competitive grants for business planning activities and working capital for producing and marketing value-added agricultural products including renewable energy. The program has helped to fund dozens of feasibility studies for locally-owned wind projects and biofuels facilities.
www.rurdev.usda.gov/rbs/coops/vadg.htm

Other Considerations

Other factors also are driving more demand for farm-based energy:

Gasoline Price and Supply Insecurity

Continuing gasoline price volatility, supply insecurity and pollution concerns are driving broad interest in energy crops and biofuels. Farm Bill Energy Title programs can help us respond to these challenges by helping to commercialize advanced, sustainable biofuels production.

Global Warming

Global warming is the environmental challenge of our generation. The Energy Title offers a major opportunity for agriculture to be a key part of the solutions. The Farm Bill Energy Title can help to displace tens of millions of tons of carbon dioxide and other global warming pollution each year.

Rising Natural Gas Prices

Farmers continue to be hard hit by the sharp increase in fertilizer prices caused by rising natural gas costs (natural gas is 90% of the cost of nitrogen-based fertilizers). Farmers and rural businesses are also facing record propane and natural gas costs for heating and grain drying. Clean energy development can reduce natural gas and propane prices by lowering demand.

Local Ownership

Locally-owned businesses can breathe new life into struggling rural communities. Local ownership means that more income stays and recirculates in the community. The Farm Bill Energy Title's programs offer several different opportunities for local farmers and businesses to invest in clean energy projects.

The 25 x'25 Vision

The broad based 25 x '25 Coalition has laid out a roadmap for America to meet 25% of its energy needs from farm-based energy by 2025. This year, Congress passed a resolution in support of that vision. The Farm Bill Energy Title is an important step in realizing that goal.

Proposed New Energy Title Programs

The following programs are among the many that have been proposed for inclusion in the 2008 Farm Bill Energy Title:

Rural Energy for America Program

The Rural Energy for America Program (Section 9006 of the 2002 Farm Bill) would generate many more clean energy development projects each year if the program were expanded by: 1) ramping up annual funding to $250 million by 2012; 2) increasing the maximum loan guarantee levels to $25 million; and 3) creating a rebate for smaller renewable energy and energy efficiency projects.

Energy Audit and Technical Assistance Program

Farmers have been hard hit by rising energy costs in recent years. This program would provide grants to university extension services, rural electric cooperatives and other public entities. These institutions would then provide training and technical assistance to farmers to help identify ways of reducing energy use and making wise clean energy investments.

Rural Repowering

This new program would provide grant and loan guarantee assistance to industrial and commercial facilities to convert existing boilers for heat and power from conventional fuels to biomass. These projects will help to establish the feedstock infrastructure needed to support a large-scale cellulosic ethanol industry, while providing their own environmental and economic benefits.

Biorefinery Development Grants and Loan Guarantees

The Section 9003 biorefinery grant program was included in the 2002 Farm Bill but never funded. The expanded program would provide grants and loan guarantees to encourage the development of advanced biofuels production facilities capable of producing ethanol and heat or power from cellulosic feedstocks as well as producing value-added chemicals from grain and cellulosic materials.

Bioenergy Reserve Program

An abundant, sustainably-produced feedstock supply of dedicated energy crops is essential to the development of a next-generation ethanol industry. This program would help farmers defray the cost of transitioning from annual row crops to perennial energy crops. Projects would be based on sustainability criteria as well as a demonstrated market for the energy crops.

Low-Carbon Biomass Feedstock Program

This program would provide feedstock support to ethanol plants based on their ability to produce biofuels with lower greenhouse gas emissions. Reductions could be measured through the use of biomass to make cellulosic ethanol or the substitution of biomass for natural gas as an energy input in conventional biofuels production.

Biomass Research and Development

Basic and applied research and development is an essential component of transforming America's energy future. This program would continue to fund university and private-sector research and development projects focused on using biomass resources for energy production.

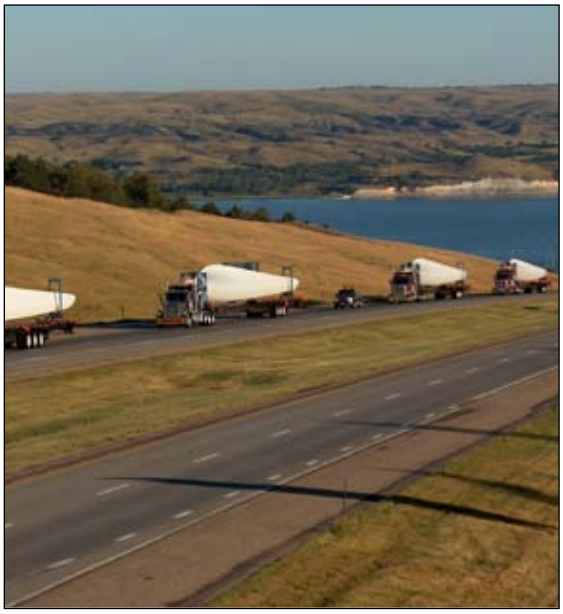
CONGRESSIONAL SUPPORT FOR THE FARM BILL'S CLEAN ENERGY PROGRAMS

"Programs such as Section 9006, which leverage federal funds for private investment in renewable energy innovations, help to provide a more diverse energy base for our nation. The pinch of high energy costs is being felt nationwide and farming operations have been among those hit hardest. The Section 9006 program works to address this problem by rewarding proven clean energy technologies and contributing significantly toward the effort of developing on-farm energy sources. We need to continue to support these kinds of programs to ensure that our country's domestic energy supply remains plentiful and secure."

-Senator Mike Crapo (R-Idaho)

"I strongly support the Section 9006 renewable energy/energy efficiency program because it is one of the only federal programs that comprehensively transforms a clean energy development vision into "refueling pumps in the ground" across rural America. Farms and rural businesses want clean energy choices. Rural America also can supply clean energy to meet a substantial portion of our nation's energy needs while strengthening domestic energy security, boosting farmer income, and improving environmental quality. Section 9006 successfully achieves these objectives."

-Representative Marcy Kaptur (D-Ohio)



ENVIRONMENTAL LAW & POLICY CENTER

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The Environmental Law & Policy Center is the Midwest's leading public interest environmental legal advocacy and eco-business innovation organization. We develop and lead successful strategic advocacy campaigns to protect our natural resources and improve environmental quality. We are public interest environmental entrepreneurs who engage in creative business dealmaking with diverse interests to put into practice our belief that environmental progress and economic development can be achieved together. ELPC's multidisciplinary staff of talented and experienced public interest attorneys, environmental business specialists, public policy advocates, and communications specialists brings a strong and effective combination of skills to solve environmental problems.

ELPC's vision embraces both smart, persuasive advocacy and sustainable development principles to win the most important environmental cases and create positive solutions to protect the environment. ELPC's teamwork approach uses legal, economic and public policy analysis, and communications advocacy tools to produce successes. ELPC's strategic advocacy and business dealmaking involves proposing solutions when we oppose threats to the Midwest environment. We say "yes" to better solutions; we don't just say "no."

ELPC was founded in 1993 after a year-long strategic planning process sponsored by seven major foundations. We have achieved a strong track record of success on national and regional clean energy development and pollution reduction, transportation and land use reform, and natural resources protection issues. ELPC's creative public advocacy effectively links environmental progress and economic development and improves the quality of life in our Midwestern communities.

Visit www.farmenergy.org for current information on the Farm Bill's Clean Energy programs, including application templates, program rules, latest news, previous award recipients and useful contacts.

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