



ENVIRONMENTAL LAW & POLICY CENTER

# AN AMERICAN SUCCESS STORY

## THE FARM BILL'S CLEAN ENERGY PROGRAMS

**NEW FARM INCOME**

**NATIONAL ENERGY SECURITY**

**RURAL ECONOMIC DEVELOPMENT**

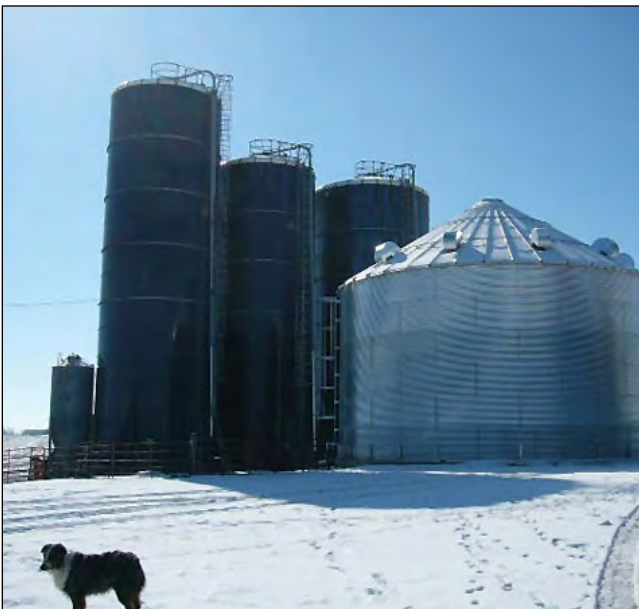
**BETTER ENVIRONMENTAL QUALITY**



# 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)

“Two major energy problems face the United States: our lack of energy independence and our reliance on fossil fuels. Farmers and the agriculture sector in general are in an excellent position to tackle these challenges: they can produce the feedstocks to make renewable fuels, provide the land for wind energy projects, implement energy efficiency improvements, and take other positive actions. Section 9006 helps to transform these projects from vision into reality; in its first three years of existence Section 9006 has leveraged federal incentives into hundreds of millions of private dollars in clean energy development projects across the country.”

-Representative Gil Gutknecht (R-Minnesota)

# **AN AMERICAN SUCCESS STORY**

## **THE FARM BILL'S CLEAN ENERGY PROGRAMS**

**NEW FARM INCOME**

**NATIONAL ENERGY SECURITY**

**RURAL ECONOMIC DEVELOPMENT**

**BETTER ENVIRONMENTAL QUALITY**



**ENVIRONMENTAL LAW & POLICY CENTER**

[www.elpc.org](http://www.elpc.org) | [www.farmenergy.org](http://www.farmenergy.org)

## 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 proven clean wind power, biofuels, solar power and energy efficiency improvements. These programs offer substantial grants and loans to jumpstart clean energy projects. Agriculture producers and rural businesses are responding enthusiastically with applications now far exceeding available funds.

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

- Family farmers and ranchers gain a potential new income stream.

- Energy security is strengthened with diverse, distributed and resilient energy systems. Renewable energy and energy efficiency reduce the risk from fuel supply disruptions, stabilize the power grid, reduce the need to import energy, and help respond to potential future restrictions on global warming pollution.

- Rural economic vitality is increased through new sources of farm and business income, 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 with higher-efficiency systems and more clean 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

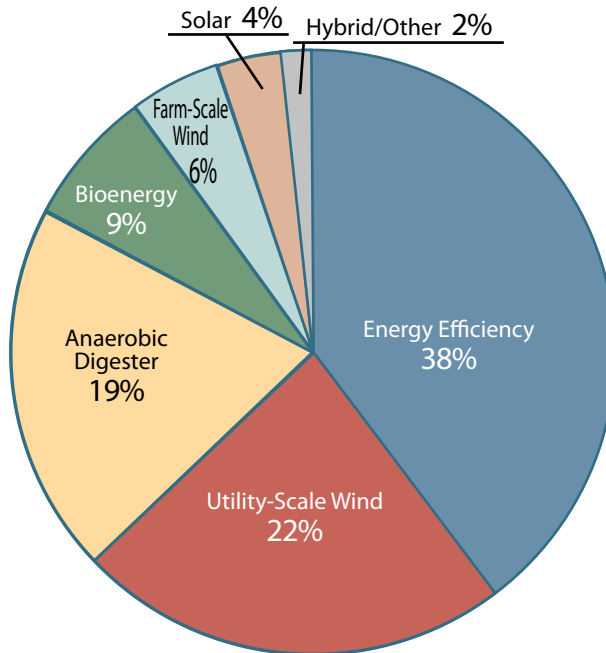
The cornerstone of the Farm Bill's programs is the Section 9006 Renewable Energy Systems and Energy Efficiency Improvements Program. Section 9006 authorizes the U.S. Department of Agriculture to award \$23 million in grants and loan guarantees each year to eligible farmers, ranchers and rural small businesses.

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.

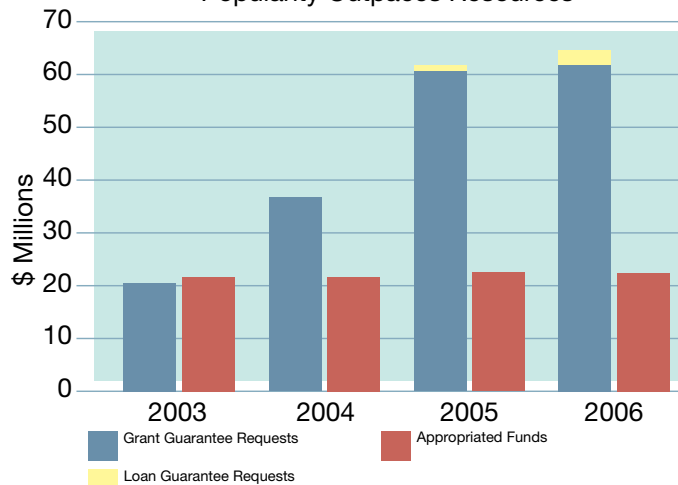
This popular new program already is producing strong results in its first three years. Between 2003 and 2005, the USDA has awarded more than \$66 million in grants and \$10 million in loan guarantees to 434 projects in 38 states. These federal funds will leverage almost \$800 million in capital investments 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. The program continues to be very popular with more than 600 applications submitted in 2006.

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

2003 to 2005 Section 9006 Grants: Distribution of Projects by Technology



Section 9006 Popularity Outpaces Resources



Note: Loan guarantees requests of \$10 million (2005) and \$58 million (2006) are shown as grant equivalents (\$20:\$1)

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.

## 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 lo-

cally-owned wind projects have begun in Iowa, many with the help of Section 9006 grants.



## Last Mile Electric Cooperative

Pacific Northwest

Farm-Scale and Utility-Scale Wind  
Section 9006 Grants: \$77,449 - 2003,  
\$307,000 - 2004

The Last Mile Electric Cooperative is an association of public utility districts and electric cooperatives in Washington. The co-op invests in both farm-scale and utility-scale wind turbines for farms, ranches and public and private facilities across the Northwest.

Northwest Sustainable Energy for Economic Development (Northwest SEED) and the Last Mile Electric Cooperative were awarded a Section 9006 grant in 2003 for \$77,449 to finance nine 10 kW turbines installed on farms and ranches. One of these turbines is on Montana rancher Jess Alger's land

near Stanford. He expects wind to power most of his home and farming operation.

According to Alger, "the nation needs poli-

cy that is focused on renewable energy, and continuing to fund Section 9006 is a step in that direction. Funding more renewable energy projects, like wind sites, would reduce carbon

dioxide emissions and I think that is very important."

Following up on the success of the small turbine program, Northwest SEED and the Last Mile Cooperative received a \$307,000 Section 9006 grant for a utility-scale project in 2004. The 660 kW turbine at Luna Point in Goldendale, Washington will be the first community wind project in the state

of Washington. Profits from the sale of wind power will benefit Operation Warm Heart, a low-income energy assistance program.



## 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, recently installed a 1.65 MW wind turbine that will provide 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."



## Lincoln Agri-Energy, LLC

Palatine, 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 cooperative 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 over 100,000 acres of area farmland) 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. Although this production is small compared to most corn-based ethanol plants, the plant's use of a waste stream makes it an innovative project. Liquid Resources employs 15 people at this facility and expects to add more as production increases.

**Every dollar of this Section 9006 grant is a dollar of equity we don't have to raise. We deeply value the support that USDA has provided to the launch of our company.**

**-Tim Curtiss  
CEO, Liquid Resources of Ohio**



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."

## 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 applied for and used the grant to help invest

in new produce and milk coolers, a walk-in freezer, roof and insulation and high-efficiency T-8 lighting fixtures. The projected energy savings from this project 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 and reliable. The store also looks better, which is increasing sales. In sum, the project is helping the store's bottom line, protecting local jobs and helping to maintain a local grocer in Crete.



## Bonnie and Donald Vos

Oskaloosa, Iowa

Energy Efficiency/Grain Drying

Section 9006 Grant: \$12,250  
2004

Bonnie and Donald Vos wanted to upgrade a 40 year-old grain drying facility on their Oskaloosa farm with more efficient equipment. They applied for and received a Section 9006 grant to help fund the replacement of their old and inefficient 3,000 bushel grain bins and 24-inch drying fan with a new grain drying facility that is twice as large.

Last fall, the Voses dried about 70,000 bushels of corn with their new grain-drying facility. They estimated that the upgraded equipment saved

their farm \$16,739 in propane costs, or about 21.7 cents per bushel, compared to their old system.

"It was a wonderful year for us to put in a new structure," Vos said. "It was an exceptionally good year for harvest, and our yields were up for both corn and beans. With propane costs at all-time highs, and with the large crop in Iowa, it would have been impossible to dry that many bushels through our old facility."

# Mississippi Poultry Growers

Various locations

Energy Efficiency  
Section 9006 Grants: \$1,503,947  
for 43 projects - 2003-04

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 approximately 20% of broiler producers' gross revenue.

Mississippi State University's 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 three 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."

America is too dependent on foreign sources of energy. This dependency creates uneasiness in the energy markets and thus translates into higher energy prices. Programs such as those provided in Section 9006 of the Farm Bill assist and encourage producers to look at and implement strategies and technologies to reduce fossil fuel use and dependence.

-David Waide, President, Mississippi Farm Bureau Federation



## 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, with Cozad producing half of the county’s total. 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.



**The financial assistance provided by USDA was instrumental in making the decision to invest in the solid fuel burner.**

**-Jon Montgomery,  
Owner, Cozad Alfalfa**

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 Recycling

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.”

## Flick Seed Co./Missouri Bioenergy

Kingsville, Missouri

Bioenergy

Section 9006 Grant: \$95,000  
2003

Flick Seed Company is a native grass seed processing and prairie restoration company in west-central Missouri that purchases seed crops from area contract growers. Each year, the company pays a hauler to landfill millions of pounds of grass residue from the seed extraction process. Steve Flick, the company’s owner, determined that the grass residue had an unusually high energy value of about 10,000 BTUs/pound so he decided that he could make a renewable fuel from the waste material.

**If we can put a man on the moon, surely we can grow kilowatts on the ground.**

**-Steve Flick, President,  
Missouri Bioenergy**

Flick formed a new company, Missouri Bioenergy, to transform the waste into a renewable fuel. The company built a facility to process up to 15 million pounds of seed residue annually into fuel pellets. These pellets will have a variety of fuel uses, including co-firing with coal in pulverized coal plants and as a fuel for industrial boilers and home heating units. The facility went online in June 2006.

USDA awarded a \$95,000 Section 9006 grant to the company to help fund this \$2.5 million project. The company also received a planning/feasibility grant from USDA’s Value-Added Producer Program and state grants.

The remainder of the project’s financing comes from private sources, including an investment by Show Me Energy, the first biomass cooperative in the country.

Flick Seed Company is also working to develop a mix of seed-bearing grass crops that have an energy value of as much as 26,000 BTUs/pound, almost four times the equivalent energy value of a pound of coal. This would completely change the economics of growing energy crops for farmers. As Steve Flick explained, “if we can put a man on the moon, surely we can grow kilowatts on the ground.”

## 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 three years of the Section 9006 program, USDA has awarded grants to 33 Wisconsin farmers to install anaerobic digesters.



## Harris Farm

Greenville, North Carolina

Anaerobic Digester

Section 9006 Grant: \$130,000  
2003

Hog farming is a major industry in North Carolina, and managing hog waste has become a major environmental challenge for the state's farmers. Harris Farm, a 12,000 hog finishing operation under contract to Premium Standard Farms, decided to take a new approach and transform its hog waste into a renewable energy resource. With the assistance of AgriClean, a Tennessee-based waste engineering firm, Harris Farm built a new manure handling system and anaerobic digester to process the waste. This is one of the first digesters designed for a hog facility in the U.S. and should serve as a model for the many thousands of hog farmers around the

state and the country in transforming a waste stream into an asset.

Harris Farm will use the biogas from the digester as fuel to replace natural gas for an existing on-site hot water boiler. The farm chose not to generate electricity with the biogas due to the utility's very low "avoided cost" buyback rate.

Scott Pogue of AgriClean commented, "If USDA were not out there to supplement the development of these systems, they simply wouldn't get built because it is too hard to gather the upfront capital. Traditional

sources of funding for these type projects are just not there yet."



## Luana Farms

Holualua, Hawaii

Grid-Tied Solar Photovoltaic System  
Section 9006 Grant: \$14,105  
2003

Luana Farms is a small organic coffee and fruit farm on the Big Island. The combination of extraordinarily high electricity rates in Hawaii (24 cents/kW-hour) and abundant sunshine means that solar energy is an especially sound investment. Hawaii also offers a “net-metering” program so that any surplus electricity produced by a renewable energy system is purchased by the utility at the retail rate. Finally, the State offers a 35% tax credit against the cost of any installed solar energy system.

With these favorable economics in mind, Luana Farms applied for a Section 9006 grant from USDA to invest in a 5 kW solar photovoltaic system for the farm. Kyle Datta, the farm’s owner, reports that since installing the system, the farm’s monthly electric bill has dropped from \$300 to just \$15, despite an unusually cloudy year in 2005.



## 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 a lot of natural gas and 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.

# Funded Clean Energy Incentive Programs

In addition to the Section 9006 Renewable Energy and Energy Efficiency Program, the Farm Bill includes several other key programs to boost domestic clean energy production in the nation's farmland and rural areas. With sufficient funding, these programs will help to increase our nation's energy security, protect the environment, and improve rural economies by boosting farm income.



---

## Value-Added Producer Program (Section 6401)

This program offers grants for business planning activities and working capital for producing and marketing value-added agricultural products including renewable energy projects. The Section 6401 program has helped to fund dozens of feasibility studies for locally-owned wind projects and biofuels facilities.

Eligible applicants include independent producers, cooperatives and agricultural producer groups. Although the 2002 Farm Bill authorized this program at \$40 million per year, in 2006 it was funded at just \$15 million. [www.rurdev.usda.gov/rbs/coops/vadg.htm](http://www.rurdev.usda.gov/rbs/coops/vadg.htm)

---

## Biomass Research and Development Program (Section 9008)

This program helps to fund university and private-sector research projects focused on utilization of biomass resources for energy production. In 2003-05, the joint USDA/Department of Energy program funded 52 research projects. Our country has enormous biomass resources from agricultural and

forestry residues to dedicated energy crops. This program helps transform these resources into an important part of America's energy mix. USDA's share of this program was funded at \$12.6 million in 2005. [www.ars.usda.gov/bbcc](http://www.ars.usda.gov/bbcc)  
[www.bioproducts-bioenergy.gov](http://www.bioproducts-bioenergy.gov)

---

## Bioenergy Program (Section 9010)

This program encourages new biofuel production capacity by making cash payments to ethanol and biodiesel producers for a portion of commodity purchases—primarily corn and soybeans but also oilseeds and animal byproducts—as their production increases. The incentive is especially useful

for new farmer-owned ethanol facilities that carry high debt burdens in their first few years of operation. Although the 2002 Farm Bill authorized this program at \$150 million per year, it was funded at \$100 million in 2005 and was discontinued in 2006. [www.fsa.usda.gov/daco/bio\\_daco.htm](http://www.fsa.usda.gov/daco/bio_daco.htm)

# Unfunded Clean Energy Incentive Programs

Some programs in the Energy Title have languished because of lack of funding. Here are two key examples:

## Biorefinery Development Grants (Section 9003)

This program would help to commercialize technologies to convert biomass into a range of transportation and 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 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.



## Other Important Clean Energy Programs

### Federal Procurement of Biobased Products (Section 9002)

For all purchases of specified products that cost at least \$10,000, federal agencies must give preference to those containing the highest percentage of biobased ingredients. This program helps to build the market for these products, making them available and affordable to all customers and reducing the

use of their petroleum-based equivalents. USDA's final rules for this program identified 11 categories of relevant products including adhesives, construction materials, fibers, fuel additives, lubricants and solvents. Rules for six product categories have now been specified. [www.biobased.oce.usda.gov](http://www.biobased.oce.usda.gov).

### Biodiesel Fuel Education (Section 9004)

This program helps to educate the public, especially fleet operators, about the benefits of biodiesel fuel use. It is funded

at \$1 million a year. For more information: [www.biodiesel.org/usda](http://www.biodiesel.org/usda).

### Hydrogen and Fuel Cell Technology Development (Section 9007)

The 2002 Farm Bill directed USDA and the Department of Energy to cooperate in the development and promotion of hydrogen and fuel cell technology programs for rural

communities and agricultural producers. The two agencies are focusing primarily on existing programs as the basis for their work. [www.hydrogen.energy.gov](http://www.hydrogen.energy.gov).

### Conservation Security Program Renewable Energy Opportunities (Section 2001)

The Conservation Security Program provides financial and technical assistance to promote the conservation and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes on working farms and Tribal land. Starting in 2005, USDA's program rules for the Conservation Security Program included a renewable en-

ergy component. Eligible producers receive compensation for converting to renewable energy fuels such as biodiesel and ethanol, for recycling 100% of on-farm lubricants, for moving to low-tillage practices which save energy, and for renewable energy production. [www.nrcs.usda.gov/programs/csp](http://www.nrcs.usda.gov/programs/csp).

### Conservation Reserve Program — Biomass Harvesting and Wind Turbines (Section 2101)

This program encourages renewable energy development on Conservation Reserve Program (CRP) acreage by allowing landowners to harvest biomass energy crops

or install wind turbines while forfeiting only a portion of their CRP contract revenue. [www.fsa.usda.gov/dafp/cepd/crp.htm](http://www.fsa.usda.gov/dafp/cepd/crp.htm).

# Looking Ahead to the Next Farm Bill

Congress is now working on reauthorization of the Farm Bill. Even with budget pressures, several countervailing forces underscore the need for strong clean energy development programs in the next Farm Bill:

---

## Gasoline Price and Supply Security

Record petroleum prices, supply insecurity and pollution concerns provide impetus for the strong expansion of biofuels production. The current Energy Title offers some opportunities, but much more can be done to achieve the full potential of a robust and cost-effective biofuels industry.

Producing ethanol from cellulosic material like switchgrass, poplars, wheat straw and corn stover can revolutionize America's energy

supply. Similarly, biorefineries hold the key to producing a wide array of chemical and fuel products from renewable resources. But moving the first generation of these plants from the laboratory to commercial operation isn't easy. Consistent support for research and financing incentives would reduce the commercial risk and encourage private companies to invest the necessary capital to get the first generation these plants built.

---

## World Trade Organization Rulings

In 2004, the World Trade Organization ruled that certain subsidies for U.S. cotton farmers were unfair to Brazilian and other cotton producers. This ruling and other WTO decisions may jeopardize certain U.S. crop subsidy programs.

The Farm Bill's renewable energy and energy efficiency programs and the land conservation incentive programs are considered legal "green box" programs under WTO rules and trade agreements because they have clear environmental objectives and do not distort international trade through direct price supports. Therefore, increasing funding for programs

such as the Section 9006 Renewable Energy Systems and Energy Efficiency Improvement Program can help farmers, ranchers and rural businesses make investments that will lower their energy costs (increasing their profit) and provide a new source of income through the sale of renewable energy.

To download a copy of the Environmental Law & Policy Center's report, "WTO Legal Impacts on Commodity Subsidies: Green Box Opportunities in the Farm Bill for Farm Income Through the Conservation and Clean Energy Development Programs," visit [www.elpc.org/tools/publications.php](http://www.elpc.org/tools/publications.php).

---

## Rising Natural Gas Prices

Farmers have been hit hard by the sharp increase in fertilizer prices brought about by rising natural gas costs (natural gas is 90% of the cost of producing nitrogenous fertilizers). Farmers and rural businesses are also facing

record propane and natural gas costs for heating and grain drying. Investments in renewable energy and energy efficiency can ease pressure on natural gas and propane demand, reducing prices for all users.

# Acknowledgements

The Environmental Law & Policy Center appreciates the many organizations and individuals who assisted us in compiling these case studies, including USDA Rural Development field offices, the National Renewable Energy Laboratory, Windustry, Northwest SEED, Southwest Mississippi Resource Conservation and Development, and individual Section 9006 grant recipients.

Visit [www.farmenergy.org](http://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.

# CONGRESSIONAL SUPPORT FOR THE FARM BILL'S CLEAN ENERGY PROGRAMS

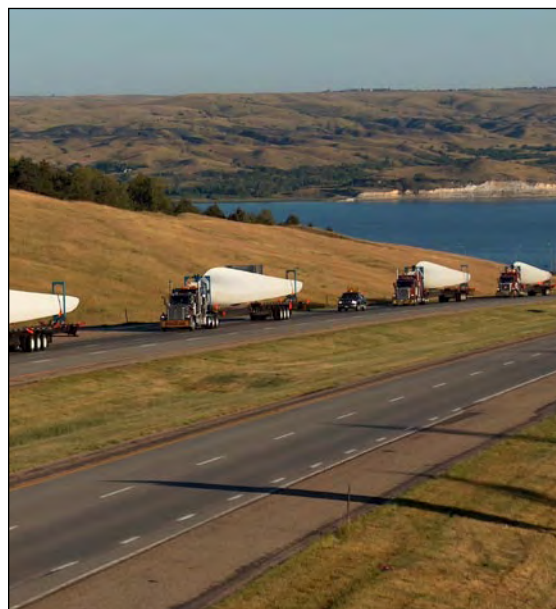


“Programs such as Section 9006, which leverage federal funds for private investment in renewable energy innovations, help to provide a more diverse energy base for our nation. The pinch of high energy costs is being felt nationwide and farming operations have been among those hit hardest. The Section 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



## ENVIRONMENTAL LAW & POLICY CENTER

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.




**ENVIRONMENTAL LAW & POLICY CENTER**

35 East Wacker Drive, Suite 1300 · Chicago, Illinois 60601

Tel: 312-673-6500 · Fax: 312-795-3730

[www.elpc.org](http://www.elpc.org) · [www.farmenergy.org](http://www.farmenergy.org)

 Printed on recycled paper  
with Soy Based Inks