Farm organizations are increasingly moving to support renewable energy standards as one of the most powerful tools to build markets for biofuels, windpower and other agriculturally produced clean energy sources.

Renewable energy standards ensure that a minimum percentage of electricity and vehicle fuels are produced from renewable sources. Sixteen states have enacted standards to grow markets for renewable electricity. Minnesota has successfully built a largely farmer-owned ethanol industry with a fuels standard. Standards for renewable fuels and electricity are also proposed at the federal level.

Renewable energy standards “are the most powerful tool a state can use to promote wind energy,” the National Renewable Energy Laboratory concludes. Standards “will be the most important driver for new renewables in the United States and Canada over the next 10 years,” says Navigant Consulting. Targets set by standards will drive addition of more than 16,300 megawatts (MW) of new renewables by 2017, the Union of Concerned Scientists (UCS) calculates. Over two-thirds of total U.S. wind development between 1998 and 2003 has taken place in states with renewable electricity standards, says UCS. Standards “in California and Texas create the two largest markets for renewable energy growth.”

National and state farm organizations support standards because they view renewable energy as an important new crop and a national interest. “Renewable energy means new commodities, whether it’s ethanol, biodiesel, wind or methane,” says Iowa Farm Bureau Commodity Services Coordinator Denny Harding. “We look on energy as a growth sector for agriculture. The technology just keeps getting better. The economics are looking better all the time.”

Colorado Farm Bureau National Affairs Director Tracee Bentley notes, “Our farmers are interested in diversifying, and most of our renewable energy potential is on farm land.”

“The development of alternative energy sources is not only significant to the advancement of American agriculture, but also is vital to enhancing our nation’s security,” American Farm Bureau Federation President Bob Stallman says.

Renewable energy standards provide a way to level the competitive playing field with conventional energy sources. Renewable fuels and electricity face market distortions. For instance, the developer of a natural gas turbine plant only pays around one-third of lifetime expenses up front. Much of the rest are fuel costs which are paid over the course of operations. While the fuel for a wind turbine is free, the initial capital cost of the equipment to capture the wind is greater. Tax subsidies also tip the playing field against renewable energy. For example, oil and gas receive $11 billion annually in subsidies. Coal receives $3.3 billion. Meanwhile the U.S. Energy Information Administration puts support for renewables at $1.3 billion per year. Renewable energy standards help reduce the imbalance.

“We support the use of renewable electric standards to stimulate development of renewable energy sources available from agriculture such as timber, wind, biomass and biogas. We support a goal of at least 10% of energy coming from renewable sources.”

Bob Stallman
AMERICAN FARM BUREAU FEDERATION PRESIDENT
A milestone in the growth of farm group support for renewable energy standards came in January when the American Farm Bureau Federation (AFBF) endorsed standards for renewable electricity:

“We support the use of renewable electric standards to stimulate development of renewable energy sources available from agriculture such as timber, wind, biomass and biogas. We support a goal of at least 10% of energy coming from renewable sources including timber and all agricultural biomass products and byproducts.”

Another national farm organization, the American Corn Growers Association, has also endorsed national renewable electricity standards.

The AFBF added its electricity standard position to its already vigorous support for a Renewable Fuels Standard (RFS). The AFBF has taken a leading role in advocating for a national RFS that would increase the market for ethanol and biodiesel to 5 billion gallons annually by 2012.

“The renewable fuel standard will function as a significant economic stimulus for rural America by creating the need for an estimated $5.3 billion in rural capital investments and 214,000 new jobs,” Stallman says. “It is also estimated that the RFS will add $4.5 billion annually to net farm income and decrease our trade deficit by $34 billion.”

For farmers that would add an estimated $51 billion to new farm income by 2012, lowering federal crop supports around $5.9 billion by 2012.

“The renewable fuels standard will benefit national security and help lower the U.S. trade deficit by reducing the nation’s dependence on foreign oil,” Stallman comments. “It will help create jobs in rural America through renewable fuels production and by strengthening the demand for agricultural commodities. It will boost farm income. It will help reduce auto emissions and protect air quality. Farmers need this rural economic stimulus package, and they are ready and able to produce the commodities needed for fuel production.”

The National Farmers Union also backs renewable fuels standards.

“It is time to focus on the RFS and to move forward on this initiative that will employ U.S. farmers and ranchers to produce America’s renewable fuels,” National Farmers Union President Dave Frederickson says. “A national RFS would encourage investment in new farmer-owned and investor-owned ethanol and biodiesel plants, thereby boosting production and stimulating rural economic activity. It would also promote our energy independence by saving $4 billion in imported oil each year.”

The Coalition for a Renewable Fuels Standard, representing a broad array of farm groups, notes the RFS is “not only good for family farmers and rural America, but it will increase U.S. energy independence, protect our air and water quality, reduce greenhouse gas emissions, reduce oil imports, create jobs and strengthen homeland security through dispersed fuel production facilities across the country.”

Farm organization members of the coalition include the AFBF, National Corn Growers Association, American Soybean Association, National Grain Sorghum Producers, National Farmers Union, National Sunflower Association, U.S. Canola Association, American Corn Growers Association and Women Involved in Farm Economics.
State-level farm organizations are also actively engaged in the push for state renewable energy standards. For example, the South Dakota Farm Bureau wants to see a state RFS to build demand for biofuels crops. The SDFB policy platform says:

“We support a state renewable fuel requirement that all gasoline contain a minimum of 10% ethanol. We support the production and use of soy diesel and biodegradable fuels, and support a minimum B-2 (2% biodiesel) requirement for all diesel fuel sold for off-road use.”

“It’s good for the environment,” notes SDFB Administrative Director Mike Held. “Obviously it creates a market for farm production. It would lessen our demand for oil imports. It’s a win-win-win.”

Another of the many examples of state farm organization support for state-level renewable energy standards comes from the Idaho Farm Bureau Federation. The official IFBF policy says:

“We support the implementation of a state renewable fuel standard which encourages the utilization of ethanol.”

“The reasons our members support a 10% renewable fuels standard is that it will become a good additional market for locally produced farm commodities,” IFBF President Frank Priestley says. “It will provide jobs and rural economic development. It lessens our dependence on foreign sources of fuel.”

Renewable electricity standards also open new opportunities for Idaho agriculture.

“Idaho would see a tremendous benefit from generating our own electricity with the abundant wind, geothermal and biomass resources we have right here,” Priestley says. “Not only are these clean, renewable ways to provide for our future needs, but they will allow farmers and ranchers the opportunity to receive benefits.”

In Colorado, farm organizations have been prominent players in the push for renewable electric standards. A broad statewide coalition includes the Rocky Mountain Farmers Union, Colorado Farm Bureau, Colorado Livestock Association, Colorado Dairy Farmers and Colorado Wheat Growers.

“When we look at what renewable energy can do for the rural communities we see it as a great economic development factor,” Rocky Mountain Farmer’s Union President John Stencel told the Colorado Legislature’s Joint Agriculture Committee in February.

“Renewable energy is among the Farm Bureau’s top legislative priorities at both the state and national level,” notes Tracee Bentley. The CFB also advocates an RFS at the national level, and a 10% state RFS.

NATIONAL & REGIONAL FARM GROUPS SUPPORT RENEWABLE ENERGY STANDARDS

AMERICAN FARM BUREAU FEDERATION
AMERICAN CORN GROWERS ASSOCIATION
AMERICAN SOYBEAN ASSOCIATION
COLORADO DAIRY FARMERS
COLORADO FARM BUREAU
COLORADO LIVESTOCK ASSOCIATION
COLORADO WHEAT GROWERS
IDAHO FARM BUREAU FEDERATION
ILLINOIS FARM BUREAU
IOWA FARM BUREAU
IOWA FARMERS UNION
MINNESOTA FARMERS UNION
NATIONAL CORN GROWERS ASSOCIATION
NATIONAL FARMERS UNION
NATIONAL GRAIN SORGHUM PRODUCERS
NATIONAL SUNFLOWER ASSOCIATION
NEBRASKA FARMERS UNION
NEW HAMPSHIRE FARM BUREAU
NEW HAMPSHIRE FARM BUREAU
OHIO FAMILY FARM COALITION
ROCKY MOUNTAIN FARMERS UNION
SOUTH DAKOTA FARM BUREAU
SOUTH DAKOTA FARMERS UNION
U.S. CANOLA ASSOCIATION
WOMEN INVOLVED IN FARM ECONOMICS
"The Colorado Farm Bureau has two reasons to support renewable energy standards. First is rural economic development. Farmers in east and southeast Colorado are already developing wind. It’s a great economic return to the community. The second is to decrease dependency on foreign oil."

In the Dakotas, which have been described as “the Saudi Arabia of wind,” farm bureaus are working to make sure that massive windpower potential is converted into real revenues for farmers and rural communities. The North Dakota Farm Bureau and South Dakota Farm Bureau both support a national renewable electric standard.

“Renewable energy is among the Farm Bureau’s top legislative priorities at both the state and national level.”

Tracee Bentley
COLORADO FARM BUREAU

"Renewable energy is an opportunity for farmers and ranchers to make a little money for a change. Wind farms also help schools and communities through an expanded tax base."

John Mittleider
NORTH DAKOTA FARM BUREAU

President for Public Policy John Mittleider comments. “Wind farms also help schools and communities through an expanded tax base.”

The NDFB has taken one of the boldest renewable energy positions of any farm group in the nation. In 2002 the organization called on state government to set a goal of installing 10,000 megawatts of wind capacity by 2020. Estimated benefits include $6 billion in construction activity, $23 million for annual landowner payments and an additional $59 million pumped into local economies each year to operate and maintain wind farms.

“North Dakota has a tremendous wind energy resource, and the benefits to farmers and rural communities, if that resource is capitalized on, could be substantial,” NDFB President Eric Aasmundstad says.

The South Dakota Farm Bureau has also set an ambitious goal, endorsing an 8,000 MW goal for wind energy production in SD by 2020.

“If the U.S. is to gain 10% of power from wind, we would like our share proportional to our resource,” says the SDFB’s Mike Held. “Clean energy production provides a tremendous economic boost, and rural areas are looking for added opportunities for economic development.”

The Iowa Farm Bureau also supports a renewable electricity standard at both the state and national levels, Denny Harding says, “basically to support development of the renewable energy industry. It stimulates economic activity in the countryside. It’s returning money back to the farmer’s pocket.”

Other state farm groups supporting renewable electricity standards include the Illinois Farm Bureau, Iowa Farmers Union, Minnesota Farmers Union, Nebraska Farmers Union, New Hampshire Farm Bureau, Ohio Family Farm Coalition and South Dakota Farmers Union.
Renewable fuels and electricity represent significant economic opportunities for rural America.

For example, biofuels plants generate tremendous benefits for local communities and farmers. An ethanol plant producing 40 million gallons per year creates $142 million in local economic activity during the construction phase and buys $56 million in goods and services annually, almost all from local suppliers. Of those purchases 71% goes to farmers for grain. Corn-based ethanol plants typically raise crop prices 5-10 cents per bushel in a 50-mile radius around the plant. That means $10 more per acre planted at average national yields.

Overall, the economic boost provided by one plant adds $110 million to the local economic base, up to 694 permanent jobs at the plant and in the local economy, and at least $1.2 million to local and state tax revenues.

“The ethanol industry is one of the most significant success stories in American manufacturing over the past quarter century,” says industry analyst John Urbanchuk. “From a cottage industry that produced 175 million gallons in 1980, the American ethanol industry has grown to include 74 manufacturing facilities with an annual capacity of more than 3.1 billion gallons per year.”

Significantly, farmers directly own 40% of that capacity through ethanol cooperatives.

Farmer ownership hedges against commodity price cycles. When crop prices are down farmers can still make money on ethanol sales.

Urbanchuk notes 13 new plants representing 500 million gallons in new capacity are under construction, and estimates 2004 production of 3.5 million gallons for a 25% growth rate over 2003. That will require $4.6 billion in purchases, including $3.2 billion for grain. The industry will add $8.9 billion to the 2004 gross domestic product.

Windpower is also generating huge economic benefits for rural communities. Landowners who lease to wind farms receive 2-3% of gross revenue, or $2,500-$4,000 per turbine. Typically each turbine requires only a half acre of land. Each 100 megawatts of wind capacity produces up to 200 construction jobs, 2-5 permanent jobs and up to $1 million in local property tax revenue. The U.S. currently has around 6,300 megawatts in wind capacity.

A 20% national renewable electricity standard would produce substantial direct economic benefits by 2020, UCS studies show. They include $75 billion in new capital investment, $4.7 billion in property tax revenues for rural areas and $975 million in lease payments to landowners for wind power. Those figures do not include indirect benefits to local rural economies and potential additional benefits from local ownership.

For farmers an additional economic benefit of renewable energy standards ranking in importance with increased revenues is decreased farm operating costs. AFBF estimates higher energy costs added $1-2 billion to farm operating costs in 2003.
“Agriculture is heavily dependent on energy, and not only as fuel for equipment,” Frank Priestley of the IFBF notes, “Most fertilizer is also derived from natural gas. When fuel prices go up it’s a double whammy.”

Natural gas represents 90% of the total cash cost of producing ammonia. Eleven ammonia plants representing 21% of U.S. capacity have closed since 2000 due to high gas prices, while nitrogen fertilizer prices have doubled. Fertilizer prices increased one-third in 2003 alone, raising cost to a typical farmer by $10-15/acre.

Renewable electrical generation exerts significant downward pressure on natural gas prices by displacing gas-fired electricity. The UCS found that a 20% national renewable electricity standard would save 1.8 trillion cubic feet of gas annually by 2020 and reduce energy bills by $26 billion.11 Another study by the American Council for an Energy Efficient Economy found that 2008 natural gas prices could be cut 22% by increasing renewable generation to 6% of U.S. electricity, up from 2% now, and by making efficiency improvements of 3% in electrical use and 4% in gas consumption.12

Recognizing the dependency of agriculture on stable natural gas prices, the AFBF in January adopted the position: “The U.S. must develop renewable fuel sources rather than use a finite, high-value source of fuel such a natural gas to generate electricity.”

“Our industry is heavily dependent on natural gas,” the CFB’s Tracee Bentley says. “The price spikes of recent years have affected virtually everything we do.”

Before those spikes, “Farmers didn’t feel energy was their issue to fight. Now we realize we should seek our energy here rather than going elsewhere. We have basically free energy flowing across our state. We should harness it.”

“Idaho would see a tremendous benefit from generating our own electricity with the abundant wind, geothermal and biomass resources we have right here.”

Frank Priestley
IDaho Farm Bureau Federation
How Farmers Can Make Renewable Energy Happen

Farmers are playing an increasingly important role in moving renewable energy development forward. They understand the productive potential of the land to grow renewable fuels and electricity. They are also coming to understand that an economic playing field tipped against renewables by tax policy and financial obstacles can be brought closer to balance by renewable energy standards.

Farm organizations, by representing the common voice of agriculture, have tremendous influence that can make all the difference in growing the renewable energy economy. If you belong to a farm organization, find out what renewable energy policy positions it has taken. If your organization has not taken a strong stand in favor of renewable energy, consider introducing a resolution at the next meeting or convention. For inspiration, look at some of the resolutions passed by national and state groups reported above.

In coming years the U.S. will look to farmers for an increasing portion of its energy supply. The faster the farm-produced share of the energy market increases, the more secure the nation will be, the cleaner the environment will become and the more prosperous farmers and rural communities will grow. Renewable energy standards are a powerful tool to accelerate growth of the rural clean energy sector, and farmers represent one of the most powerful constituencies for standards at state and federal levels. By supporting renewable energy standards farmers will benefit themselves, their communities and the nation as a whole.

“Our industry is heavily dependent on natural gas. The price spikes of recent years have affected virtually everything we do. Before those spikes, farmers didn’t feel energy was their issue to fight. Now we realize we should seek our energy here rather than going elsewhere. We have basically free energy flowing across our state. We should harness it.”

Tracee Bentley
COLORADO FARM BUREAU
Sources


   (Figure does not include renewable energy growth from recently adopted Maryland, Hawaii and Rhode Island standards.)


    (Figures are in cumulative net present value 2002$ using a 7% discount rate.)


For more information please visit: www.harvestcleanenergy.org