



## OFBF Self-Help Energy Programs

Administered by the Ohio Farm Bureau Development Corporation  
280 North High Street, P.O. Box 182383, Columbus, OH 43218-2383  
Phone: 614-246-8294 Fax: 614-249-2200  
E-Mail: [darnold@ofbf.org](mailto:darnold@ofbf.org)

### Ohio Farm Bureau Federation Energy Policy – A Diversified Energy Portfolio

#### Rationale

Motor fuels, fertilizer, power for laborsaving appliances - Energy is second only to labor as the largest operational input for many farm, small business and industrial operations. Many residential energy consumers in rural, suburban and urban communities are finding it a challenge to control their energy costs, too.

There is no one, all-encompassing technological "silver bullet" that will address our increasing energy needs. Fortunately, the United States has access to a variety of natural resources, both fossil and advance/renewable; industrial and manufacturing capacity, as well as proven and emerging technologies that can be applied in concert to lead our economy in the right direction. A strategy incorporating all of these strengths, advantages and resources is known as a *Diversified Energy Portfolio*.

An effective *Diversified Energy Portfolio* that decreases the impact of higher energy prices now and stabilizes energy pricing trends over the next 20 years includes the following (topics in alphabetical order):

#### BioFuels

Ohio lags behind other states in developing ethanol and biodiesel refining capacity. We need to streamline the Ohio EPA permit process to give biofuel developers a uniform permit application process with set standards and approval time frames. Other work needs to be done to rapidly install E-85 pumps at not a handful, but several thousand retail fuel outlets across Ohio.

#### Coal

Ohio needs to encourage development and construction of clean coal technologies in the following areas:

- Clean Coal Technologies: Using current generation technology, coal provides a majority of electric base load requirements in many areas of the United States. New, clean coal technology is needed to be developed and incorporated into generation infrastructure.
- Coal to Liquids (CTL) Program: Technology is developed to refine coal into liquid fuels. The activity can help relieve tight supplies in this energy category. The organization should support expansion of CTL programs toward this objective.
- FutureGen: The state needs to become the prime candidate for the U.S. Department of Energy's FutureGen Project. We have over a 200-year supply of coal – We need to use it!

#### Community Planning and Economic Development

Cleveland is becoming a center for wind and fuel cell manufacturing. First Solar of Perrysburg, Ohio is a world leader in solar cell production. Timken of Canton, Ohio is a leading manufacturer for bearings going into commercial wind turbines across the world. General Electric, Parker-Hannifin and a host of other Ohio-based industries are making components for wind, solar, biomass and other advanced/renewable technologies, all of which are being exported out of state.

Energy development not only gives Ohioans the opportunity to control their energy costs; related manufacturing and/or production opportunities also means jobs.

OFBF supports promotion of collaborative efforts between government leaders, utilities, energy service providers/project developers, manufacturers, interested citizens and consumers to explore how advanced/renewable energy projects can be established in local communities to provide the following benefits:

- Access cost-effective generation to fulfill base and intermediate electric generation requirements on local, county, regional, state and/or national levels.
- Placement of energy generation projects in local communities and rural areas that enhance community development and economic vitality, balanced with environmental quality.
- Review of Ohio's Tax Code to reflect new technologies and sources of utility scale generation, compare/contrast tax rates with neighboring states, as well as seek a balance between the needs of energy project developers and the needs of state and local governments, schools and service programs relying on utility tax proceeds.
- Education/information resources that help service providers and interested parties create effective relationships and/or partnerships concerning energy development. Materials should include, but not be limited to: leasing agreements/contracts, risk management, taxes, facility installation/placement, decommissioning and remediation/repair of ground, roads and other infrastructure after a project is constructed.

OFBF supports the establishment of renewable energy cooperatives, self-help and community/government aggregation groups for investing in, purchasing and/or sharing the creation of projects and/or products allowing delivery of energy to its members and/or other consumers.

### **Electric Infrastructure**

Usage figures compiled by the U.S. Department of Energy – Energy Information Agency (EIA) support the trend that between 1970 and 2030, electric energy needs for agriculture will double. Similar trends are projected for industrial, small business and residential energy consumers.

EIA studies on the condition of our nation's electric transmission system (grid) and the establishment and proliferation of National Interest Transmission Corridors (NITC) reveals that a massive refitting/rebuilding process needs to be implemented. Similarly, many local distribution systems in urban, suburban and rural communities are nearing full capacity. The next step will probably include massive refitting/rebuilding programs for these networks. In many cases, the activities involved in rebuilding both the transmission and distribution elements of our electric system will be the largest undertaken since many of these networks were first created in the early decades of the 20<sup>th</sup> century.

To ensure that our electric system is capable of addressing all consumer requirements and needs, government leaders, utilities and community planners should design the system to accommodate the following:

- Movement from a Centralized to Decentralized System: Large scale, centralized coal and nuclear capabilities should be enhanced to meet increases in baseline generation requirements. Moreover these resources should be coupled with other decentralized generation capacity in strategic areas of the service grid to supplement generation delivery, as well as address some local intermediate and peak electric load requirements. These systems should incorporate wind, solar, biomass, fuel cell, natural gas turbine and other technologies that enhance service and develop a diversified energy portfolio.
- Support for On-Site Generation and Customer Friendly Interconnection: Industrial, farm, small business and residential energy consumers should be able to have better access to information concerning their electric load profile and usage requirements. Interested consumers should be encouraged to couple on-site generation technology with utility service to create strategies that help them control their energy costs.

On a related front, work should be done to establish effective utility – customer net metering partnerships. On-site generation could be employed to meet some of the intermediate and peak electric needs of other consumers located in the local distribution network where the on-site generation system is located.

- Support for New Technology: Advanced Metering Infrastructure (AMI) and/or other “smart metering” technologies should be installed to develop the opportunities detailed above. Similar work on creating appliances that are Energy Star compliant, as well as incorporate options that allow them to be connected into on-site electric use/monitoring networks is needed.

### **Electric Interconnection**

As part of their risk management strategy, many farmers have installed on-site generation. Some farmers have traditional generators fueled by diesel fuel, gasoline, propane and/or natural gas. Others are making plans to or upgrade on-site facilities with advanced/renewable technology (wind, solar, fuel cell and biomass).

Few Ohio farmers want to be completely “energy independent” or “off the grid.” However, many would like to work with their utility and other energy service providers to create programs where their on-site generation can be used in conjunction with utility generation to help reduce energy costs. Moreover, many would like to work with their utility to make their on-site resources available to help the neighborhood during times of peak energy demand and/or special need.

Farmers want a uniform, *consumer friendly* interconnection process that allows them to better employ net metering, smart metering and/or co-generation as a strategy to control their energy costs.

### **Energy Efficiency**

While incorporating electric infrastructure improvements (see Electric Infrastructure), government leaders, utilities, community planners and consumers should incorporate aggressive energy efficiency projects and strategies that maximize their opportunities to use resources efficiently and control their energy costs. Energy efficiency strategies should include:

- Support for On-Site Generation and Customer Friendly Interconnection: Industrial, farm, small business and residential energy consumers should be able to have better access to information concerning their electric load profile and usage requirements and couple on-site generation technology with utility service to create strategies that help them control their energy costs. Work should be done to establish effective utility – customer net metering partnerships. On-site generation could be employed to meet some of the intermediate and peak electric needs of other consumers located in the local distribution network where the on-site generation system is located.
- Support for New Technology: Advanced Metering Infrastructure (AMI) and/or other “smart metering” technologies should be installed to develop the opportunities detailed above. Similar work on creating appliances that are Energy Star compliant, as well as incorporate options that allow them to be connected into on-site electric use/monitoring networks is needed.
- Progressive Consumer Options: Collaborative efforts should be established where consumers can make step by step progression from basic to more advanced energy efficiency strategies. These efforts should include:
  - Consumer outreach and education on energy trends, and the need for efficiency strategies to control energy costs.
  - Basic Refits – Consumer access to basic consumables (light bulbs, fixtures, small appliances) that are energy efficient, and involve changes in choice/habit at little additional cost.
  - Intermediate Refits – Consumer access to home audits, insulation and other programs that incorporate additional investment in home and/or facility remodeling.
  - Specialized Refits – Consumer access and recognition of customized approaches (on-site generation, special HVAC, combined heat and power and other technologies) that are incorporated into their home/business that maximize efficiency/savings potential.

## **Energy Generation Technology**

Many forms of advanced and/or renewable technology are becoming cost effective to generate base and intermediate electric loads. Along with advanced coal and nuclear capabilities, other technologies that should be incorporated into Ohio's electric generation portfolio include: wind, solar, hydro, basic biomass, advanced biofuel, fuel cell and methane/biogas collection and utilization.

The Ohio General Assembly and/or Public Utilities Commission of Ohio should continually evaluate, recognize, incentivize and incorporate new technologies that enhance Ohio's capabilities to expand a Diversified Energy Portfolio.

Government needs to ensure a "developmental balance." They should establish a process that gives all new and emerging technologies equal access to support programs and incentives that encourage their development, as well as provide a field of competition to ensure that such technologies continue to strive for greater efficiency and delivery of energy at the lowest possible cost.

## **Natural Gas Pipeline Infrastructure**

Many areas of the United States are served by several companies with interstate pipeline systems that transport, store and deliver natural gas to utilities for local transportation and distribution. The nation is served by two consolidated networks – Eastern states, such as Ohio are served by a network originating in Louisiana and spreading into the Northeast, and another network starts in Texas and serves the West. Few connections linking the systems exist.

Moreover, given the development of these networks, some major population and industrial areas of northern Ohio are becoming *capacity critical*, lacking adequate infrastructure to address future peak needs. To better serve Ohio, the following points should be considered:

- Construction of more pipeline and interconnections between the East and West networks to better facilitate transportation of gas supplies from one part of the continental U.S. to the other.
- Expansion of the network to include gas originating from other sources including high natural gas production areas in Canada.
- Exploration and incorporation of current local pipelines that can be incorporated into network to expedite more and larger volumes of natural gas into potential *capacity critical* areas.

## **Natural Gas Production**

Natural gas and oil reserves are accessible throughout domestic geological formations in many areas of the United States, including Ohio. Service life and comparably low volumes, coupled by state taxes and fees keep many supplies from these wells from entering the system. Work needs to be done to reevaluate tax structures, physical constraints and network interconnections to get these supplies into the market.

Research is showing us that methane can come from a variety of resources. Accordingly, work needs to be done to harvest/collect methane from landfills, municipal waste management systems, and coal mining projects, both active and abandoned. Harvesting these resources will reduce the possibility of future methane emissions into the atmosphere, as well as create additional sources for the fuel.

## **Nuclear**

Along with coal, nuclear supplies base load electric generation for many areas of the Ohio. Plans should be made to maintain use of nuclear technology as a key source of electric generation through at least the first half of this century.

## **Ohio Energy Grant and Loan Fund**

OFBF supports enhancements to the Ohio Department of Development's *Energy Loan Fund* and *Energy Grant Fund* programs in the following areas:

- Increased Resources - Increase electric utility service charges that generate funds for the Ohio-based programs to more closely reflect the average level of funding/support collected in other states to administer similar programs.
- Extended Resource Collection Period – Realign provisions governing the program’s current resource collection period to closely reflect Ohio’s “25x’25” energy generation and efficiency objectives as detailed in SB 221.
- Program Access – Revise/create a more customer-friendly application process for residential energy consumers.