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ENERGY

Rural Energy Production and Access to Markets

The Scope of the Problem

With gas prices rapidly approaching $4 a gallon across much of the country and unrest gripping large portions of the Middle East, states and the federal government are facing a series of pressing energy challenges. While much attention is frequently given to U.S. dependence on foreign oil, questions about rural energy production and access to markets are no less pressing in large portions of the country. State and federal policymakers are facing many policy challenges, including:

- Increasing rural energy production and the ability to get it to the market;
- Utilizing and improving infrastructure to ensure greater market access;
- Addressing the ways energy prices impact the cost of food; and
- Using alternative methods of energy production to improve rural life and reduce dependence on foreign oil.

Addressing those policy challenges has the potential to lead to economic development in rural areas, create jobs, improve quality of life and, ultimately, improve America's energy outlook by reducing dependence on foreign oil.

The Benefits of Rural Energy

High oil prices and political unrest are forcing American policymakers to re-evaluate traditional energy strategies. Changes in conventional thinking have resulted in increased calls for alternative sources of energy, such as wind and solar, and greater reliance on biomass and biofuels. While alternative sources of energy have significant long-term potential for America's energy future, they also present a series of short-term problems that must be addressed to make them a viable alternative to foreign oil.

Large amounts of undeveloped, usable land and agricultural crops are required to produce alternative energy sources such as wind and biofuels in quantities large enough to make them a viable alternative to traditional energy sources.[1] In this

respect rural communities, where land is plentiful and traditionally available for a reasonable price, are well-positioned to assist in the development of alternative energy sources, while also reaping economic development benefits new energy initiatives have the potential to provide.

Wind power now comprises about 1 percent of the U.S. energy market.[2] 2009 statistics from the Department of Energy indicate that if wind power comprised 5 percent of the U.S. energy market, it would lead to $60 billion worth of investment into rural communities, provide $1.2 billion in new income for farmers and landowners, and create 80,000 new jobs in locations where jobs are desperately needed.[3]

Rural farmers also can effectively utilize valuable land by planting energy-bearing crops such as corn, soybeans and switchgrass. Given time to develop and adequate support from state and federal policymakers these crops, frequently referred to as biomass

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products, eventually can be turned into electricity and fuel. While methods such as the development of corn-based ethanol require large amounts of energy to produce, scientific estimates have suggested biomass could eventually produce 14 percent of electrical power and 13 percent of gas required to operate cars with expanded crop production and technology improvements.[4]

Policies to Support Rural Energy Development

While increases in rural energy production have the potential to provide long-term economic benefits to the United States and also reduce dependence on foreign oil, they will require a dramatic shift in U.S. energy policy. Emphasis on the following policies by both state and federal government officials has the potential to radically shift America's energy platform.

Improved Interconnection[5]

- Generators must connect to the grid to effectively use energy produced in rural areas.
- Improved connection allows energy producers to move and sell surplus electricity on a regional or national level.
- A more uniform interconnection will better allow renewable resources to reach the market.
- Use of Renewable Energy Tax Credits6
- Renewable energy tax credits are designed to spur investment in renewable energy production.
- Credits can be used in the development of both electricity and alternative fuel sources.
- If used effectively, renewable energy tax credits have the potential to support a wide range of rural energy projects.

Emphasis on the Rural Energy for America Program (REAP) [7]

REAP (section 9007 of the 2002 Farm Bill) offers the following assistance for rural projects:

- Loans for energy efficiency and renewable energy development for agriculture producers and rural small businesses;
- Grants for agriculture producers and rural small business owners to improve energy efficiency and emphasize renewable energy sources; and
- Grants to state, tribal and local government officials that provide energy assistance to rural communities and businesses.

Investment in Research and Development of Rural Energy Sources [8]

- Continued investment by both state and federal policymakers is essential to helping rural energy producers maximize resources.
- Grants from the Department of Energy have been used to increase the productivity of wind turbines and to support technologies such as carbon sequestration and hydrogen fuel cells in rural communities.
- State-supported initiatives, such the University of Minnesota's continuing efforts to conduct research on biofuels and renewable energy sources, are equally important.

While the above list is not exhaustive or one that provides provide quick fixes, the highlighted policies have the potential to help foster rural energy development. That, in turn, has the potential to lead to increased economic stability, improved quality of life and the creation new and sustainable jobs in rural America.

Rural energy produced and developed in the United States has benefits that extend far beyond rural communities. Considering the high price of oil and the political unrest gripping large portions of the Middle East, rural energy provides state and federal policymakers a viable alternative to dependence on foreign oil and another means to help create U.S. energy independence.

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