Recommendations for Economic Recovery and a Clean Energy Future

Statement of Bart Ruth
Chairman, Policy Committee
National 25x'25 Renewable Energy Alliance

December 15, 2008

Chairman Bingaman, Ranking Member Domenici and other distinguished members of the Senate Committee on Energy and Natural Resources, thank you for the invitation to present you with recommendations the National 25x'25 Alliance Steering Committee believes can best address our troubled economic times. As congressional leaders and the new, incoming administration look for ways to bolster a sagging economy, the 25x'25 Steering Committee believes that now is the best time to implement renewable-energy and energy-efficiency initiatives that can drive and maintain economic recovery. In support of those initiatives, the Steering Committee today offers Congress and the incoming administration a package of new recommendations that will bolster the U.S. economy, create new jobs and insure a clean energy future.

The 25x'25 Steering Committee, which provides leadership for a coalition of nearly 800 agricultural, forestry, energy, environmental, business, labor, civic and community groups that call for 25 percent of our national energy needs being met with renewable resources by 2025, believes that our recommendations are the backbone of a strategy that will address our troubled economic times. These recommendations underscore the longstanding 25x'25 position that a renewable-energy and energy-efficient future will not only boost our economy, putting hundreds of thousands of people back to work, but also enhance our national security and improve our environment.

These recommendations for economic recovery from the 25x'25 Steering Committee are underscored by a national study undertaken by the University of Tennessee Department of Agricultural Economics that shows that if America's farms, ranches and forestlands are empowered with the policies and incentives needed to meet 25 percent of the nation's energy needs with renewable resources – biofuels, biomass, wind energy, solar power, geothermal energy and hydropower – an estimated $700 billion in new, annual economic activity would be generated, and 4 million to 5 million new jobs would be created.

The University of Tennessee study, commissioned by 25x'25, presents just one scenario among many in meeting the 25x’25 vision. And while the analysis includes forest residue from hazard-reduction programs and mill residue, there are numerous resources that are not taken into account - woody biomass from managed forests, crop residue (other than corn and wheat) and urban wood waste – suggesting the economic benefits of a 25x'25 future could be even greater. Furthermore, while the analysis includes the production of dedicated energy crops, some varieties of feedstocks currently under research in laboratories and universities, including energy cane, Miscanthus and hybrid willow, may not have been fully evaluated in the analysis, indicating even greater economic returns.

Another strong indicator of renewable energy development's potential to strengthen the economy comes from the Department of Energy, which looked at just wind energy and concluded that it is capable of becoming a major contributor to America’s electricity supply and economy over the next three decades.

The DOE says that achieving a 20-percent wind contribution to the U.S. electricity supply would increase annual revenues to local communities to more than $1.5 billion by 2030 and support roughly 500,000 jobs in the United States.

The 25x'25 economic recovery recommendations will lead to long-term, comprehensive energy development that will accelerate the production of all forms of renewable energy and create new renewable energy markets.

The recommendations developed by the National 25x'25 Steering Committee for a nationwide, clean energy economic recovery initiative include:

Increase funding for the Rural Energy for America Program (REAP).
The Rural Energy for America Program, authorized under Section 9007 of the Energy Title of the 2008 Farm Bill, provides grants or loan guarantees for renewable energy systems and energy efficiency improvements for agricultural producers and rural small businesses. The program is currently funded at $255 million over four years, with additional annual authorization of $25 million. The limit on the maximum amount of the combined loan and grant is 75 percent of the funded activity and the grant portion cannot exceed 25 percent of the cost of the activity. The program, in existence since 2002, is continuously oversubscribed and many valid projects are rejected because of limitations on USDA funding. Increasing funding for REAP will generate temporary construction jobs in rural America along with permanent jobs operating and maintaining renewable energy facilities. As an example, a 104 megawatt wind power project in Oregon, financed through REAP, generated over 30 permanent jobs in Gilliam County, Oregon.

Proposed funding for REAP: $250 million annually, $500 million over two years.

Increase funding for the Repowering Assistance Program.
The Repowering Assistance Program, authorized under Section 9004 of the Energy Title of the 2008 Farm Bill provides loans and loan guarantees to help biofuel plants convert their heating and power fuel supply to biomass and reduce their dependence on fossil fuel-powered boilers. Payments would be made for installation of new systems that use renewable biomass or for new production of energy from renewable biomass. The program is currently funded at $300 million over four years, with additional $25 million in annual authorization. According to the Renewable Fuels Association 172 biorefineries are in operation today. Installation of renewable biomass boilers will generate construction and maintenance jobs and contribute to cleaner air and environment.

Proposed funding for Repowering Assistance: $150 million annually, over two years

Broaden the authority and increase funding for the Biorefinery Assistance Program.
The Biorefinery Assistance Program authorized under Section 9003 of the Energy Title of the 2008 Farm Bill provides loans and loan guarantees to construct commercial-scale advanced biofuel facilities. Loans may be up to 80 percent of the cost of the project not to exceed $250 million. It also provides grants for demonstration-scale advanced biofuels plants. Despite existing federal grants and loan guarantees, the collapse of the credit markets has stalled construction of the nation's first commercial-scale cellulosic biorefineries. Of six projects selected by the U.S. Department of Energy in 2007 to receive up to $385 million in federal support, only one has begun construction. It also has slowed the conversion of existing grain-based ethanol plants to dual feedstock biofuels production facilities. The economic recession may therefore delay progress toward meeting cellulosic and advanced biofuels targets in the Renewable Fuels Standard and slow progress toward curtailing greenhouse gas emissions.

Additional funding for the Biorefinery Assistance Program will reduce investor risk and provide construction and operations jobs in rural communities. Consideration should be given to broadening the authority to utilize direct federal grants to expedite the construction of first generation advanced biorefineries and to modify or retrofit existing grain-based ethanol plants to convert cellulosic biomass to

biofuels. Knowledge gained and experience with these operations would rapidly drive down costs associated with second-generation cellulosic biofuel plants and result in private-sector investment in their construction.

Proposal for Biorefinery Assistance Program: increase and fully fund mandatory and discretionary levels, at $500 million in year one and $1 billion in year two, and consider expanding the use of the grants to facilitate the construction of first generation cellulosic biofuel plants.

Fund the Bioenergy Crop Assistance (BCAP).
The Bioenergy Crop Assistance Program was authorized under the 2008 Farm Bill to support the establishment and production of eligible crops for conversion to bioenergy, and to assist agricultural and forest landowners with collection, harvest, storage, and transportation of these crops to conversion facilities. The rules for the program have not been developed, and no mandatory funding is provided in the authorizing legislation. Twenty-one cellulosic biorefineries are in the planning stage of construction, to begin operations by 2010, but without full and immediate funding of BCAP to provide incentives to farmers to grow dedicated energy crops, feedstocks may not be available, jeopardizing investments and threatening the commercial scale production of advanced biofuels.

Proposed for Bioenergy Crop Assistance Program: implement BCAP in 2009; fund at $250 million annually, $500 million over two years.

Invest in Biofuel Infrastructure Projects
A comprehensive federal initiative should be developed and funded to address biofuel infrastructure, distribution and delivery issues. A coordinated plan should be developed and significant federal funding provided for biofuel distribution infrastructure projects. Biofuel pipeline feasibility studies need to be completed. The federal government should help finance the construction of new pipelines, as well as address rail capacity for biofuels. Funding for E-85 Corridor programs should be expanded and funding should be made available to facilitate the manufacturing and deployment of blender pumps. The federal government should promote the use of flex-fuel vehicles, by creating a federal FFV fleet and increase funding for battery technology development. In addition, advanced biorefineries, most of which are in planning stages, often await permitting for long periods of time. The processing of these permit applications must be expedited.

Proposal: Increase federal investments in biofuel distribution infrastructure, including financing to expand rail capacity, pipeline construction, and strong incentives for E85 and blender pumps, the number of which should grow as more flex-fuel vehicles are registered in a region. Provide strong incentives to speed up commercial use of flex fuel vehicles and their use by federal entities. Expedite permitting for advanced biorefineries.

Fund the Community Wood Energy Program.
The Community Wood Energy Program authorized under the Food, Conservation, and Security Act of 2008, provides grants to state and local governments and communities to develop wood energy plans and to acquire and upgrade community wood energy systems in communal facilities, such as schools, town halls, libraries. The program would use woody biomass as a primary fuel for such projects.

Proposed funding for the Community Wood Energy Program: 20 million annually, for two years.

Increase funding for and extend Clean Renewable Energy Bonds (CREBs).
The Energy Policy Act of 2005 provides electric cooperatives and public power systems with the ability to issue Clean Renewable Energy Bonds (CREBs). The CREB is a renewable incentive for not-for-profit utilities, comparable to the Production Tax Credit (PTC) that is available to investor-owned utilities. Not-for-profit utilities that serve 25% of the nation can not access the PTC. CREBs support a wide variety of projects, including wind, biomass, geothermal, solar, municipal solid waste, small irrigation power, and

hydropower. CREB funds would support both large- and small-scale projects, and would generate jobs both in installation of renewable energy technologies and in manufacturing of the required component parts. The program is already over-subscribed, at $800 million in current mandatory spending.

Proposal for CREBs: extend the program through 2010 and provide additional bonding authority of $2.5 billion.

Restructure the Production Tax Credit and Investment Tax Credit for renewable energy electricity sources.

Currently, a PTC or an ITC is given in a form of a tax credit to be claimed against income for developers of and investors in renewable electricity projects utilizing biomass, solar, wind, hydro, marine, landfill gas, geothermal and other clean sources of energy. The credit is currently non-transferrable. Furthermore, in many cases other incentives reduce the amount of the Production Tax Credit or an Investment Tax Credit. For example, a biomass Production Tax Credit is reduced by half when a Combined Heat and Power (CHP) Investment Tax Credit is also used for the same project. State and government financing also reduces the PTC amount a renewable energy project can receive.

According to recent analysis by the American Wind Energy Association, the failure to restructure the PTC and provide a rapid long-term extension could result in the loss of 89,000 jobs and $16 billion in investment in the wind energy industry alone. Renewable energy development relies upon transactions with major financial industry players, because renewable electricity is a capital intensive industry. The current economic crisis has removed many major financial investors from tax equity markets, dramatically reducing the ability of many renewable power developers to realize the intended benefits of available tax incentives.

Thousands of megawatts of new renewable energy power capacity for 2009 could be cancelled or delayed as a result, unless the tax credit system is restructured, and PTCs are extended over five years. In addition, equity strapped industries may not be able to increase investments in geothermal, biomass, solar and hydropower projects. According to the National Renewable Energy Laboratory, if the PTC were transferable to lending institutions, or if it were applicable as prepayment on any loans, the wind, solar, biomass, geothermal, hydro and other renewable energy industries could fully utilize the PTC and the ITC. In a time of economic downturn, full use of the ITC and the PTC is essential for the renewable energy sector to continue attracting investment and prevent job loss.

Proposal: Restructure the federal Production Tax Credit and Investment Tax Credit for all sources of renewable electricity to allow for accelerated depreciation, refundable credits and transfers between persons/entities, and enable projects to utilize other financial incentives without a reduction in the amount of ITC and PTC that an entity can claim.

Extend the Production Tax Credit and Investment Tax Credit for five years:

Production and investment tax credits serve as primary incentives for investors to develop wind, solar, geothermal, hydro, marine and other forms of electricity from renewable sources. Wind industry developers, for example, are eligible for a production tax credit of 2.1cents per kilowatt hour generated in the first 10 years of operation. Manufacturing of both wind turbines and solar panels is growing in the United States, bringing jobs to rural areas. More than 50 new or expanded wind industry manufacturing facilities have been announced or opened since January of 2007, creating tens of thousand of high paying jobs while providing clean and reliable energy. However, an unstable PTC/ITC policy serves as a disincentive to investors, particularly in this time of economic distress. The solar industry, for example, estimates that if PTC were not extended in 2008, the solar PV sector alone would have lost $8.1 billion in investment and a net 39,800 jobs in 2009.

Proposal: Extend the Production Tax Credit and Investment Tax Credit for renewable electricity sources for five years.

Increase the Production Tax Credit for renewable electricity produced from biomass, hydro, green gas and other renewable sources of energy:
Currently producers of renewable electricity from wind and geothermal sources of energy receive a Production Tax Credit of 2.1cents per kilowatt hour. Other producers of renewable electricity receive half this amount. Additional renewable electricity could be generated in the United States if developers who produce renewable electricity from biomass, hydro, renewable gases and other sources of energy received the same credit as is currently allowed for wind and geothermal electricity developers.

Proposed funding: Create a level playing field for producers of renewable electricity by increasing the Production Tax Credit for biomass, marine, hydro, marine, green gas, waste and other renewable energy sources of electricity to a level equivalent to that received by wind and geothermal energy producers.

Improve tax incentives for Community Wind:
Community wind is a type of wind development that focuses on investment from local communities, rather from an outside investor. The National Renewable Energy Laboratory (NREL) estimates that smaller community wind projects contribute twice as many jobs and income to a local community than a larger wind plant financed by outsider investment. An average community wind plant of 20 MW can provide up to 41 jobs and $4 million in local income, as opposed to an outside-investment 40 MW plant's 18 jobs and $1.3 million in income for the community. However, community wind investors' income off the plant is often passive. Under current regulations passive income has to be quite large to fully use the credit. Regulations should be changed to allow for local wind investment projects to count against active income of the local investors. Such a change will generate more interest in, and investment by communities in local clean electricity sources.

Proposed: Allow community wind developers to count tax incentives against active income.

Fund Smart Grid and improve electricity transmission:
The Federal government should appropriate funds for the Smart Grid Investment Matching Grant Program created under Energy Independence and Security Act of 2007. The program provides reimbursement for 20 percent of qualifying Smart Grid Investments. Within two years, the stimulus effect of this provision will become apparent, through significant new job creation in renewable energy electricity sector, as more electricity sources will be able to capitalize on a better grid system. 300GW of wind power are awaiting grid connection. In order for the wind industry to expand, 12,000 miles of new transmission lines are needed, as well as a smart grid management system. The Department of Energy reports that transmission is the number one barrier preventing rapid long-term expansion of wind energy use. Without adequate transmission capacity, the nation risks losing existing jobs in wind turbine manufacturing and installation. A more efficient, reliable transmission grid will also reduce electricity costs to consumers in states with high peak rates.

Proposed funding for Smart Grid: $1.3 billion for smart grid investment.

****

25x'25 is a diverse alliance of agricultural, forestry, environmental, conservation and other organizations and businesses that are working collaboratively to advance the goal of securing 25 percent of the nation's energy needs from renewable sources by the year 2025. 25x'25 is led by a national steering committee composed of volunteer leaders. The 25x'25 goal has been endorsed by nearly 800 partners, 30 governors, 14 state legislatures and the U.S. Congress through The Energy Independence and Security Act, which was signed into law by President Bush on December 19, 2007. 25x'25 is a special project of the Energy Future Coalition (EFC). The EFC is a broad-based non-partisan public policy initiative that seeks to bring about change in U.S. energy policy to address overarching challenges related to the production and use of energy.