

MGA Renewable Electricity Platform Goals, Objectives, and Policy Options *Followed with ET2050 Forum Participant Input*

MEASURABLE GOALS¹

- **By 2015:** 10 percent of electricity consumed in the region (equivalent to 103 million MWh of retail sales) will be from renewable resources.
- **By 2020:** 20 percent of electricity consumed in the region (equivalent to 219 million MWh of retail sales) will be from renewable resources.
- **By 2025:** 25 percent of electricity consumed in the region (equivalent to 293 to million MWh of retail sales) will be from renewable resources.
- **By 2030:** 30 percent of electricity consumed in the region (equivalent to 376 million MWh of retail sales) will be from renewable resources.

OBJECTIVES

- Maximize cost-effective renewable electricity production in the region and its integration on the grid.
- Make most efficient use of the existing transmission infrastructure and develop new infrastructure, as necessary, to accommodate the region's economical renewable electricity.
- Ensure retention of local economic benefits from wind and other renewable power development.
- Expand the region's domestic production of wind turbines, towers and blades, solar technologies, and other renewable energy technologies to provide high-paying manufacturing and operational support jobs.
- Create a stable regulatory environment for renewable energy development.

¹ For the purpose of these measurable goals, renewable electricity includes electric power generated from wind, biomass, solar and geothermal energy sources, from new hydroelectric facilities and new hydroelectric capacity obtained through re-powering of existing facilities, and from hydrogen produced from the preceding renewable energy sources.

POLICY OPTIONS

1. Implement appropriate policies for development of renewable electricity generation. Enact, where appropriate, or enhance existing state renewable energy standards or objectives in the region to stimulate the development of new renewable electricity generation.
 - Promote a multi-year extension of the federal production tax credit (PTC) for renewable energy for up to eight years, effective once the current two-year extension expires on December 31, 2008. A longer extension will bring needed industry stability and help achieve more development than would otherwise be possible with repeated short-term extensions.
 - Promote expansion of federal Clean Renewable Energy Bonds to increase incentives available for development of renewable energy projects by entities that cannot utilize the PTC effectively, such as tax-exempt electric cooperatives, municipal utilities, and local and tribal governments.
2. Expand collaborative regional transmission planning and siting to enable future development of renewable electricity generation. Inter-jurisdictional transmission planning and siting involving state regulators, utilities, regional transmission organizations, project developers, advocates, and others must be strengthened to optimize future transmission investments and ensure that the region's grid infrastructure enables robust development of renewable electricity generation and ensures broader system adequacy. In addition, state regulatory commissions need to be empowered to define the "public interest" more broadly to include regional benefits.

ET2050 Participant input

Barriers

- States are resistant to paying and supporting regional planning and transmission projects beyond those that provide direct benefit to their customers and utilities.
- There is a large divide between East and West, with political issues between the regional power markets, MAPP (Mid-American Power Pool) and the MISO.
- Cost allocation in the form of an approved transmission tariff does not exist for large regional transmission projects.

Opportunities

- A collaborative regional transmission plan can provide long term cost savings and more efficient delivery of electricity for all.
- The creation of an equitable cost-sharing system will provide long-term benefits for those who are paying for the system.

Action plans

- State PUCs need to have their authority broadened to include the “public interest” more broadly than most current legislative authority. Indiana provides a good example of expansion of PUC authority to include “in the public interest” in generation and transmission decision.
- Through the Organization of MISO States (OMS). The MGA should encourage inter-jurisdictional transmission planning. The region must be pushed politically to work together on planning and cost allocation, with the backing of Federal Energy Regulatory Commission (FERC) Order 890, which requires public utility transmission providers to participate in open joint transmission planning processes at the local and regional levels.
- The MGA must also ask utilities to attend these inter-regional planning sessions to resolve the East versus West issues. It must support national regional planning standardization and utilize the National Association of Regulatory Utility Commissions (NARUC) to resolve regional planning and cost-allocation issues.

3. Incorporate transmission development requirements into existing state renewable energy objectives and standards. Given the potential mismatch in timing between rapid wind farm development and the much longer time required to study, approve, and construct electric transmission lines, adequate transmission needs to be coordinated with state renewable energy standards and objectives. States should engage interested parties in integrated resource planning, including the identification of additional transmission resources needed to meet state renewable energy obligations. Approval for transmission improvements should be sought through the appropriate utility regulatory process, and construction should commence, to enable timely development of renewable generation facilities.
4. Pursue a multi-state transmission initiative to facilitate construction and delivery to market of a large amount of new renewable electricity generation, together with power from other lower-carbon generation facilities. Utility transmission planners have long identified bottlenecks in the transmission system that must be addressed in order to deliver to market large quantities of new wind energy as well as other renewable and low carbon electricity.

Policy-makers and other stakeholders need to engage in regional integrated resource planning efforts to identify multi-state transmission and generation initiatives. In conjunction with this effort, a cost-benefit analysis and cost allocation issues must be addressed.

ET2050 Participant input

Barriers

- Many states do not share resources, especially regarding regional projects. As a result, states limit their cost approval to the state's geographic portion of regional projects. The backbone of the transmission system requires regional cost allocation solutions.

Opportunities

- Different states have different renewable resources; sharing the wind in the Dakotas or Minnesota can help everyone. The more done by cooperation, the more benefit to everyone—especially compared to every jurisdiction building their own entire infrastructure.

Action plans

- To encourage sharing of resources, the OMS should be invited to get involved and help define the regional benefits of those projects that can greatly expand renewable resources in the region.
- The Department of Energy (DOE) Eastern Interconnect Study Approach may also help with Media Industries Strategy Project (MISP), PJM Interconnection (PJM), and Southwest Power Pool Inc. (SPP). Participants also suggested proposing federal legislation on a renewable portfolio standard (RPS) goal with a transmission tariff to be the backbone of a regional transmission system.
- State legislation is needed so PUCs can consider regional projects. Examples from the telecommunication industry that have federal and state jurisdiction may be helpful on how to do this.
- Indian land should also be considered a state and federal component. There are potential advantages in a relationship with tribes that have the land resource for transmission and access to special federal monies and permission.

5. Develop and implement comprehensive siting principles and policies for wind farms to encourage orderly development of the resource. Achieving wind energy generation on a large scale will require sustained public acceptance of the siting and construction of wind

farms. Wind energy must be deployed with a clear awareness of the need for appropriate siting that takes into account ecological, scenic, cultural, and other concerns. In some parts of the Midwest, local opposition to wind farm construction already presents a barrier to development of the resource. Crafting adequate and consistent state siting policies and procedures should be done cooperatively and inter-jurisdictionally to ensure that wind development proceeds in ways that foster long-term public support for the industry and that avoid pitting states against one another or impeding a regional approach to wind development.

6. Encourage a diversity of approaches to renewable electricity development, including projects that have significant components of local ownership. Policymakers should evaluate the experience with local ownership incentives in Minnesota, Iowa, and elsewhere and consider further measures to foster local equity participation in wind and other renewable energy projects to enhance local economic returns. However, policy-makers should continue to support a diversity of ownership structures in the marketplace and avoid creating barriers to achieving significant levels of renewable electricity development and associated transmission expansion.
7. Demonstrate technology, engineering and operating strategies for maximizing the total electricity generation from the region's wind resources. Policy-makers should support the development and deployment of strategies and technologies to maximize wind energy's contribution to the region's electric power generation. Such efforts should focus on:
 - Applying the findings of wind integration studies, such as the 2006 Minnesota Wind Integration Study. (These studies show that higher percentages of wind power can be incorporated reliably into the electric power system given the Midwest's tremendous wind resource.)
 - Making better use of existing transmission infrastructure and capacity through next generation grid management.
 - Commercializing all practical and economical energy storage options, such as advanced batteries and compressed air storage.
 - Developing new uses of wind energy such as wind electrolysis to produce hydrogen or wind-to-ammonia for fertilizer production that do not require bulk transmission and readily substitute for existing GHG-emitting fossil energy sources.

ET2050 Participant input

The Production Tax Credit (PTC) has been a key component in the growth of wind energy use since Congress created it as part of the country's energy policy in 1992. The credit is set to expire at the end of 2008.

Barriers

- Political opposition from senators and the White House poses the largest barrier. Many government officials may object to the PTC reauthorization, since many oppose funding strategies that compete with gas and oil tax incentives.

Opportunities

- The PTC is one of the most important factors in the expansion of the domestic wind energy industry. By renewing the tax credit, the Midwest can capitalize on creating jobs in the emerging renewable energy industry. Economic incentives will attract energy service providers.

Action plans

- Advocates of renewing the PTC must act quickly, before the credit expires. Government officials and members of the media must be solicited to help inform the public and put political pressure on decision makers.
- Legislators must pass unanimous joint resolutions urging Congress to renew the PTC, and governors and stakeholders should write letters urging Congress to do so. The MGA should speak to state legislatures, members of the media and the American Wind Energy Association (AWEA) to address renewing the PTC.

8. Develop economic incentives and workforce development policies to attract renewable energy component manufacturers and service providers to the region. Take steps to integrate state economic development and workforce development programs and incentives into renewable energy development policies and strategies with the goal of attracting manufacturers and service providers, both for regional economic benefit and to stem the rising capital and labor costs associated with all energy projects. The Midwest already benefits, for example, from the presence of major wind turbine blade and tower manufacturers, turbine assembly operations, engineering and wind farm construction firms, and operations and maintenance providers whose commercial success extends well beyond the region.

ET2050 Participant input

Every day, jobs are lost due to the declining manufacturing industry in the Midwest. Showcasing the region as a renewable energy resource can have a positive impact on the job market by creating manufacturing jobs in this industry.

Barriers

- States are competing against each other within the same footprint.
- There are some risks associated with a state-only project, but by working regionally, we can reduce the risk by increasing the pool to spread it out over a large region. If the PTC does not pass in the next couple of months, potential manufacturing jobs may be driven overseas.

Opportunities

- Creating more opportunities for utilities to build renewable energy will lead to the creation of more jobs in the Midwest. The timing for European investment is good, as the exchange rate is in the Euro's favor.

Action plans

- The PTC renewal can be promoted as a reason to protect manufacturing jobs in the renewable energy industry.
- A regional turbine pool could be created to guarantee the market, possibly by using existing policy frameworks in the region to pass similar individual state legislation. Legislators could coordinate policy, perhaps by looking at a "turbine utility."
- Implementing a marketing strategy would assist in the creation of a regional economic plan. The Midwest should be marketed as a hub of renewable energy within the United States and North America, to raise global awareness by creating a brand to promote. We all stand to benefit, individually and as a region. The Midwest is not only the breadbasket of the United States, but also the wind source. To promote the region, the MGA could send governors to an international wind conference; in Europe, for example.
- The MGA should perform a market analysis that can translate into a workforce analysis of the education/job training needed for potential employees, along with infrastructure development and an inventory of existing capacity.
- A regional assessment is needed regarding current education and training activities for renewable energy and other "green" jobs. Each state's assets should be assessed to identify opportunities for collaboration.

- The use of biomass must be explored on a greater scale. Biomass tends to be developed on a smaller scale with smaller developers, and has similar developmental issues to wind power.
 - Catastrophic insect infestation must be taken into account during the infrastructural planning for biomass. With the arrival of the Emerald Ash Borer, an exotic beetle that is destroying ash trees in the Midwest, biomass may a more viable option now than ever before. In Minnesota, using only 1% of ash trees fuels a 25-megawatt facility for 200 years.
 - Investigate developing biomass fuels on conservation acres, such as forest preserves, on which maintenance burns to control overgrown dead wood are required.
Explore Internal Revenue Service (IRS) uncertainty regarding biomass financing, which results in a lack of certainty for project planning and financing.

Additional ET2050 Feedback

Goal: Change MISO Queue Reform

Although this goal does not refer to any specific policy option formally presented to the Energy Security and Climate Stewardship Platform for the Midwest (2007), the group recognized the importance of reforming the MISO queue process. Applicants may have to wait as long as a couple of years to get their interconnection service.

Action plans

- The MGA should request governors to make this a priority issue and work with their commissions to focus attention on finding a solution to the logjam that the current FERC process has created with renewable energy projects.
- MISO has several work groups working on potential solutions and recommended FERC regulatory changes. There is also a growing support for regional area approvals for renewable energy that would allow large transmission planning to proceed faster and provide more wind energy. The MGA and government officials need to be engaged on this issue. It is not a big and complicated topic, but it needs explanation.