

The Quest for Common Ground

It's easier today than ever to get locked into an opinion based on the way we choose to filter information... we tend to "hear what we want to hear"! The Quest for common ground is a series of interviews with people close to important issues in our region with varied perspectives on the issue. Understanding different perspectives is the first step in averting conflict and finding solutions.

This segment, perspectives on Adapting to a Changing Climate.

Perspective from Joe Miller – Minnesota Rural Electric Association:

Minnesota's rural electric cooperatives, like other utilities, are tasked with providing power for anyone who requests it within their service areas. That responsibility comes with a simple obligation: the lights must stay on.

Reliability has to remain the starting point for every energy discussion in Minnesota. In a state where subzero cold, summer heat and growing electricity demand can strain the grid, dependable power is not a luxury. It is essential for families, farms, schools, hospitals and businesses.

That is why electric cooperatives support an all-of-the-above approach to energy. We care deeply about the environment and have embraced renewable energy as part of the solution. Wind and solar are important resources, and they will continue to play a major role in Minnesota's energy future. But, they cannot do the entire job alone — even with batteries. We need various technologies to keep the electric system reliable.

In fact, recent North American Electric Reliability Corporation reports (those who are responsible for maintaining a reliable electric system) have highlighted "worsening resource adequacy" (power supply) and that "weather-dependent resources ... increase the complexity of planning and operating a reliable grid." As power providers, our goal is to supply power at all times, not only when the wind is blowing or the sun is shining. Minnesotans want, and need, power on the coldest winter mornings, the hottest summer evenings and during periods of peak demand. That means Minnesota needs a full basket of resources, especially those that can be called upon when they are needed most.

This is where dispatchable generation remains critical. A reliable electric system requires a balanced mix of technologies, including resources that provide steady around-the-clock power and others that can ramp up quickly when demand rises.

If we want to reach the carbon free future that Minnesota's 2023 carbon free legislation directs, nuclear energy must be part of that conversation. Today, nuclear power provides roughly half of Minnesota's carbon-free electricity. That makes it one of the state's most important clean-energy resources already. If Minnesota is serious about reducing emissions without sacrificing reliability, then nuclear must remain on the table — and more of it should be considered. However, right now, there is a moratorium on building new nuclear energy, which we believe needs to be repealed.

At the same time, generation alone is not enough. We also need the infrastructure to move electricity from where it is produced to where it is needed. That means building new transmission lines and modernizing the grid. Too often, worthy projects face long delays in siting and permitting. Reforming those processes in a way that remains thoughtful, transparent and respectful of landowners and communities is essential if Minnesota is going to meet future energy needs.

The good news is that Minnesota does not have to choose between reliability and environmental progress. We can have both. The technologies exist. The expertise exists. What is needed now is the willingness to pursue practical solutions instead of limiting ourselves to a single path.

The future should give Minnesotans hope. By using every available tool — renewables, nuclear, dispatchable generation and expanded transmission —



Mark Jacobs
Retired Aitkin
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we can build an electric system that is cleaner, stronger and ready for the demands ahead.

Perspective from Lucy Rea USDA Forest Service:

Research indicates that temperatures in Minnesota have warmed by about 2.2 °F on average in the past century, with winter temperatures warming the most, particularly in the north. Summers, on the other hand, have not warmed as rapidly but have become much drier, leading to more frequent drought conditions and increasing wildfire risk. This has broad-reaching impacts, including affecting our forests' ability to provide services that benefit and enrich our lives, from recreational opportunities to forest products such as timber (see www.forestadaptation.org/assess/ecosystem-vulnerability/northwoods for more information about how climate change will impact Minnesota).

Research scientists are exploring and developing energy alternatives that could help us reduce the amount of carbon dioxide released into the atmosphere, which has increased by 50% over the past century and is projected to continue increasing. For example, Forest Service scientists are collaborating with partners to find alternative markets to support the forest industry, such as sustainable biofuels or products like biochar. These fuels, developed from plant materials, are renewable and can help combat climate change by offsetting or replacing fossil fuel energy sources. Partnerships between researchers and private industry have led to innovations like mobile biochar units, capable of converting waste woody material into a valuable product for soil enrichment, mine restoration, or even to enhance crops, instead of burning it in piles and adding to CO₂ in the atmosphere.

Climate variability leads to uncertainty, which can mean that land-use practices that were effective in the past might not have the same outcome in the future. Forest Service scientists are studying ways to manage forests to keep them healthy and productive amidst these changes. At local scales researchers have developed practical guidance for woodlot and forest landowners in northern woodlands. Scientists are also collaborating at national scales with projects like the Adaptive Silviculture for Climate Change (ASCC) experimental network, designed to test climate-adaptive silvicultural practices across a broad range of forest types. When establishing an ASCC experimental site, scientists, forest managers, tribal members and other community partners, develop a shared goal for future forest conditions. Together, they decide on a range of adaptation tactics, from standard forest thinning to planting new tree species that are expected to cope with future warmer and dryer conditions. Using a common experimental framework across diverse sites increases the scientific rigor and creates opportunities to leverage knowledge and data over broader landscapes.

Long-running climate adaptation experiments like ASCC help to take the guesswork out of climate adaptation and support foresters to make informed decisions to achieve desired conditions for future forests. For example, research in the Northern Minnesota ASCC site at the Cutfoot Experimental Forest shows that tree seedlings from warmer, southern sources survive and grow well in northern Minnesota. Knowing what and where to plant helps managers to plan and care for the land in the face of future uncertainty (more information about the

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ASCC network and publications can be found at <https://adaptivesilviculture.org/>.

The views reflected in this article are solely my personal views based on my expertise, experience, and publicly available data, and do not necessarily reflect the views of the U.S. Department of Agriculture or the United States government.

Perspective from Paul Austin, executive director, Conservation Minnesota:

Whatever you want to call it, changing weather patterns and the impacts they have on Minnesotans—droughts, floods, wildfire smoke—are real. But there's some good news that touches as much, or more, on energy affordability as it does on making "responsible choices."

Clean energy sources are not only cleaner, healthier, and homegrown (which means they're less affected by global conflict), they are now also the most affordable.

Our neighbors are proof. The states in our region that are using the most wind and solar are the ones with the lowest electricity rates. Take Iowa and South Dakota, for example. Iowa has the largest wind power share in the country, with two-thirds of the state's electricity coming from renewables and almost all of that from wind. In 2022, Iowa's largest utility produced more wind energy than its total customer electricity demand. South Dakota is currently the top state in the country for clean energy overall, with renewable resources generating more than 80% of its electricity, and nearly 60% coming from wind power. It is also true that states in our region with the least renewable energy, like Michigan, pay the highest electricity rates.

At a national level, energy prices are rising twice as fast as inflation, and increasing demand means we need to keep building more clean energy. Costs for solar are down 75% from a decade ago. And just as demand is increasing and clean energy costs are falling, the federal government has been busy stalling or canceling clean energy projects altogether while costing customers millions to keep failing coal projects running in our region.

Fortunately, Minnesota knows better. We've passed a 100% Clean Energy Standard which will move all Minnesota utilities to provide reliable and affordable energy through sources like solar, wind, and battery storage. And in 2025, we passed new data center regulations requiring data centers to pay the full cost of their energy use and to comply with Minnesota's 100% Clean Energy Standard.

More good news: we're on our way to a cleaner, more affordable grid. Last year, more than half of our electricity came from clean sources. But it will take sustained effort to complete the job and reach 100%—it's one of our top priorities at Conservation Minnesota.