



Carbon dioxide reduction measures

12300 Elm Creek Boulevard • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • greatriverenergy.com

Background

In 2023, Minnesota passed a law requiring electric utilities to serve 100% of retail electric sales without carbon dioxide emissions by 2040. By reducing coal-based energy and more than doubling renewable energy, Great River Energy expects to reduce its carbon dioxide emissions more than 80% below 2005 levels by 2032, while retaining a reliable and competitive power supply.

Great River Energy's position

Great River Energy has been thoughtfully planning and executing the transition of its power supply portfolio for more than a decade. The cooperative's portfolio of renewable resources combined with the ability to retire renewable energy credits to satisfy Minnesota's carbon-free standard puts Great River Energy in strong position to meet the standard. Great River Energy will strive to continue serving members with reliable, affordable electricity while meeting the standards in the law.

Great River Energy's current portfolio is a balanced and cost-effective mix with three main components:

- *Wind power purchase agreements:* Great River Energy has over 1,800 megawatts (MW) of competitive wind contracts as a source of carbon-free energy and a hedge to the wholesale energy market. Most of that wind energy is already on line and the remainder is under development and is expected to be on line in the next 2-3 years.
- *Peaking generation:* Great River Energy has 1,400 MW of reliable and flexible natural gas peaking capacity in Minnesota. Much of that generating capability is backed up with on-site fuel oil, which is critically important for winter reliability. Great River Energy's peaking generation operates when called on by the market to provide essential reliability when needed and emits very little carbon dioxide on an annual basis.
- *Capacity and energy hedge contract:* Great River Energy purchases capacity and an energy hedge from the entity that purchased a coal-based power plant from Great River Energy in 2022. The purchase amount is currently 1,050 MW and will step down in increments until the contract expires in 2031.

Great River Energy's portfolio depends on ready access to the electricity market, which plays the essential roles of allowing the free flow of energy across state lines and providing the ability to purchase capacity as needed.

About Great River Energy

Great River Energy is a not-for-profit wholesale electric power cooperative which provides electricity to approximately 1.7 million people through its 27 member-owner cooperatives and customers. Through its member-owners and customers, Great River Energy serves two-thirds of Minnesota geographically and parts of Wisconsin.