



Innovation for Minnesota's cleaner energy future



Natural Gas Innovation Act

In June 2023, CenterPoint Energy proposed **the first five-year innovation plan** under Minnesota's Natural Gas Innovation Act (NGIA) – a landmark state energy law passed with bipartisan support in 2021.

NGIA creates a new regulatory **framework for natural gas utilities to invest in renewable energy** resources and innovative **technologies** that aim to reduce the state's greenhouse gas emissions. CenterPoint's innovation plan is subject to review and approval by the Minnesota Public Utilities Commission (PUC).

More than two-thirds of Minnesota households and businesses currently depend on natural gas for heating. NGIA recognizes that Minnesota must pursue multiple pathways to **reduce and eliminate emissions while continuing to provide the reliable, cost-effective energy** that our natural gas customers count on every day, especially on the coldest days.

What is included in CenterPoint's innovation plan?

Our proposed innovation plan includes 18 pilot projects to deploy and evaluate a broad array of innovative resources and technologies aimed to reduce greenhouse gas emissions. Several key elements include:



Investing in made-in-Minnesota carbon negative, zero- and low-carbon gas alternatives

- **Renewable natural gas (RNG)** is produced by capturing and recycling organic waste materials from farms, food waste, wastewater treatment facilities and other sources to produce pipeline-quality gas. CenterPoint would purchase RNG for our gas supply, with the goal of reducing greenhouse gas emissions resulting from the production, distribution and consumption of natural gas.
- **Green hydrogen** is produced by splitting water into oxygen and hydrogen using renewable electricity. It can be blended into CenterPoint's natural gas supply or used directly in a dedicated system with an industrial or large commercial customer.



Networked geothermal system

We propose developing a networked geothermal system to provide building heating and cooling to a neighborhood. A geothermal system uses a network of wells, water, pipes and pumps to pull heat out of the ground to deliver warmth to buildings in winter and to pump heat from those buildings back into the ground to provide cooling in summer.



Hybrid heating

Through NGIA, we'll offer customers incentives to install hybrid heating systems that use electric heat pumps with gas backup heating for the coldest weather. We also plan to evaluate new strategies to reduce energy waste and lower emissions through deep energy retrofits of homes and the construction of high-performance commercial buildings.



Industrial decarbonization

We plan to offer incentives and support to industrial customers to improve efficiency and reduce emissions for high-heat processes (such as glassmaking, concrete production or metal foundries). Electric heat pumps may be suitable for low-to-medium heat processes, while technologies such as carbon capture or green hydrogen may be needed for processes not amenable to electrification.

About CenterPoint Energy

We are Minnesota's largest natural gas utility, serving the energy needs of more than 900,000 residential, commercial and industrial customers in over 260 communities.



Decarbonizing Minnesota's natural gas end uses

CenterPoint Energy participated in an 18-month stakeholder process organized by Center for Energy and Environment (CEE) and the Great Plains Institute (GPI). The diverse group examined potential pathways to decarbonize Minnesota's natural gas end uses, resulting in a July 2021 report that outlined 25 consensus recommendations.

The report analysis recognizes that **gas utilities will continue to have an essential role in Minnesota's cleaner energy future and the importance of exploring a range of technologies to reduce emissions most cost-effectively from natural gas end uses.** The consensus recommendations align with many

elements of NGIA and offer a useful guide for addressing the very complex challenge of reducing carbon emissions while continuing to meet Minnesota's heating and industrial needs reliably and affordably.



Learn more at CenterPointEnergy.com/NGIA.



*As calculated using the IMPLAN model. Measured in terms of full-time equivalent ("FTE") jobs or the work that can be performed by one person in one year. This includes jobs directly related to the pilots, upstream indirect jobs created in the supply chain, and downstream induced jobs created in local industries due to increased consumption expenditures associated with direct and indirect jobs.

How will CenterPoint's innovation plan benefit Minnesotans?

CenterPoint is committed to helping our customers by offering cleaner energy alternatives, investing in Minnesota's economic future.



The projects may leverage an estimated **\$17 million or more in federal clean energy incentives and support for Minnesota.**



Reduce an estimated **1.2 million tons of CO2 emissions** over the projects' lifetimes – equal to the **annual energy use of 150,000 homes or 14% of total annual emissions**



Create 3,000 full-time equivalent jobs* over the projects' lifetimes and support local economic development



Adding only \$1.43 per month for a typical residential utility bill.

NGIA timeline

