

# Reduce your carbon footprint with CenterPoint Energy and CleanO2 Carbon Capture

## Background

Greenhouse gases significantly contribute to climate change. CenterPoint Energy is committed to identifying and implementing clean energy initiatives that reduce greenhouse gas emissions, make clean energy financially accessible, and enhance sustainability through the increased use of renewable energy sources.

One such initiative is the recent implementation of a carbon capture pilot program to monitor and measure energy savings and CO<sub>2</sub> reductions after the installation of a carbon capture device called CARBiNX™ – the brainchild of CleanO2 Carbon Capture Technologies.

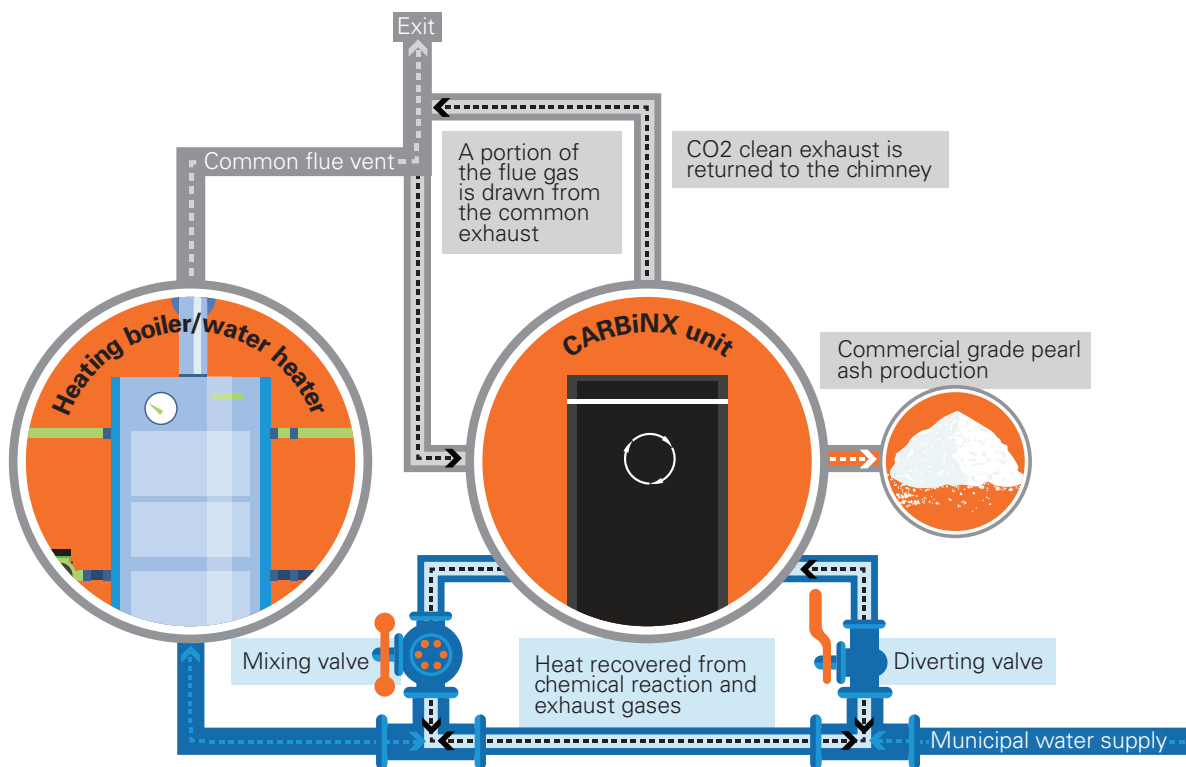
## Pilot

CenterPoint Energy is working with CleanO2 Carbon Capture Technologies on a 12-month research pilot in Minnesota to monitor and measure the energy savings and CO<sub>2</sub> reductions that light industrial and commercial companies experience using the CARBiNX device. CenterPoint Energy's Conservation Improvement Program is funding the installation and maintenance of this unique technology, the world's first decentralized commercial carbon capture device to lower greenhouse gas emissions in the heating industry. In the US, about 12 percent of greenhouse gas emissions come from businesses and homes when natural gas is used to heat buildings or water.

## Technology

CleanO2's CARBiNX, which is about the size of two mid-sized refrigerators, is the first device built small enough to fit in light industrial and commercial buildings that use natural gas-powered heating and water heating systems. Each device takes a portion of waste flue gas containing CO<sub>2</sub> and passes it through a chamber, where it reacts with a carbon-reduction chemical to create pearl ash. The unit operates as a heat exchanger, using the heat generated from flue gas and the chemical process to preheat a building's domestic water supply, saving energy because it requires the boiler and/or water heater to use less natural gas.





### Potential Benefits

**Cost Savings:** CleanO2 estimates that its carbon capture technology can decrease energy consumption by up to 20 percent, depending on boiler size and efficiency and hot water consumption. These savings come from the way the device uses the heat generated as the CO2 is converted to pearl ash. Companies may receive a return on investment within five years through energy savings, preventative maintenance and profit sharing.

**Emissions Reductions:** CleanO2 has indicated that increased energy efficiency, coupled with carbon capture, can reduce CO2 emissions by up to 20,000 pounds annually per unit. To give you an idea of how much that is, 20,000 pounds of CO2 would fill ten 1,250-square-foot, single-story houses.

**Carbon Reuse:** Each CARBiNX device can create up to 14,000 pounds of pearl ash per year, according to CleanO2. This safe and nontoxic byproduct can be used to manufacture a variety of products, including detergents and soaps, agricultural goods and textiles, among others. CleanO2 offers a profit-sharing program to customers, depending on the type of agreement signed.

### For More Information

To learn more about CleanO2's carbon capture technology and how businesses are saving money and reducing their CO2 emissions, visit [CenterPointEnergy.com/CarbonCapture](https://www.CenterPointEnergy.com/CarbonCapture).



*CenterPoint Energy is facilitating this pilot program but is not the supplier, installer or servicer of the equipment and will have no contractual obligations regarding the equipment with any client choosing to participate in the pilot program. CenterPoint Energy makes no claims or endorsements regarding the unit's efficiency or effectiveness.*