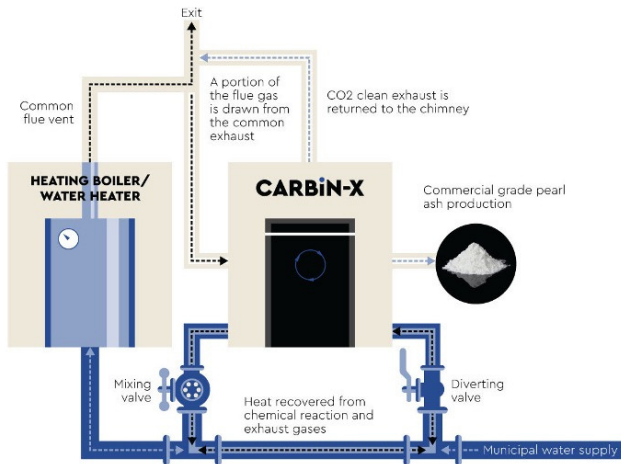


CleanO2 Carbon Capture Technologies has introduced a revolutionary new technology to help building owners green their buildings and generate ongoing revenue. Introducing CarbinX™ – a commercial carbon capture and conversion system designed for multi-residential, institutional, and commercial buildings.

CarbinX™ collects CO2 from heating appliance flue gas that would otherwise be vented to atmosphere and runs it through a specially designed reaction chamber where it reacts with a hydroxide to form a by-product, (typically potassium carbonate, also called “Pearl Ash”). The CO2 binds with the hydroxide molecules and is permanently captured in the Pearl Ash by-product, avoiding unnecessary release to atmosphere.

## How CarbinX™ works



- A portion of the heating appliance flue gas is diverted to the CarbinX™ unit
- The CO2 in the flue gas reacts with the hydroxide in the reaction chamber and converts the CO2 and hydroxide into Pearl Ash, a useful chemical by-product
- Cold municipal water for the heating appliance is diverted through the CarbinX™ unit, where it is pre-heated using a combination of the heat from the exothermic chemical reaction and the captured heat from the heating appliance flue gas
- The pre-heated water is then run into the heating appliance, reducing the amount of fuel consumed to heat the water since it enters warmer and requires less fuel/time to heat
- The Pearl Ash is collected approximately every 2 weeks and replaced with fresh hydroxide
- The produced Pearl Ash is used to make soap and detergent products, which are either sold to consumers or back to the building (at a discount) for its washrooms and janitorial needs
- The revenues from the soap and detergent sales are shared with the building owners, returning the owner's investment in approx. 4-6 years, (depending upon the volume of CO2 production from the heating appliances), and generating ongoing revenue thereafter.

## Buyer's Investment Payback Analysis

| Description  | Low Emissions | AVG Emissions | High Emissions |
|--|---------------|---------------|----------------|
| Hydroxide Chemical Input (kg/month)  | 220 kg        | 275 kg        | 400 kg         |
| Carbonate Chemical Output (kg/month)                                       | 270 kg        | 338 kg        | 492 kg         |
| Annual Fuel Savings  | \$938         | \$1,156       | \$1,360        |
| Annual Preventative Maintenance Savings**                                  | \$1,500       | \$1,500       | \$1,500        |
| Rebate from By-Product Sales   | \$3,897       | \$4,870       | \$7,084        |
| Annual Savings and Rebate  | \$6,335       | \$7,526       | \$9,944        |
| CarbinX Unit Cost CAD\$  | \$25,000      | \$25,000      | \$25,000       |
| Est. Installation & Transport Cost*  | \$12,000      | \$12,000      | \$12,000       |
| Total Cost   | \$37,000      | \$37,000      | \$37,000       |
| Annual Reduced Emissions (tonnes) from CO2 capture and recycled waste heat | 6.7           | 7.1           | 7.8            |
| Expected Payback Period (Years)  | 5.8           | 54.9          | 3.7            |
| Expected Equipment Life - 20 years   |               |               |                |
| Annual Revenue & Savings after Payout                                      | \$6,335       | \$7,526       | \$9,944        |

\* Installation & Transportation Cost will depend on building, jurisdiction and distance from Calgary, Alberta

\*\* Annual Preventative Maintenance Savings are based on less than \$100.00/month. The CleanO2 technician conducts a semi-monthly visual preventative maintenance checklist inspection to identify existing or potential problems

• Low/Average/High Emission Scenarios are based on a study conducted by the University of British Columbia and are dependant upon the use intensity of the heating appliances and output of carbon dioxide

## Benefits to Building Owners

- **Reduced Heating Costs:** CarbinX™ reduces gas consumption by approximately 20% by using waste heat from flue gas and the exothermic reaction (depending on current boiler efficiency/energy consumption)
- **Reduction of Carbon emissions:** up to 20%
- **Ongoing Revenue Stream:** Revenues from the sale of by-product (currently at \$1.20/kg produced) are shared with the building owner for the life of the unit, creating an ongoing revenue stream after payout.
- **Free Preventative Maintenance:** Regular preventative checklist inspection by CleanO2's technician as part of our CarbinX™ monitoring/servicing can identify existing or potential problems before they become severe and expensive.