Clean, Green, Energy Future

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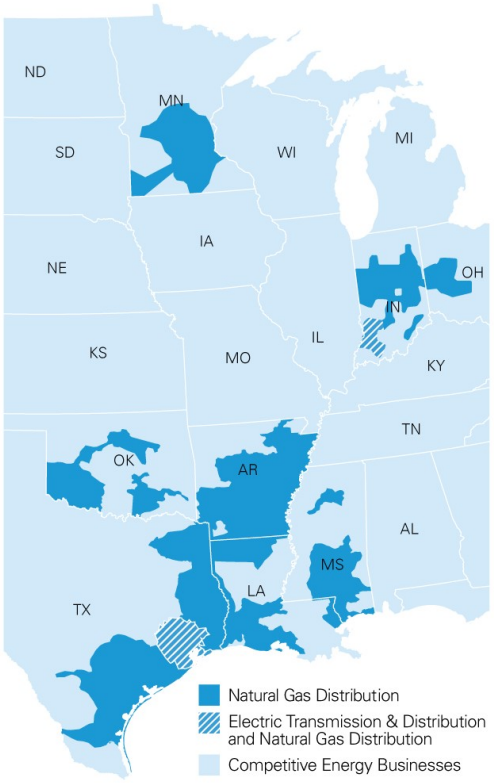
CenterPoint Energy

CenterPoint Energy at a glance
7+ million customers



Gas Utility Services

Regulated gas distribution jurisdictions in eight states with

- 4.5 million customers = 2nd largest in the U.S.
- 119,000 miles of pipe, largest in the U.S.

Minnesota Gas

- 870,000 customers = largest in MN
- 260 communities
- 1,200 employees

Gas Workers Local 340 – 341 employees

Office and Professional Employees International Union Local 12 Metro & Mankato – 221 workers

Int'l Brotherhood of Electrical Workers Local 949 – 267 workers

(1) Operational data based on information as of December 31, 2017
(2) Does not include approximately 72,000 natural gas customers as of December 31, 2017 that are under residential and small commercial choice programs invoiced by their host utility

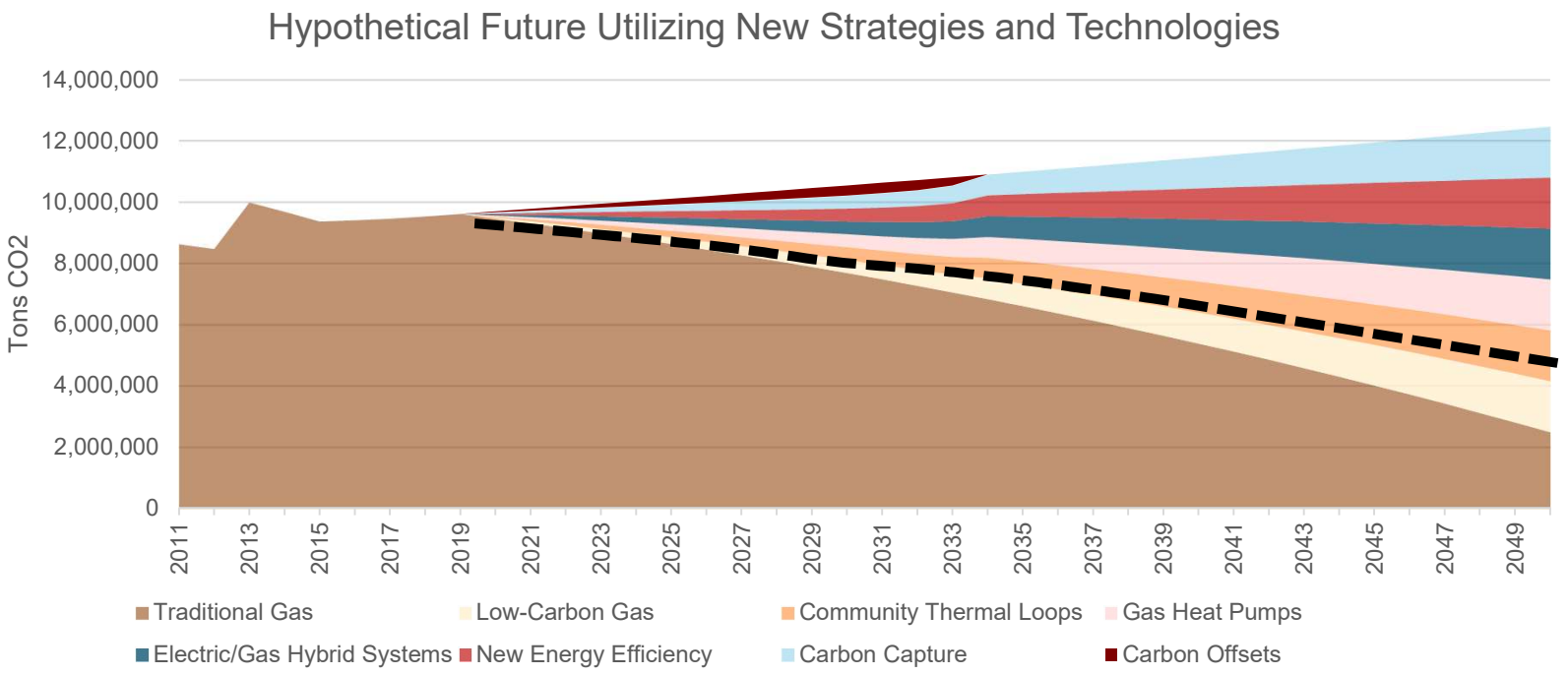
How CNP is Thinking about Clean Energy

- **Concept of service is changing**
- **As customer expectations evolve, our services are evolving**

CUSTOMER OBJECTIVES	
Always Safe	Environmental Stewardship
Always Reliable	Community Stewardship
Maximize Affordability	Corporate Stewardship

- **Expectations of customers, communities and policymakers are to reduce greenhouse gas emissions from customer end use of gas**

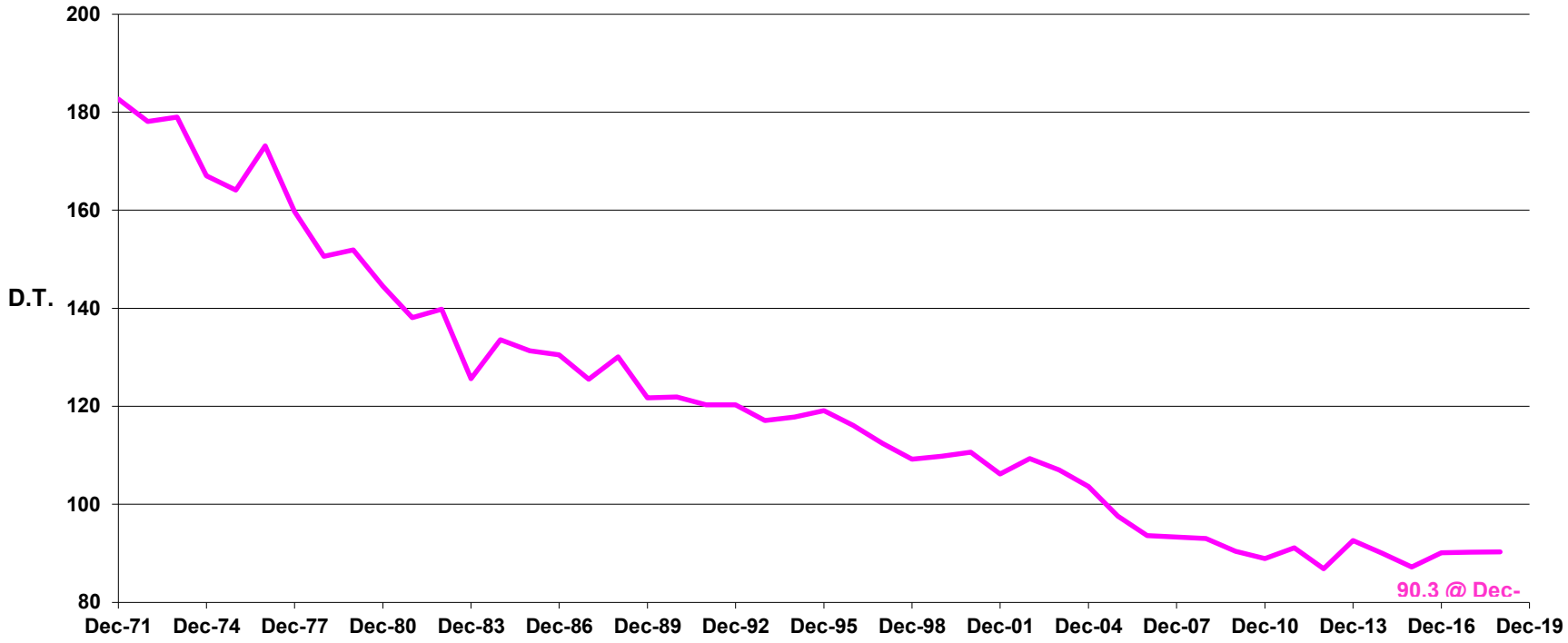
Imagining a Clean, Sustainable, Energy Future



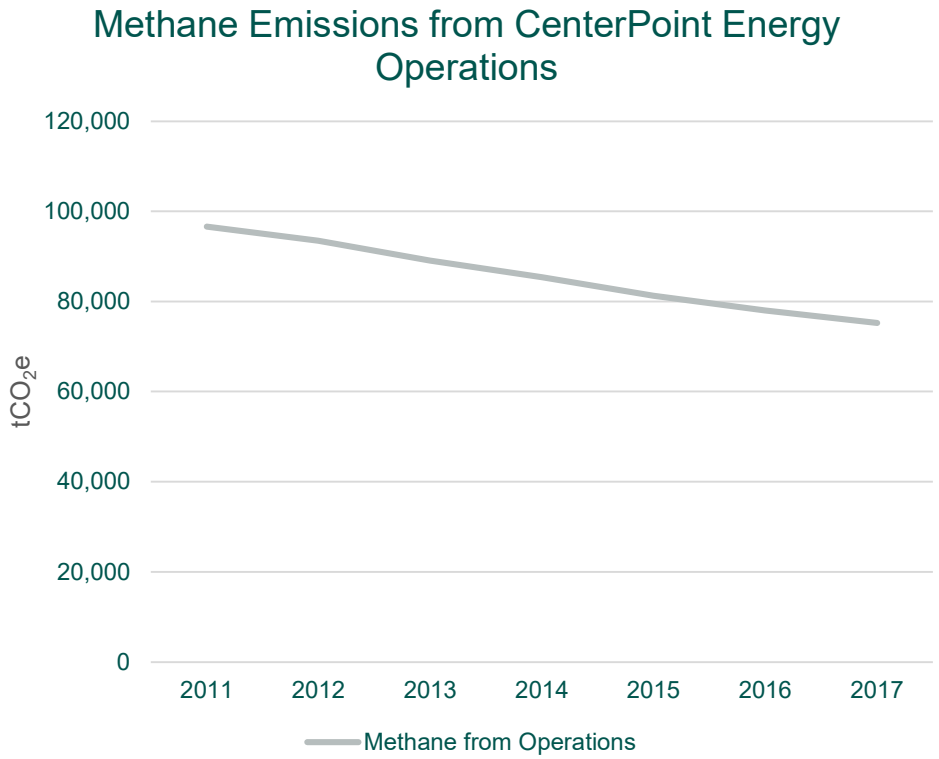
Sources: RNG Market Prices, 2019; Harrison, Kevin, 2018. AGA RNG Workshop Presentation; GTI, 2018; CNP analysis based on CEE, 2017. Cold Climate Air Source Heat Pump Field Assessment; CNP, 2018 CIP Status Report; CEE DSM Potential Study, 2018. CleanO2 Technology, 2019; CAEP, 2016. 2020 offset price estimates.

Energy Efficiency Programs and Technology

Weather Normalized Annual Natural Gas Consumption Per Residential Customer (10 Years Normal Weather), 1971-2018



Methane Emissions from Operations down 25%



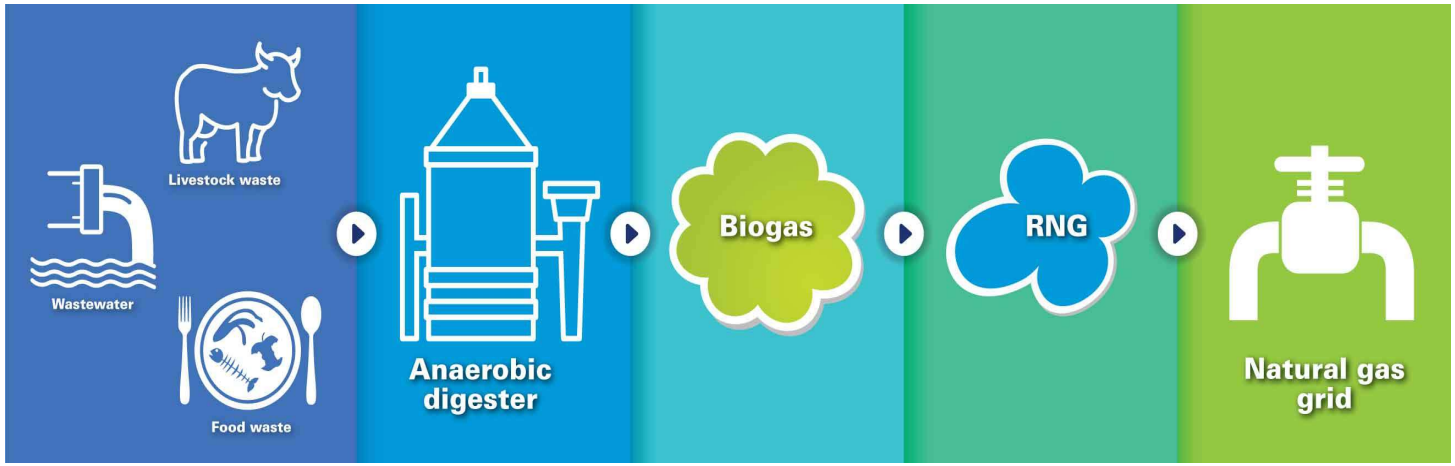
Source: United States Environmental Protection Agency, Facility Level Information on Greenhouse gases Tool, https://ghgdata.epa.gov/ghgp/main.do.

Renewable Natural Gas (RNG) – What is it?

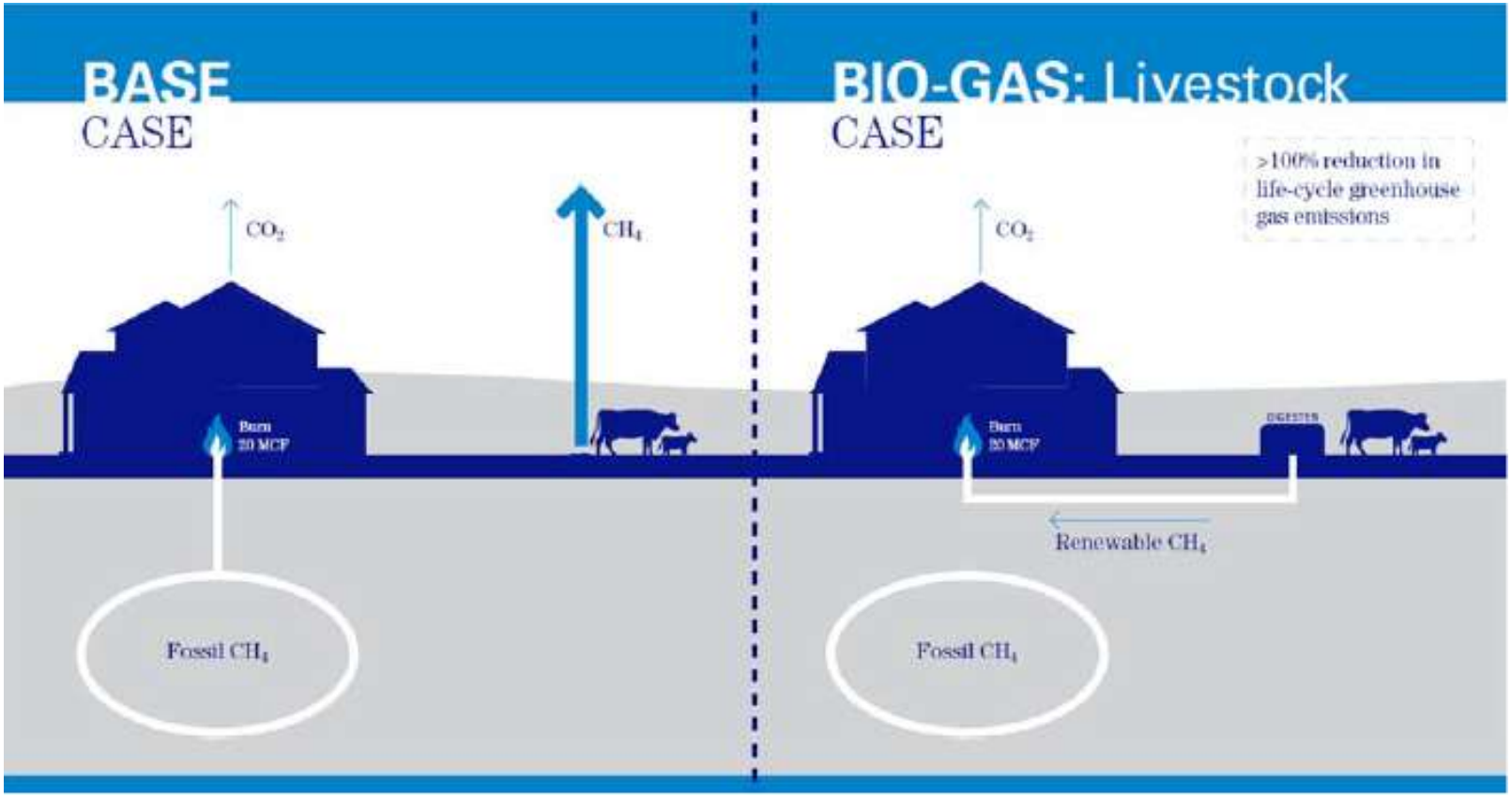
- **Opportunity for Made-in-MN natural gas by recycling biogas from organic materials, providing lower, or even net negative emissions compared to conventional natural gas**

Potential Sources:

- Agriculture waste (manure)
- Wastewater treatment plants
- Food waste
- Landfill gas



Environmental Benefits of RNG



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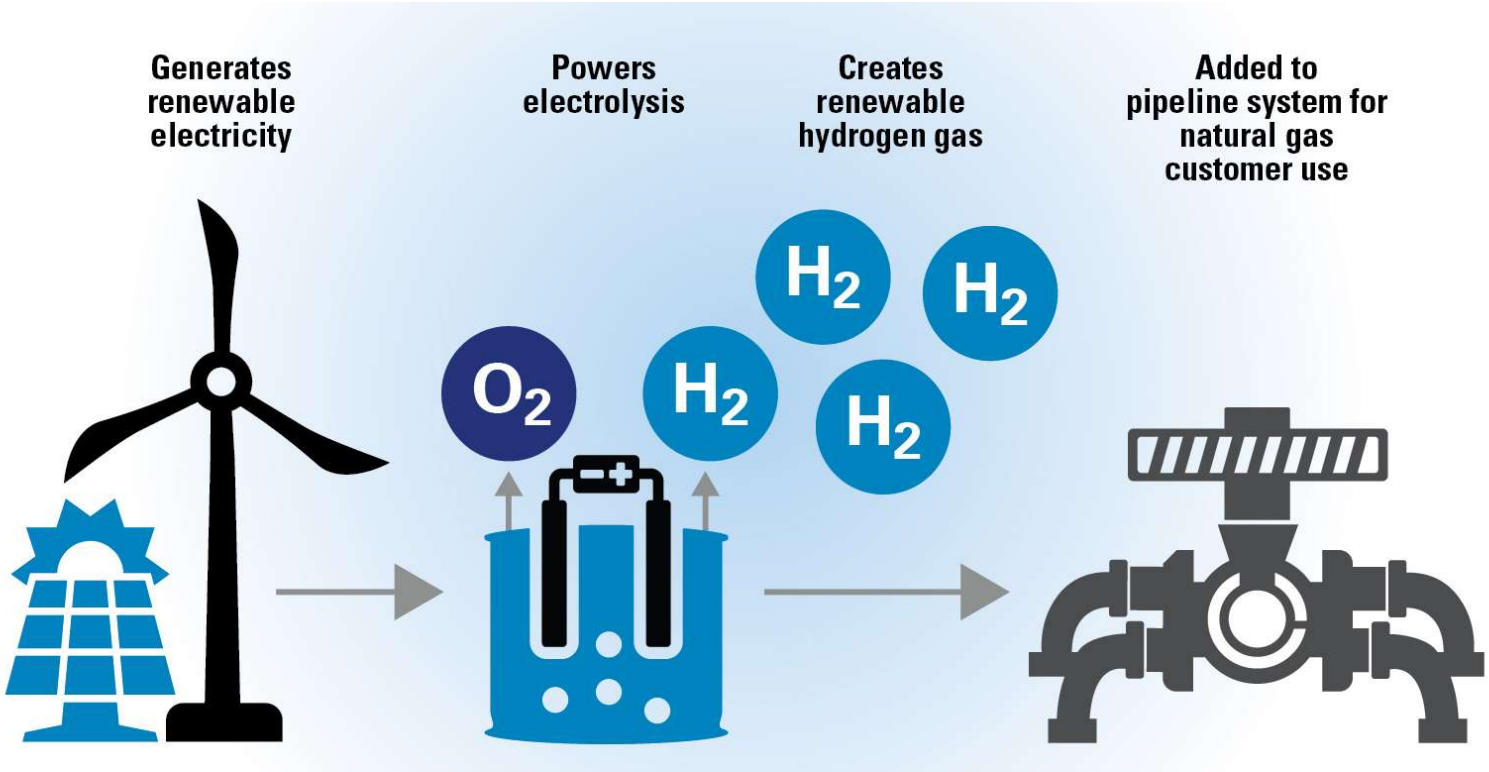
Changing Our Fuel Mix: RNG Interconnection

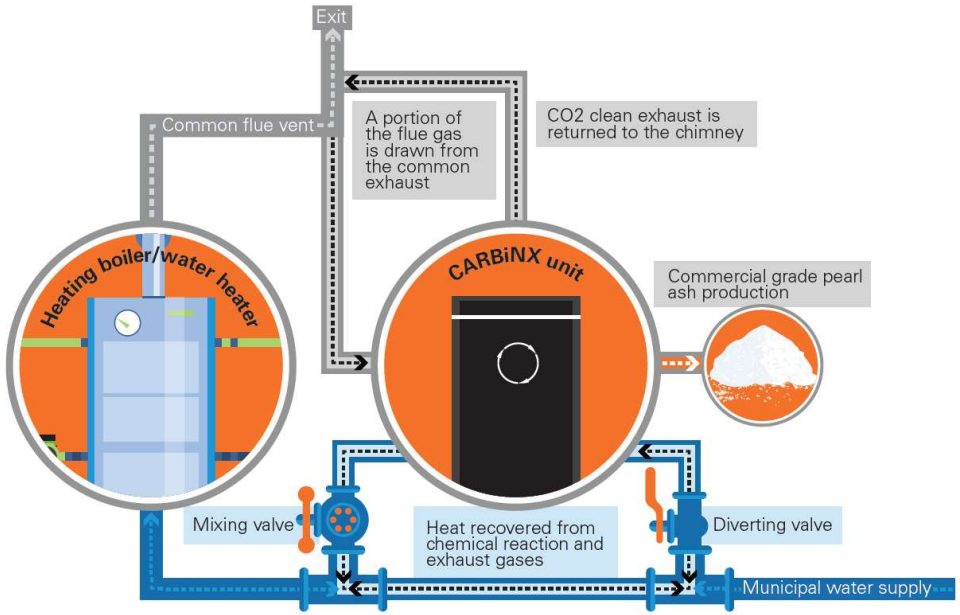
- **Interconnection Tariff**
  - Approved by the MNPUC November 2020
- **Access**
  - Establishes a process for RNG producers to interconnect with CenterPoint Energy pipeline system to sell their product
  - Ensures gas quality and safety standards so RNG is interchangeable with conventional natural gas
- **Opportunity**
  - Support new clean energy industry in MN
  - Reduce emissions
  - Improve waste management
  - Diversify the energy supply

Changing Our Fuel Mix: Green Hydrogen demo



CleanO_2 Carbon Capture & Heat Recovery

- **Commercial Use:**
  - Boilers or hot water tanks
  - Hotels, malls, schools, hospitals, fitness centers, etc
- **Benefits to Customers**
  - Reduces up to 20% of CO_2 emissions
  - Saves up to 20% in energy costs
  - Pearl ash profit sharing
- **Pilot 2021**
  - Objective: Measure and verify potential for a future Energy Efficiency Rebate
- **Status:**
  - Meeting with building code officials

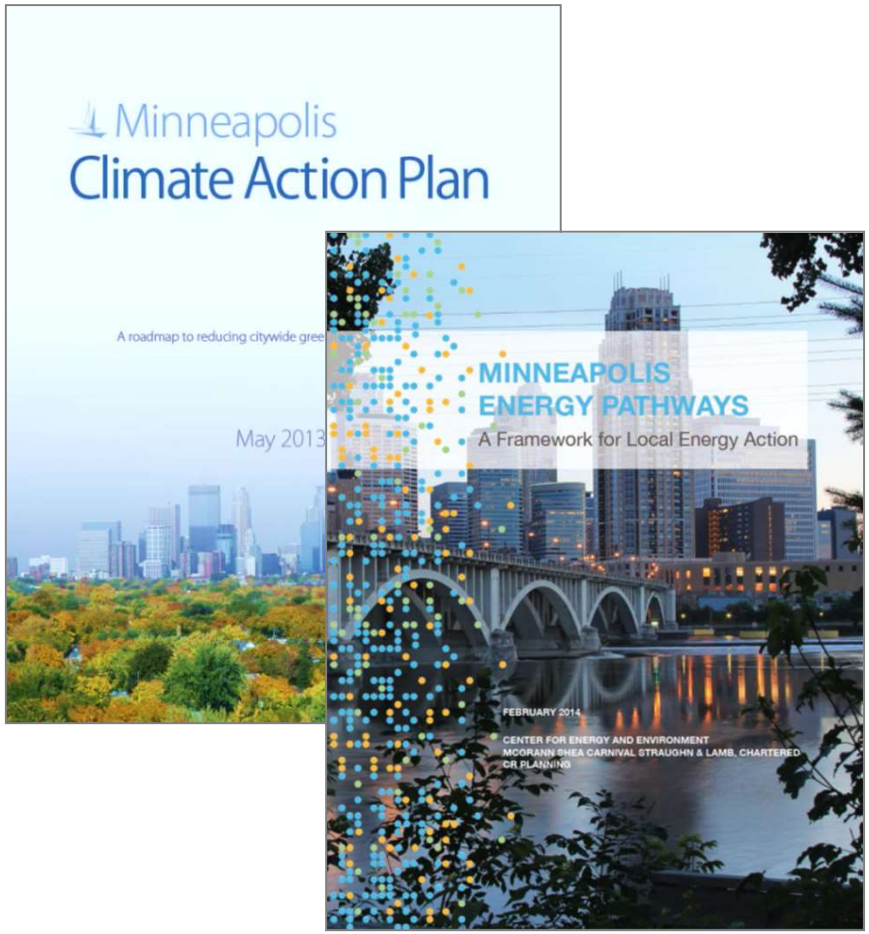


Clean O2's CARBiNX™ technology

Natural Gas Innovation Act

- Bipartisan Legislation
- Creates regulatory framework and process for natural gas utilities to invest in new clean energy resources and technology
- Allows gas utilities to submit “innovation plan” for approval by the PUC
- In 2020, MN Senate passed the bill 62-4, but the House didn’t vote.
- The bill will be reintroduced in 2021 where we hope it will pass

Mpls Clean Energy Partnership
Helping Minneapolis Achieve its Energy Vision



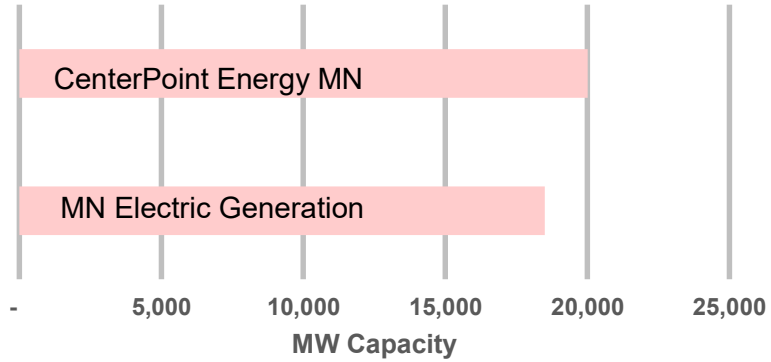
- Minneapolis Climate Action Plan GHG goals:
  - 15% by 2015
  - 30% by 2025
  - 80% by 2050
- Advance equity in infrastructure and environmental benefits
- Establishes Clean Energy Agreements with both utilities

ENGAGING WITH OTHERS

- G21: Decarbonizing MN Natural Gas End Uses
- Renewable Natural Gas Forum
- Minnesota Multifamily Affordable Housing Energy Network
- Midwest Energy Efficiency Alliance
- Engaging customers, regulators, legislators, and other stakeholders

Decarbonization while continuing to Deliver essential energy for everyone

- **During the 2019 polar vortex, CenterPoint Energy gas customers:**
  - Used the equivalent of 20,000 MW of electricity
  - More energy than MN's total electric generation capacity
- **Provide Minnesotans safe, reliable natural gas service at affordable rates**
- **Balance the need to support clean energy goals with reliable energy**
  - Challenge status quo thinking where reasonable



Sources: U.S. Energy Information Administration (EIA) www.eia.gov/energyexplained/natural-gas/natural-gas-pipelines.php, https://www.eia.gov/todayinenergy/detail.php?id=21672#tabs_SpotPriceSlider-4, and https://www.eia.gov/electricity/data/state/