



BUILDING  
DECARBONIZATION  
COALITION

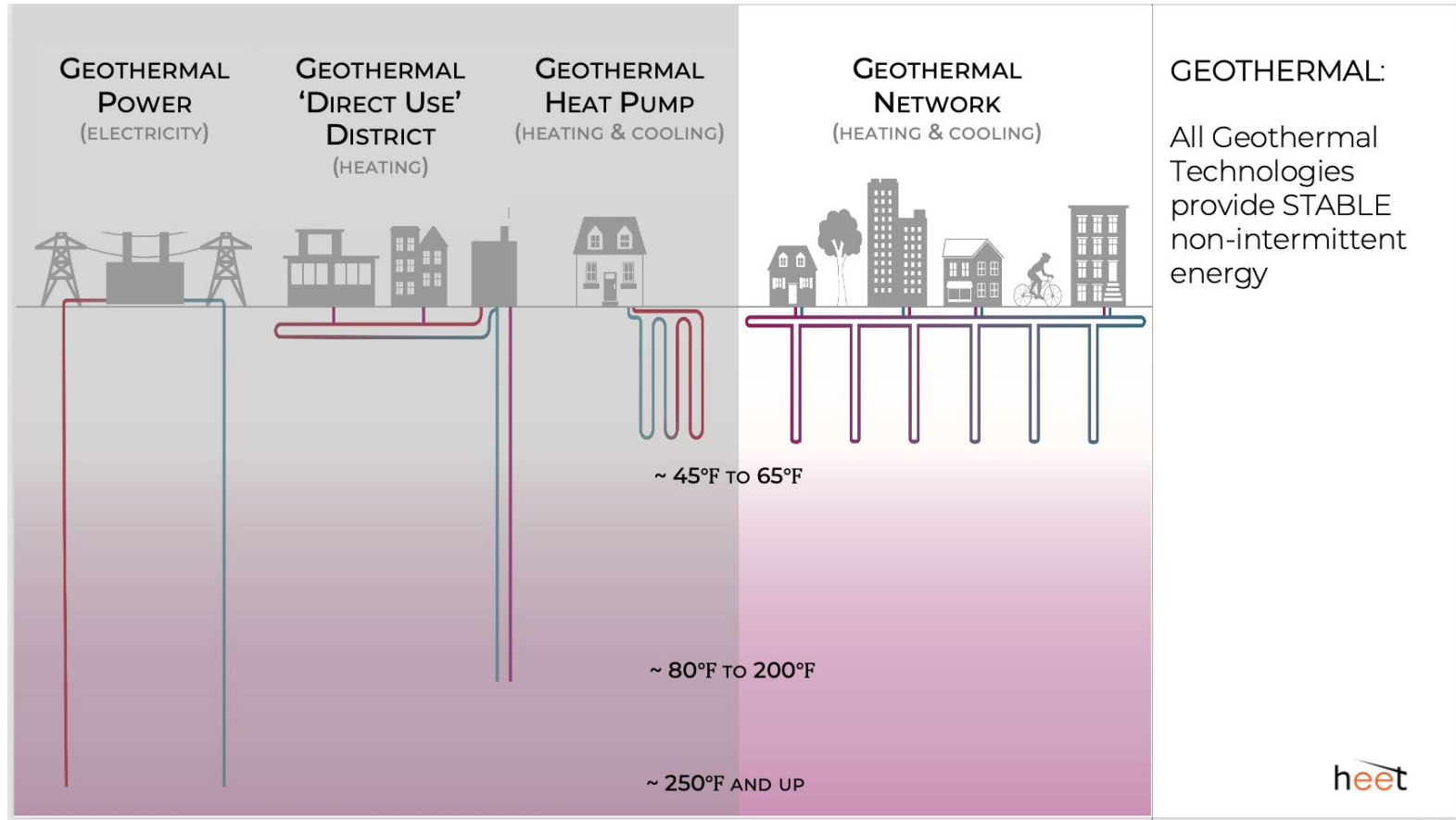
# Thermal Energy Networks

Thermal Energy Opportunities for  
Buildings and Communities

September 8, 2025  
Ania Camargo Cortés

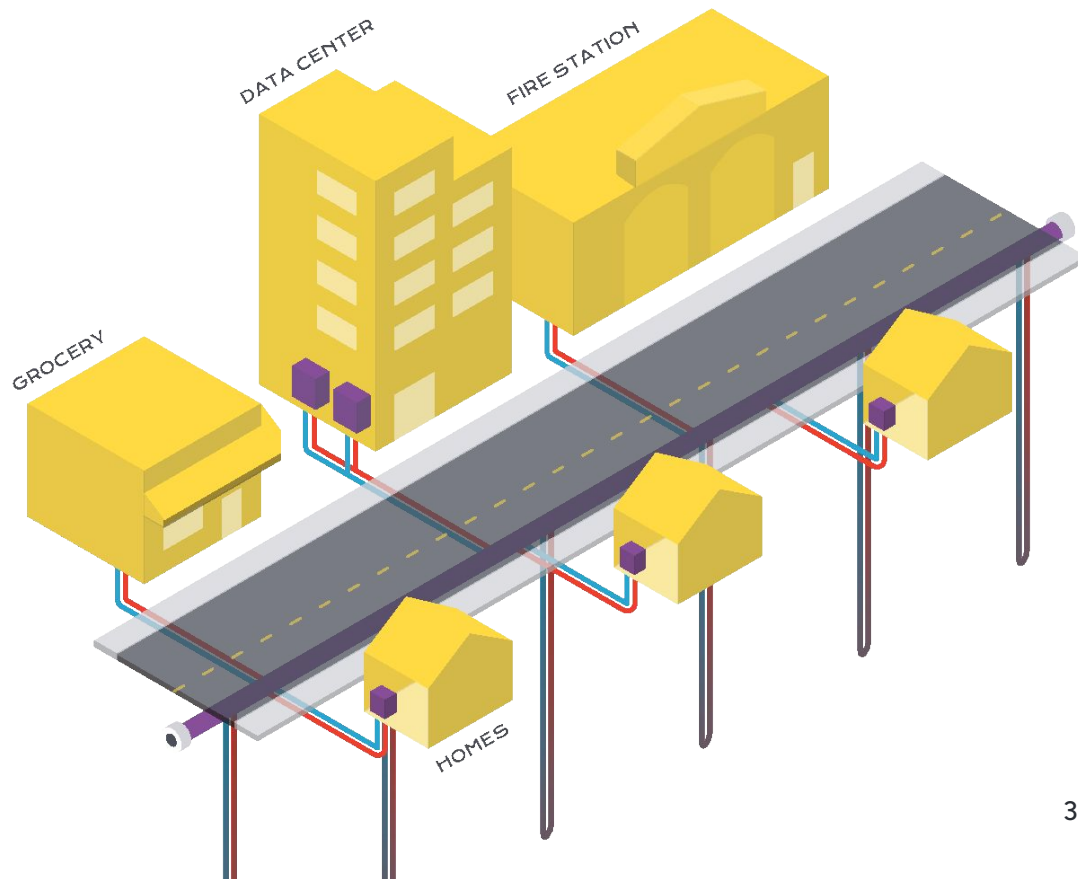


# The Geothermal Family

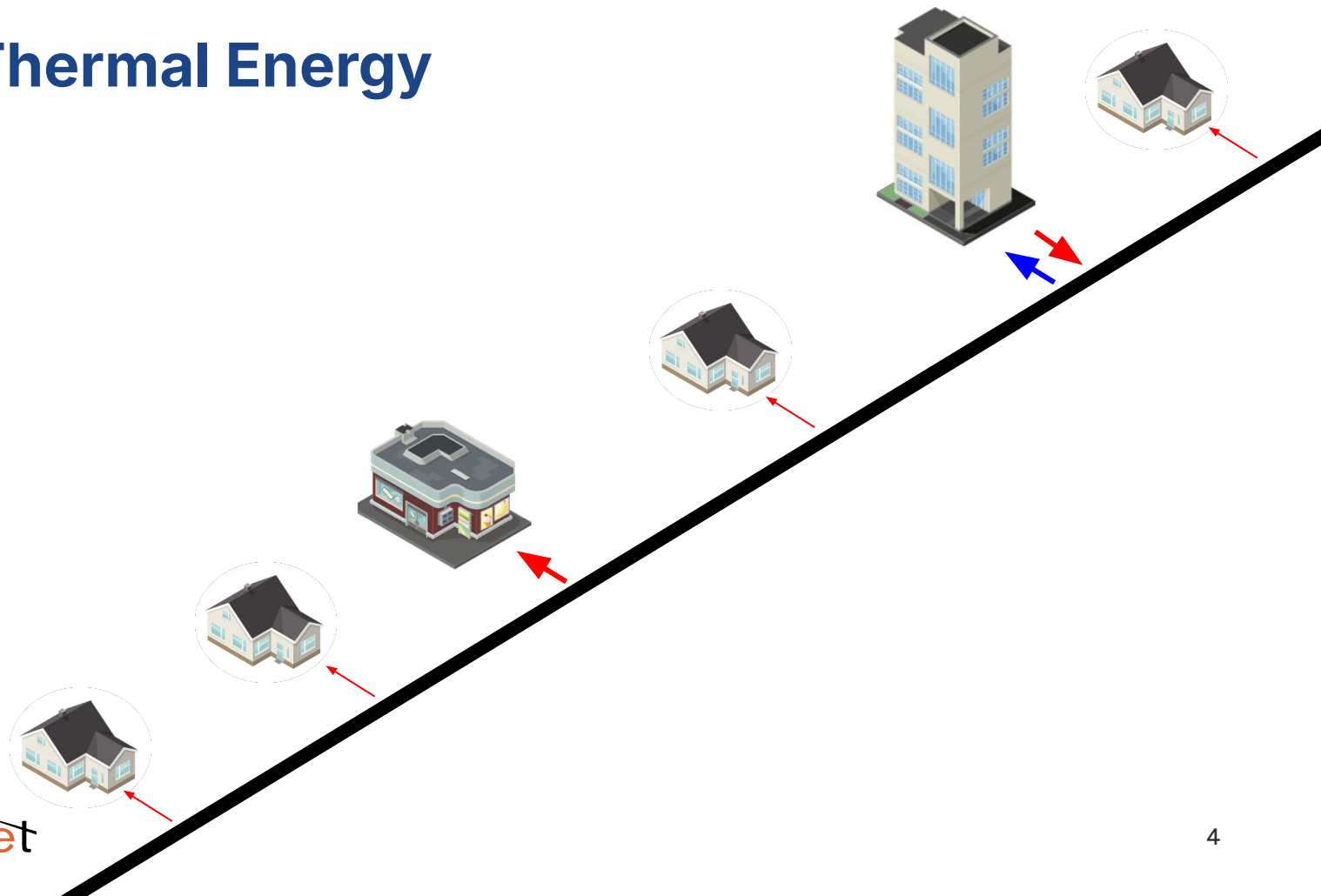


# Geothermal Networks (GENs)

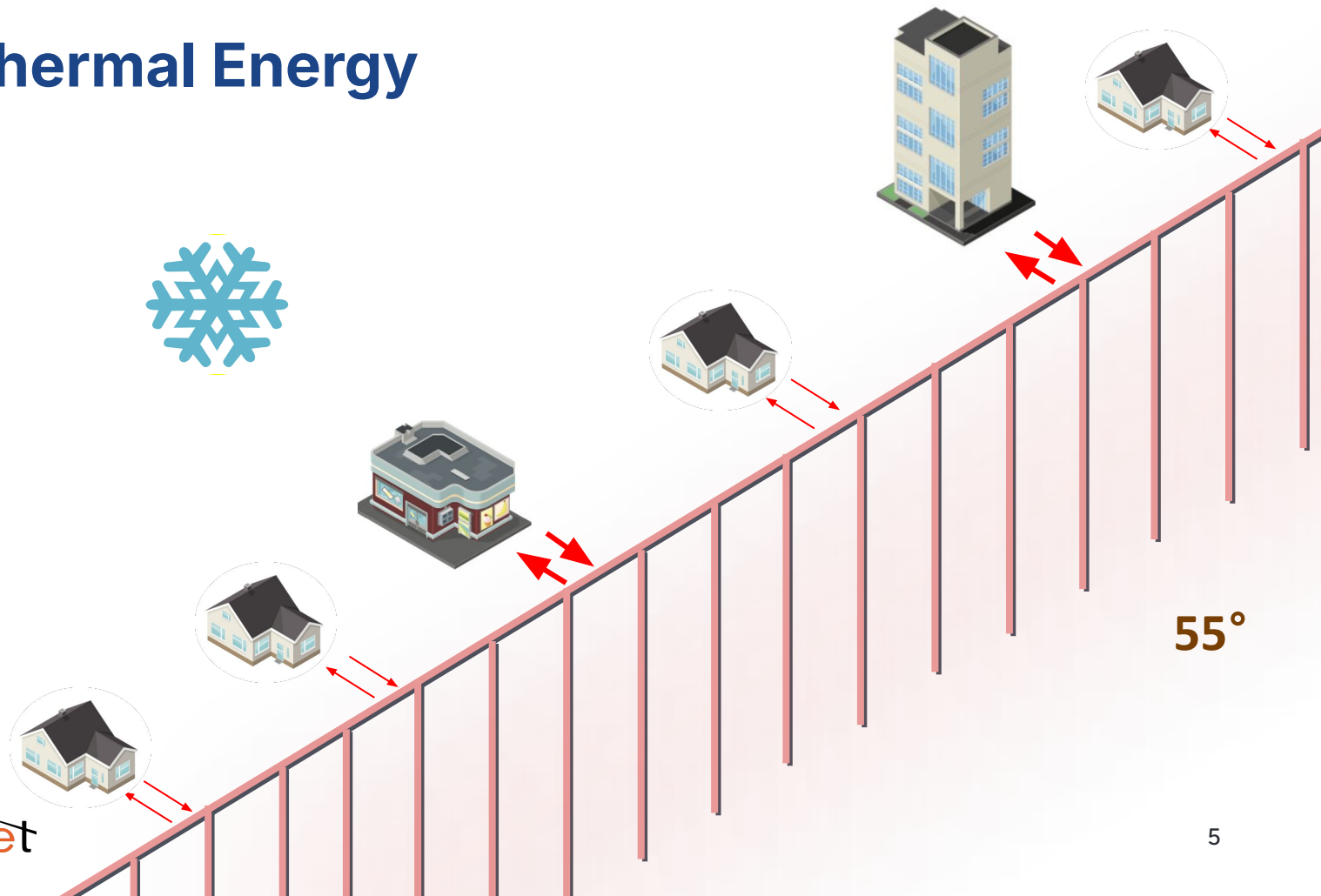
- Infrastructure in the street, single pipe, ambient
- Heat pump in every building
- “Shallow” boreholes



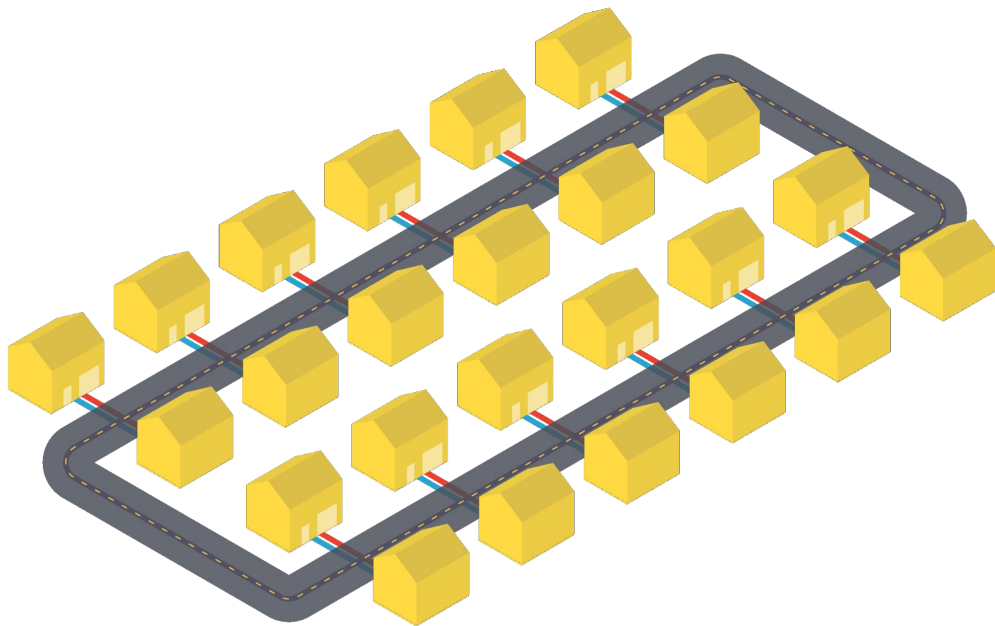
# Sharing Thermal Energy



# Storing Thermal Energy



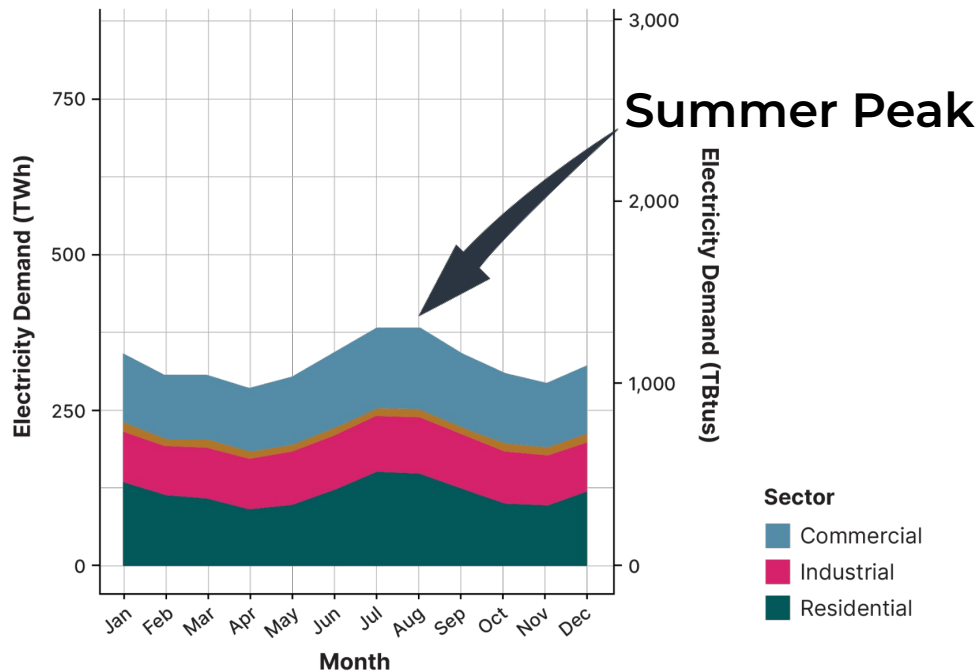
# Thermal Energy Networks at Scale



- Equitable and affordable
- Path for utility workers
- Safe managed pipe transition
- Benefits to the electric grid

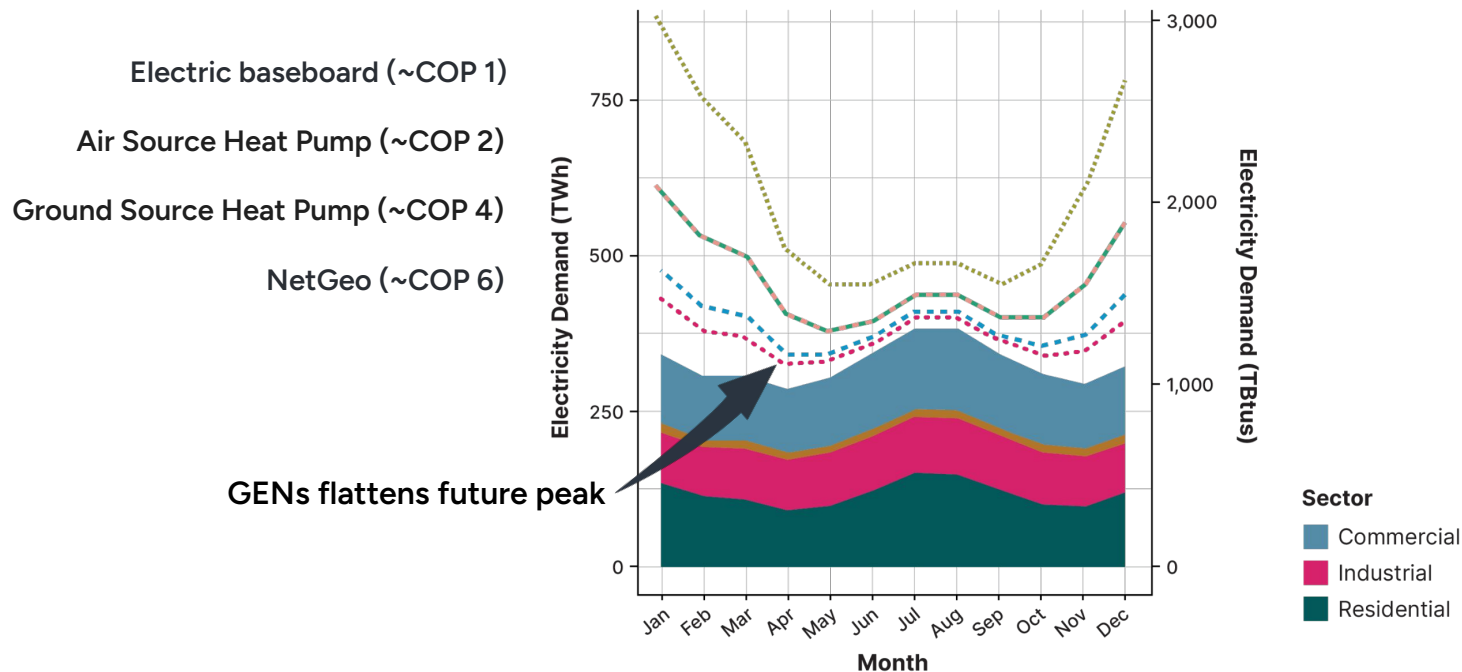
# Impact on the Electric Grid

## Current US Seasonal Electric Peaks For Buildings



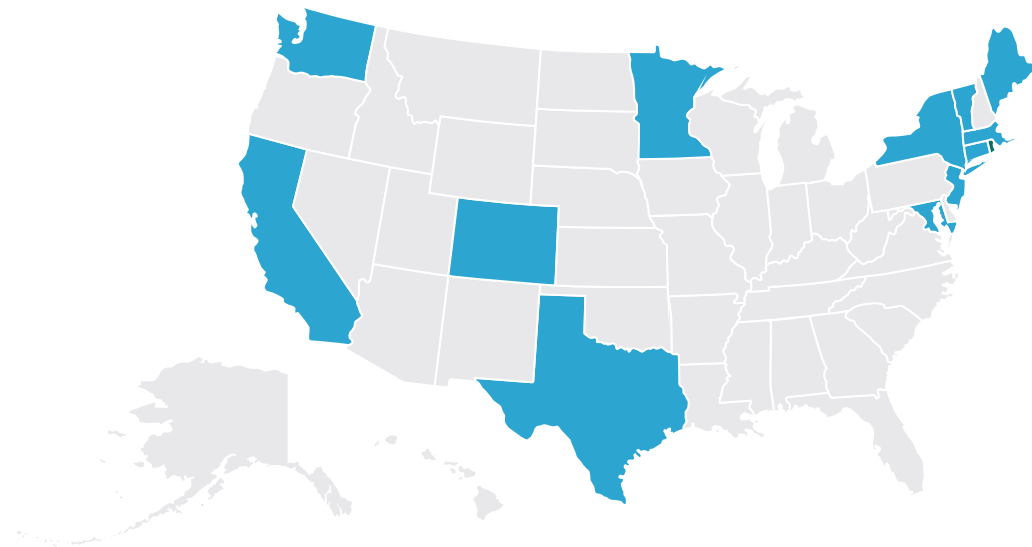
# Impact on the Electric Grid

## Future US Seasonal Electric Peaks (as we electrify)





# Thermal Energy Network Legislation



 Passed Legislation

**MA** - 2021, 2022, 2024

**MN** - 2021, 2024

**NY** - 2022

**CO** - 2023, 2024

**WA** - 2024, 2025

**MD** - 2024

**VT** - 2024

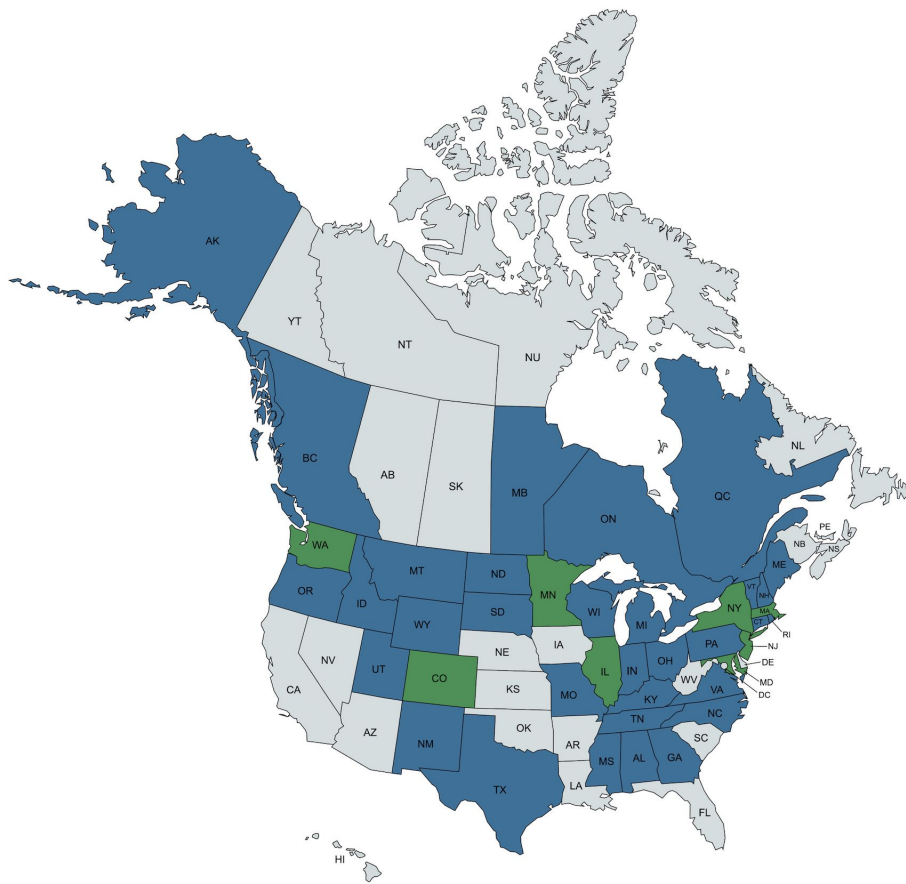
**CA** - 2024

**NJ** - 2024 (study)

**ME** - 2025 (study)

**CT** - 2025 (grant program)

**TX** - 2025



# Ownership Models: Community Case Studies



## West Union, Iowa

A city-owned, LLC-leased geothermal network



## Edmonton, Alberta

A municipal utility in a new development

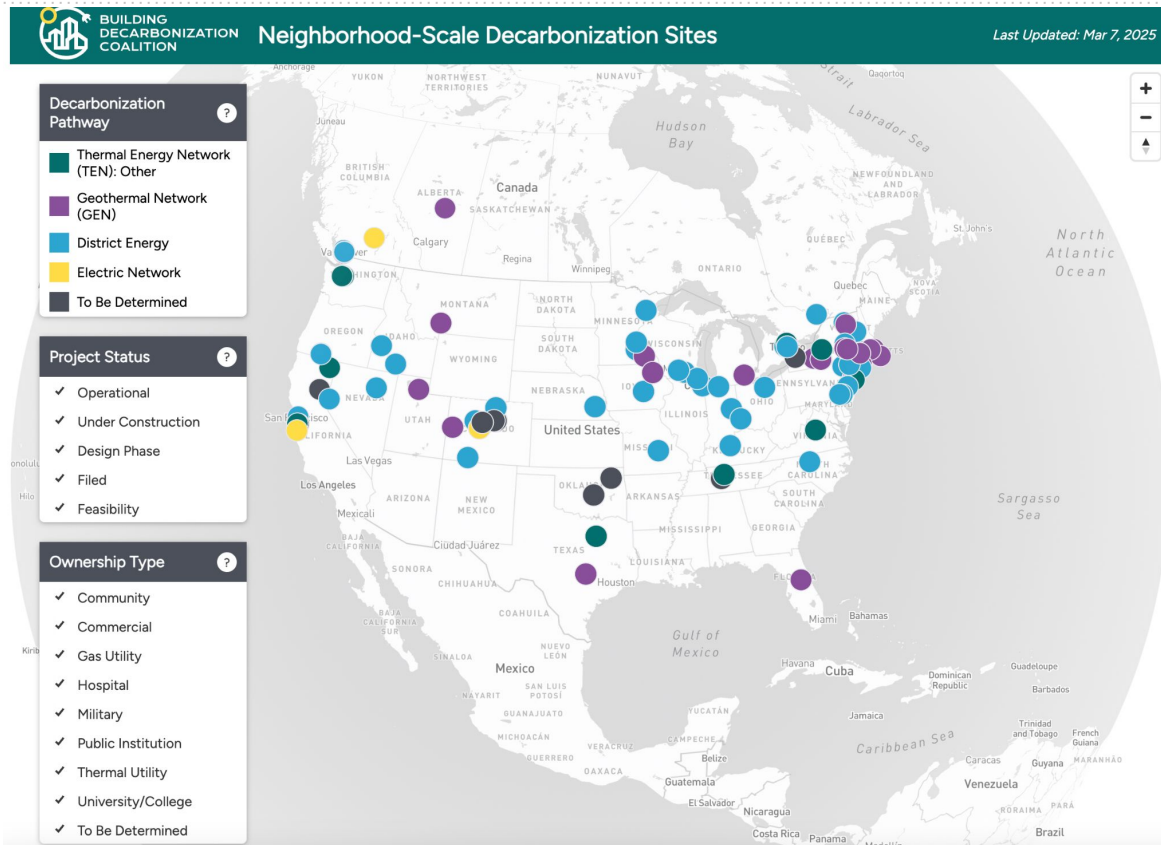


## Ann Arbor, Michigan

Voters approved a clean energy utility to own a future geothermal network



# Neighborhood Scale Decarb Map > 100 sites



Add or Edit Sites

Access  
the map:



# Federal Support for Geothermal

- 25D Residential Clean Energy Credit expires end of 2025
- Sec 48 Investor Tax Credit remains (til 2034)
  - 30-50% credit for geo projects
  - Applies to Commercial & Tax-Exempt entities
- Third party ownership provisions for geo systems







# Thank you!

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