# Transitioning Off Gas to Clean Heat

Presentation to Winthrop Town Council
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by Mothers Out Front, Winthrop

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# Why transition off gas? It costs too much!

**Gas harms the climate**

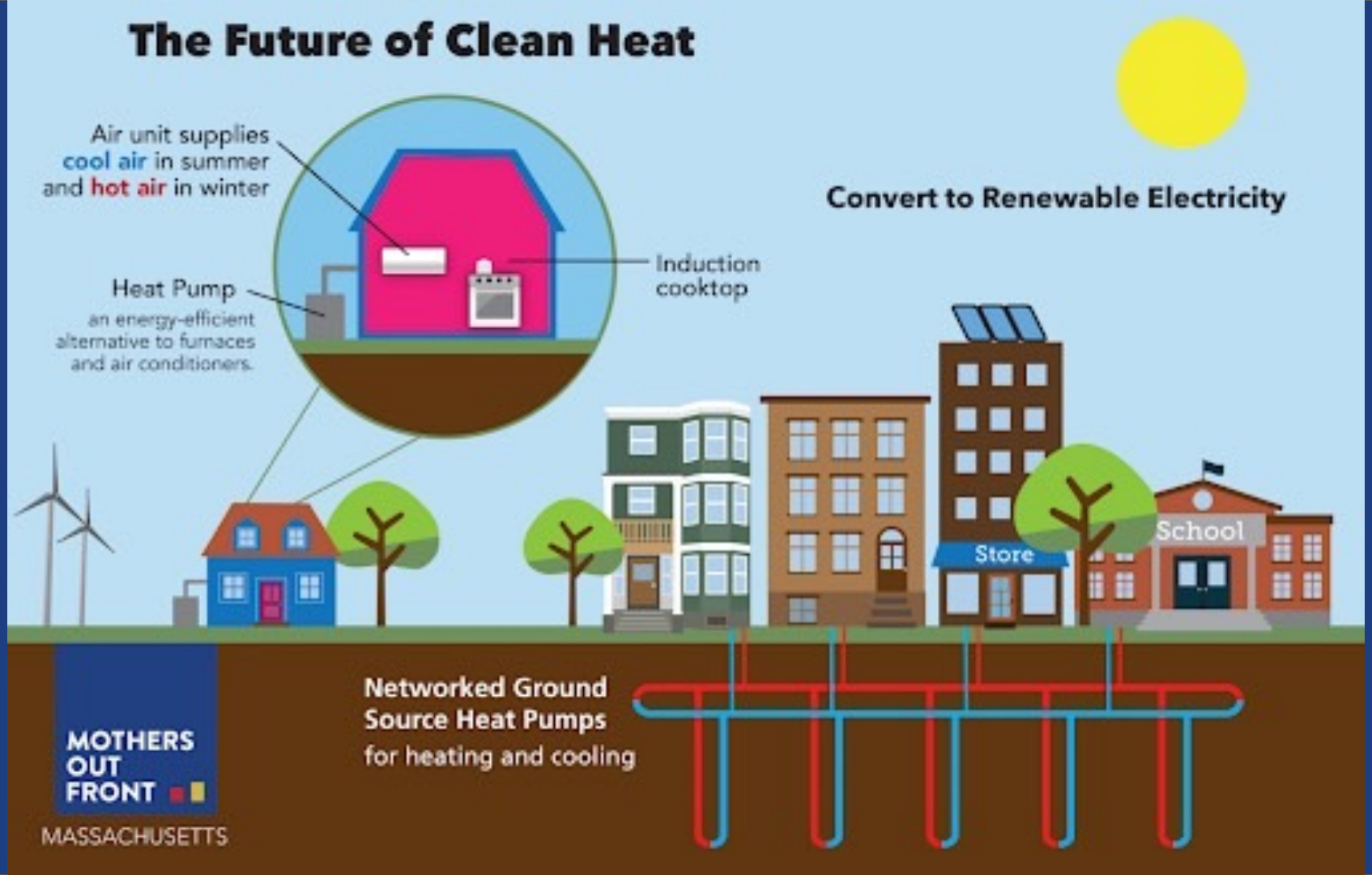
**It harms the health of people, animals, and plants**

**Gas explodes, and**

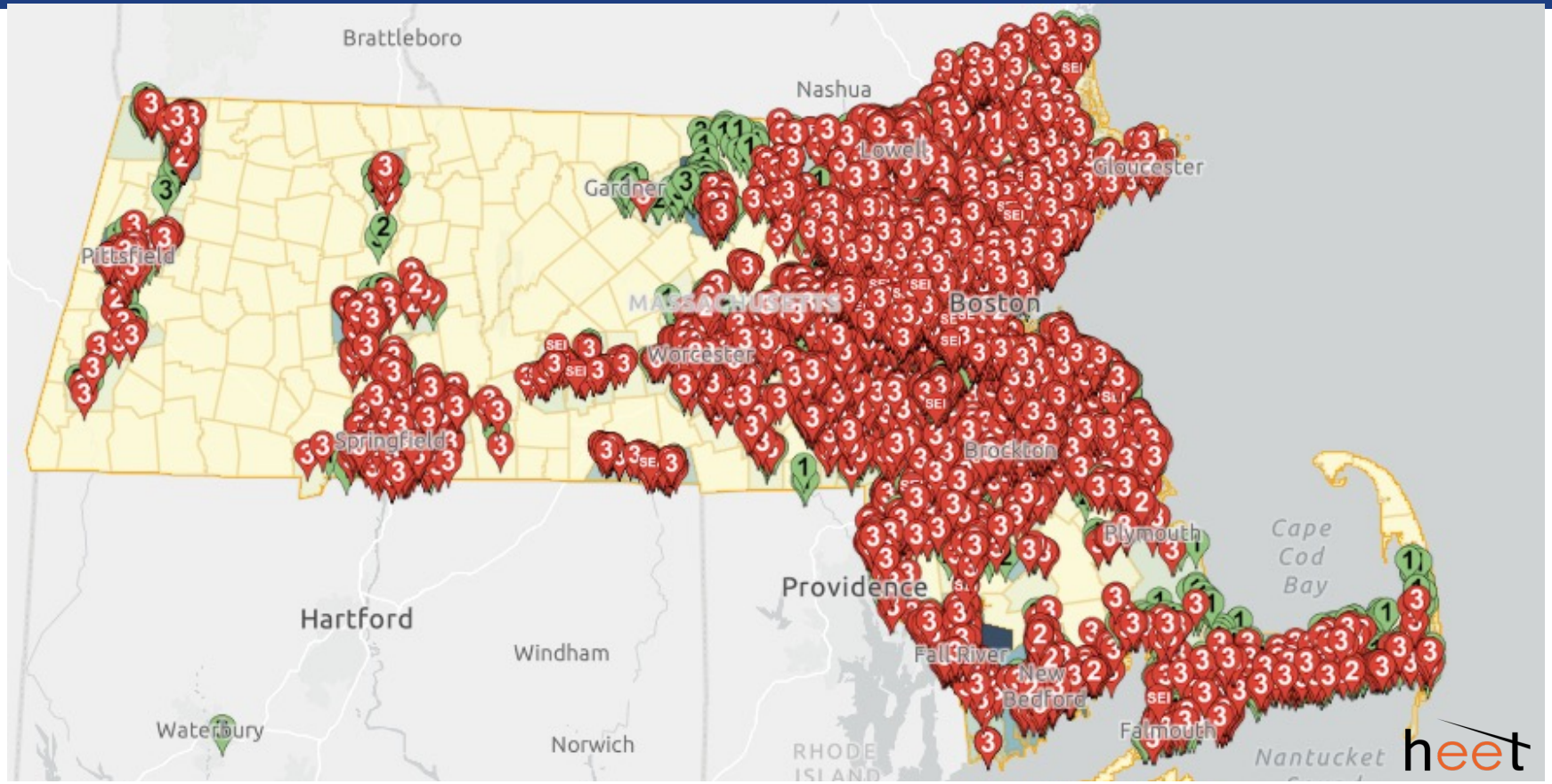
**It Costs billions to maintain**

# Indoor Gas pollution

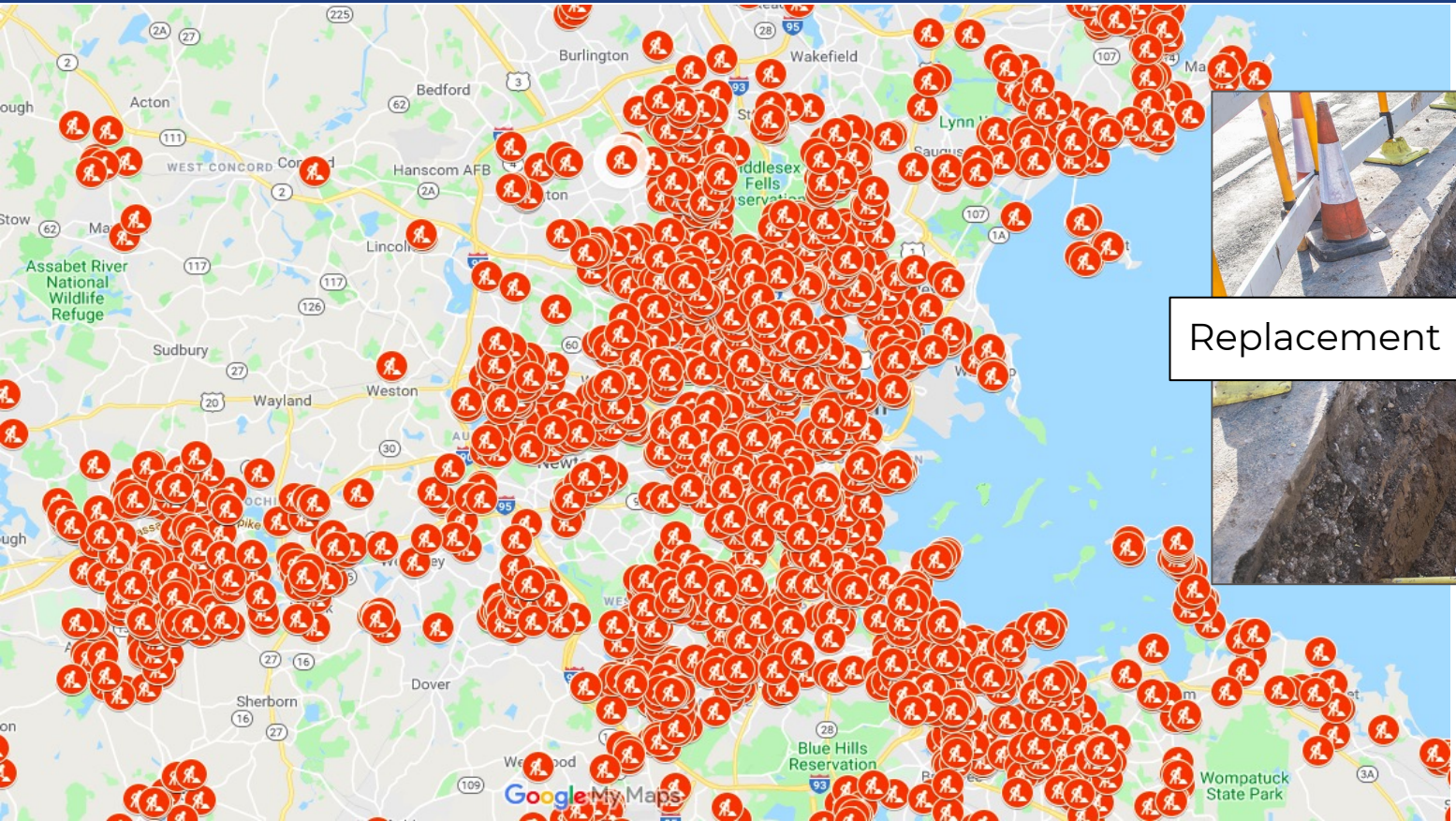
# Explosions Due to Gas


The Future of Clean Heat
Air unit supplies cool air in summer and hot air in winter
Heat Pump
an energy-efficient alternative to furnaces and air conditioners.
Induction cooktop
Convert to Renewable Electricity
Store
School
Networked Ground Source Heat Pumps
for heating and cooling
MOTHERS OUT FRONT
MASSACHUSETTS

# GSEP leak repair $500 million a year
# In 2020, 26,000 leaks — In 2022, 23,000 leaks.



# Costly Gas system "enhancement" continues



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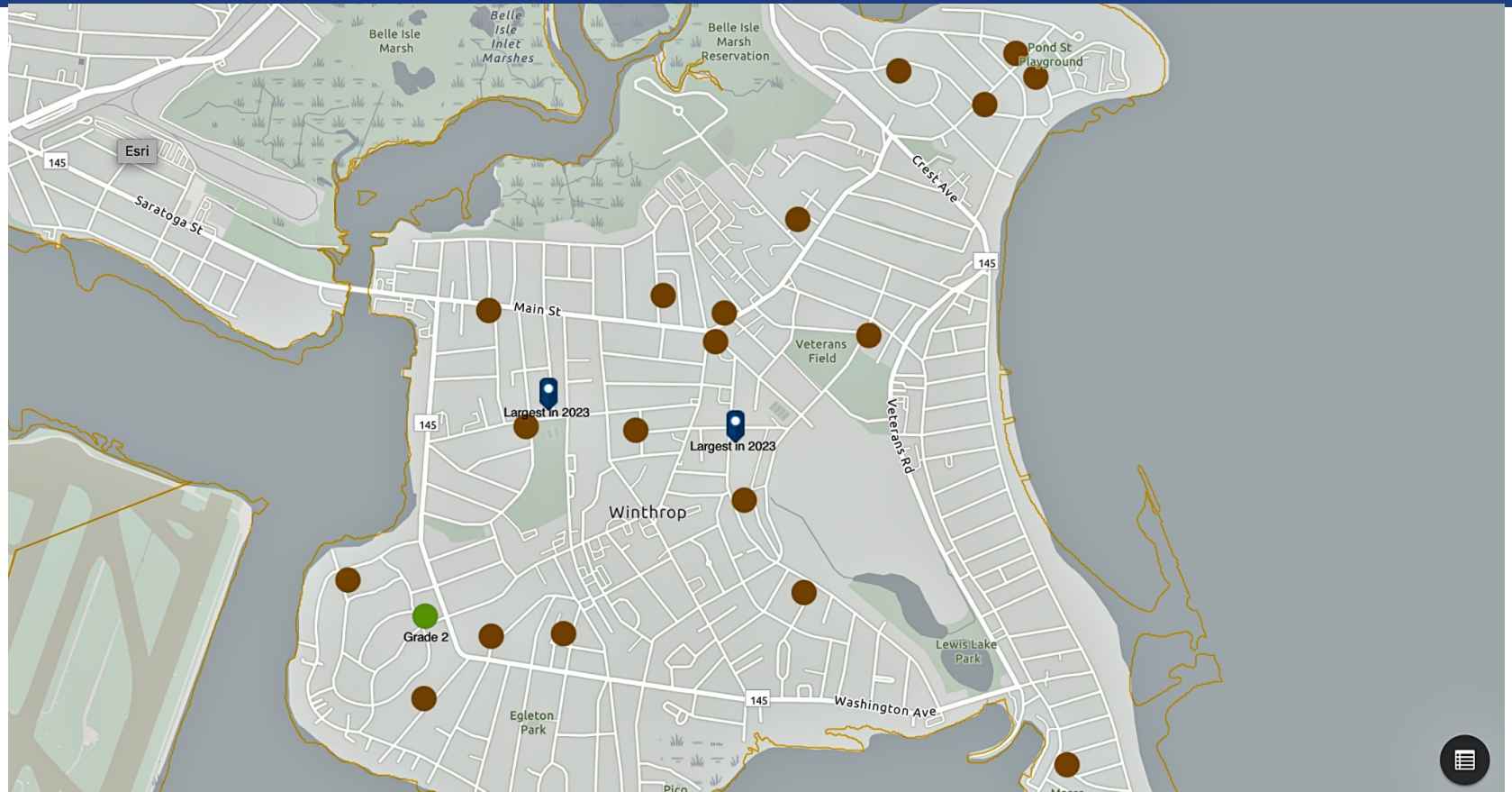
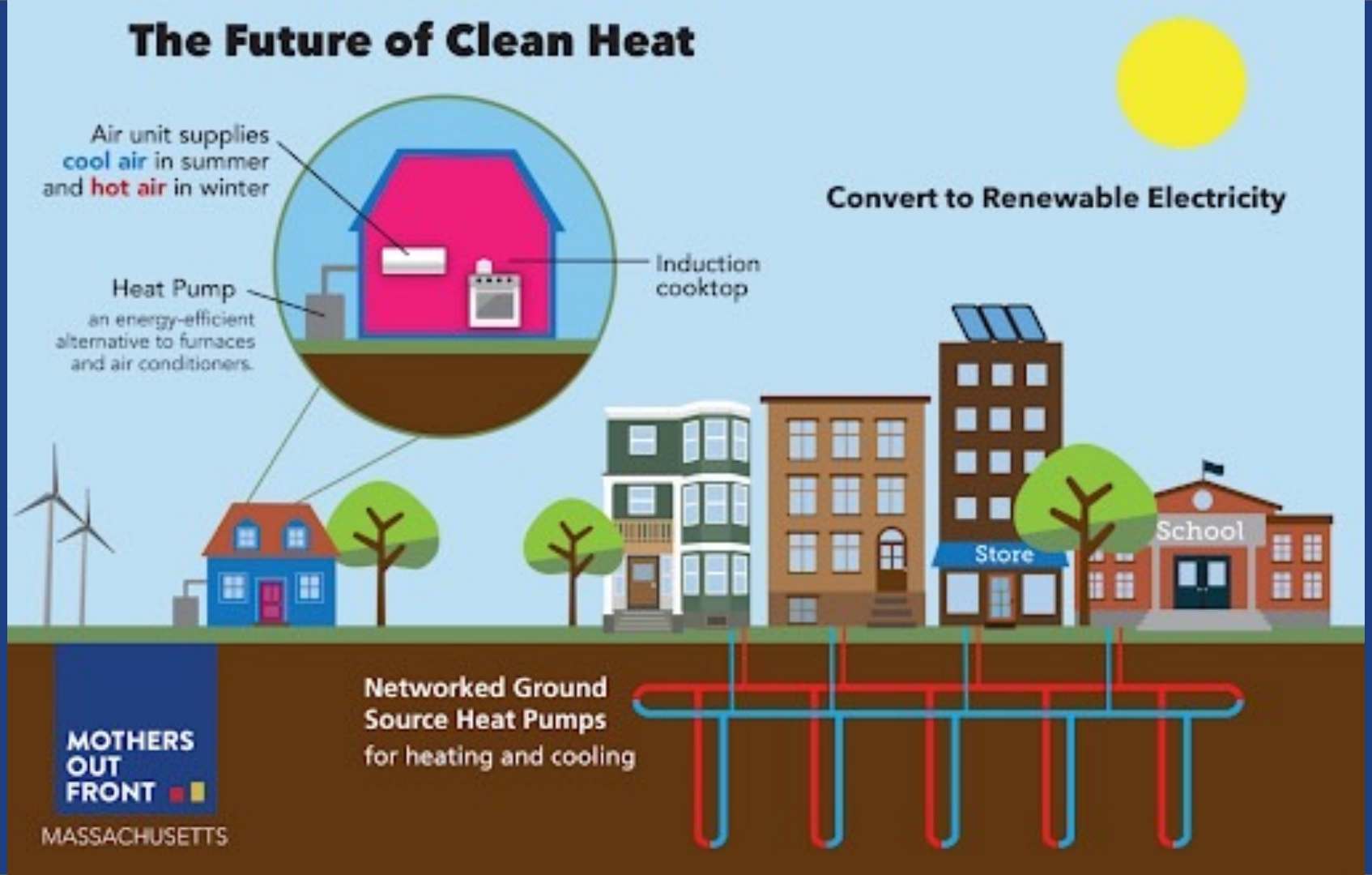
# 17 Metric Tons leaked in Winthrop in 2022 ($23,592)



# Advanced Leak Repair Works

Advanced technique repair, lining a gas main in New Jersey, 2020.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# Ad hoc and unplanned switching from gas

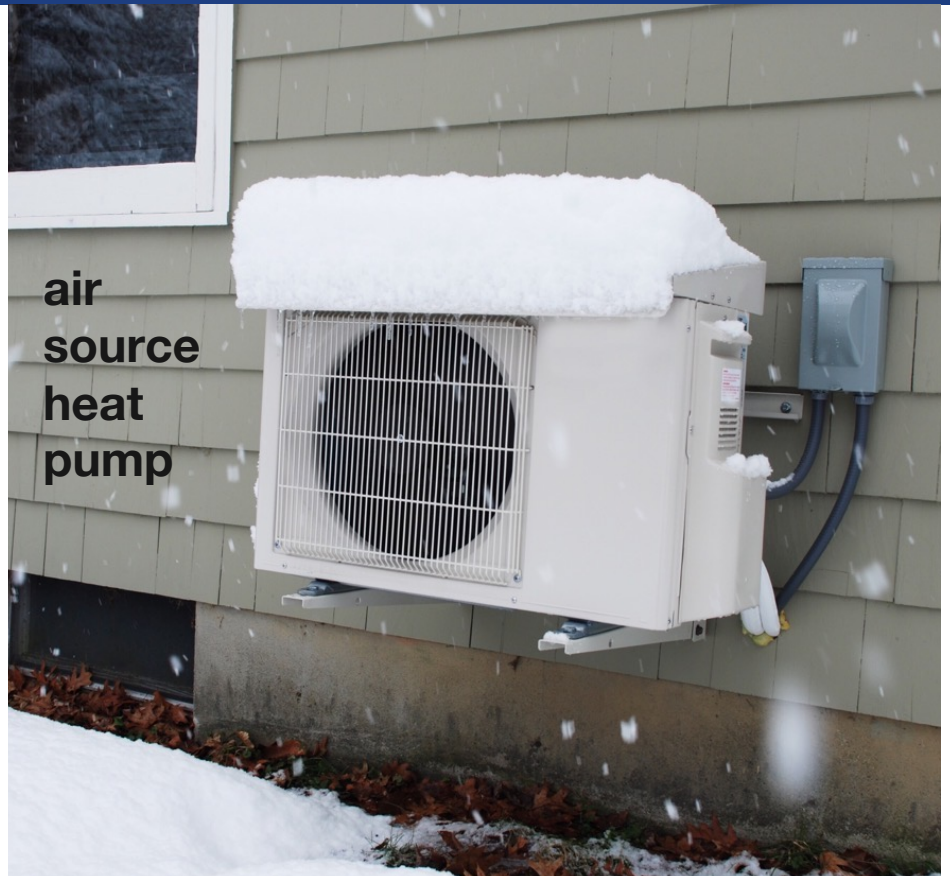
- Individuals who can afford to, switch from gas
- Renters and low-income owners can’t afford to switch
- Leading to fewer and fewer gas customers paying bigger and bigger bills as expensive pipe replacement continues

# We need a utility-scale planned solution.

**Strategic:** reduced gas infrastructure, same customer base

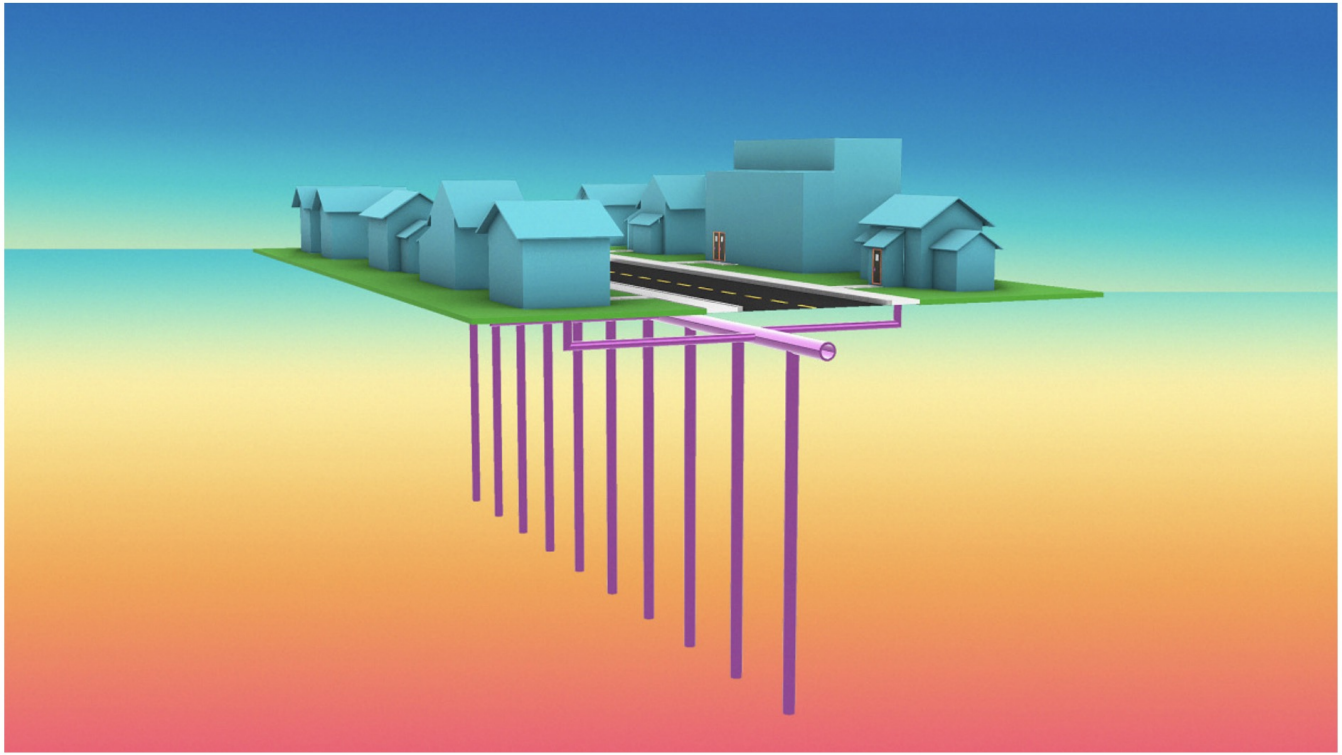
- Neighborhood by neighborhood
- Everyone is switched to clean heat
- Gas pipes are systematically retired
- Utility-scale financing
- Repaid in monthly utility bills

# Heat pumps are more efficient than gas = savings over time



# Geothermal Heat Pumps – DOE Study

# Networked geothermal – the most efficient solution



[Rendering: Anara Magavi/HEET]

# Energy and Jobs

# Networked geothermal pilots in Massachusetts

- Eversource: Framingham pilot came online June 5, 2024
- National Grid:  Lowell and Boston pilots in planning stage

# More action is needed!