An Act Relative to the Future of Heat in the Commonwealth

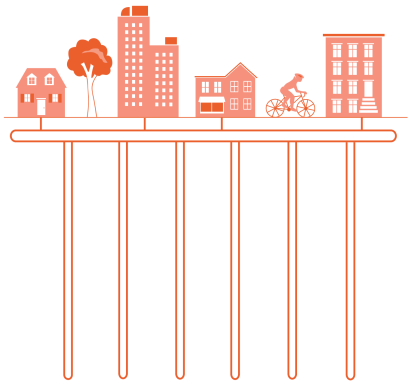
Senator Cynthia Creem (S.2148) & Representative Lori Ehrlich (H.3298)

Massachusetts is a national leader in embracing bold initiatives to tackle climate change, and recently committed to net-zero emissions by 2050. Based on the Commonwealth's greenhouse gas emissions inventory, heating buildings contributes 27% of the state's emissions. No path to reach the net-zero emissions target by 2050 includes business-as-usual operations for gas companies. Yet today we are investing billions into replacing gas pipeline infrastructure that won't be paid off by 2050, costs that will be passed onto ratepayers. We are literally digging stranded assets into the ground.

- Gas infrastructure is crumbling, gas companies have reported more than 15,000 leaks every year since reporting started in 2015, even as they scramble every year to repair the leaks.
- The gas system collapsed in explosions and fires in the Merrimack Valley in 2018. It could happen again.
- Replacing gas pipes will cost gas customers between $20-30 billion for pipes that will be outdated by 2050.
- Electrification of heat at the scale needed to get to net-zero is challenging and must happen quickly.

We need our gas companies to keep our buildings warm, ensure our safety, and do so while cutting greenhouse gas emissions without increasing our energy bills. But the current plan to replace old gas pipes with new ones is not sensible when there is a safe, affordable renewable energy alternative available now. We need a better plan. A plan that can minimize physical risks from explosive gas, minimize climate risks from leaking and burning gas, and minimize financial risks for gas customers and gas companies alike. We need a plan that can get us to a safe and clean future. That plan is the Future of Heat Act.

What is the Future of Heat Act?



The Future of Heat allows gas utilities to become renewable, clean energy utilities for example using networked geothermal heat. Networked geothermal is an innovative application of existing and proven technology available to us here in the Commonwealth to meet our need for affordable, safe heating while decreasing carbon emissions.

Gas companies are currently installing demonstrations of a decarbonized infrastructure – networked geothermal distribution – that can:

- Finance decarbonization of heat without raising prices on consumers.
- Ensure that the transition to renewable heat is accessible and equitable.
- Reduce electric grid peaks to accelerate electrification.
- Protect gas workers' jobs and grow good new jobs in the Commonwealth.

The Future of Heat Act will move this proven technology beyond the demonstration stage to provide a plan to balance financial and gas system safety risks. It will redirect investment to modern infrastructure that can provide safe, reliable, clean and affordable heat long into the future, sustainably and equitably as described below.

A Just Transition to Clean Heat:

- Allows gas companies to deliver renewable thermal energy to our homes, not just gas.
- Allows gas companies to replace leaky gas pipes with modern renewable thermal pipes.
- Incentivizes gas companies to make long term repairs rather than expensive replacement of old pipes.
- Mandates that the cost of new fossil fuel infrastructure cannot be billed to ratepayers past 2050.
- Requires gas companies to add more renewable thermal energy each year, moving our gas system and its workers towards a modern energy system with safe jobs.
- Requires that the DPU consider impacts on public health in its decision-making.

Financing the Transition to Clean Heat:

- Authorizes pipeline replacement funds to be used for non-emitting renewable energy infrastructure.
- Authorizes securitization*[1] financing for geothermal or other non-emitting renewable thermal technology.
- Assesses per therm charge to fund renewable energy programs as well as energy innovation.

Jobs and Equity Considerations for a Just Transition:

- Assists customers in replacing appliances and upgrading buildings in order to make the transition from gas to renewable thermal energy accessible to all.
- Prohibits landlords from passing on to tenants any costs for which landlords have been reimbursed.
- Provides training for gas workers to transition to comparable clean heat jobs.

This bill reduces the physical, financial and climate risks of our current system while encouraging an equitable transition of the gas utility into a renewable thermal utility.

Prepared by the Gas Leaks Allies,[2] for more information: gasleaksallies@gmail.com

[1] Securitized financing was used successfully in the 1990s in Massachusetts and is a proven way to reduce financing costs and minimize impacts from stranded assets. Colorado and other states have recently passed legislation that allocates the savings from this securitization specifically to worker retraining as a financing mechanism for our energy transition. This bill includes low-income building retrofit costs, demonstrating a direct way to overcome inequality of access in the decarbonization of heat.

[2] GAS LEAKS ALLIES: **:** Arise for Social Justice, Boston Climate Action Network, Boston Park Advocates, Brookline GreenSpace Alliance, Clean Water Action, Climate Action Now–Western Mass., Climate Code Blue, Climate Finance Action, Climate Reality Project-MA Chapter, Community Labor United, Conservation Law Foundation, Emerald Necklace Conservancy, Friends of the Public Garden, Garden Club of the Back Bay, Gas Safety Inc., Greater Boston Physicians for Social Responsibility, Green Committee-Neighborhood Association of Back Bay, HEET, Longmeadow Pipeline Awareness Group, Mothers Out Front, No Ashland Pipeline, Salem Alliance for the Environment, Sierra Club-MA Chapter, Speak for the Trees, Springfield Climate Justice Coalition, Twodegrees@greenneighbors.earth, 350MA, Dr. Margaret Cherne-Hendrick of Fresh Energy, Prof. Nathan Phillips of Boston University.
Diagram courtesy of HEET.