

# CLEANER HEAT, LOWER BILLS: HOW NY HEAT WILL ENABLE LOW-COST SYSTEM ELECTRIFICATION

## NEW YORK HOME ENERGY AFFORDABLE TRANSITION ACT (S. 4158/A. 4870A)

### CURRENTLY

New Yorkers are subsidizing gas hookups and costly gas pipe replacements, which drive up utility bills.

#### UTILITY BILL FOR A BUILDING ON THE GAS SYSTEM

Their bill includes a:

- Supply charge, which fluctuates with the market.
- Delivery charge, which is the fee from the utility to cover the of the costs of installing and operating gas mains and pipes system-wide.

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#### HOW HAVE UTILITIES HISTORICALLY KEPT GAS DELIVERY CHARGES LOW?

For decades, utilities have been able to operate the gas system while keeping costs low through an expanding customer base and depreciation. The costs of the system have been shared across enough people, and across long time horizons, to keep individual rates low.

This only works for as long as the gas system continues to expand. As people choose to electrify and leave the gas system, there are fewer and fewer customers to share the cost. This leads to the cost of gas becoming increasingly inequitable and unstable.

### UNDER NY HEAT

After 2030, with at least a 2-year notice and public input, the Public Service Commission can approve more cost-effective alternatives for refurbishing or replacing aging sections of gas infrastructure.

#### UTILITY BILL FOR A BUILDING THAT HAS BEEN ELECTRIFIED BY THE UTILITY THROUGH A NEIGHBORHOOD GAS TRANSITION PROJECT

Homeowner is no longer connected to the gas system. Their electric bill includes a:

- Supply charge, which fluctuates with the market.
- Delivery charge, which is the fee from the utility to cover the of the costs of installing and operating neighborhood-scale home electrification.

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#### HOW CAN UTILITIES KEEP ELECTRIFICATION COSTS LOW?

Rather than invest in miles of new gas pipe, utilities would invest in neighborhood-scale home electrification, including thermal energy networks and home energy upgrades like heat pumps and electric appliances. They can recover those investments across the customer base, and spread over time. The investments would be targeted to areas where existing gas infrastructure is at the end of its useful life and can be retired.

**Thus, utilities will redirect spending in a neighborhood from one system (gas) to a different system (electric and thermal energy).**

## CURRENTLY

### WHAT HAPPENS WHEN A GAS PIPE IS AT THE END OF ITS USEFUL LIFE? HOW MUCH DOES IT COST NEW YORKERS?

The utility will dig up a street and replace the pipe, which can cost approximately \$6 million per mile<sup>1</sup>.

On average in New York, 100 customers are served by one mile of gas pipe, meaning it costs \$60,000 per customer per mile of pipe replaced. That cost is spread out over every person who pays their gas bill over a multi-decade time horizon. Since the cost is spread out, customers only see a modest increase in their utility bill. That increase, though, is rising faster than ever. Rate hikes are being driven by the incredibly high cost of replacing old cast iron and steel pipes that are considered "leak-prone"

Cost per household, charged across all customers: \$60,000

## UNDER NY HEAT

### HOW MUCH COULD AN ALTERNATIVE SYSTEM COST NEW YORKERS?

Rather than replace the gas pipe, the utility can electrify every home served by that section of gas pipe, either with a thermal energy network or standalone heat pumps. For comparison, the average cost for a whole-home heat pump retrofit in New York is \$16,300 per home (If a home has significant upgrades and weatherization needs, the costs can be higher, even up to \$40,000 per home). These costs will be paid for by the utility, not the individual homeowner.

Just like the whole base of ratepayers pays for the costs of the gas system, spread over time, NY HEAT will use that same model to pay for the cost of neighborhood electrification projects, spread over time.

Cost per household, charged across all customers and spread over time: \$16,300 - \$40,000

### HOW DO YOU ENSURE RELIABLE SERVICE THROUGH THE TRANSITION TO ELECTRIFICATION??

The utility would develop a neighborhood-scale electrification plan to facilitate the strategic retirement of sections of pipe.

The PSC will review the plan to make sure it provides safe, affordable, and reliable energy service. Meanwhile, the utility would notify affected customers well in advance and work with them to set up the alternative, at no cost to the customer.

Once customers have all-electric appliances, upgraded electric panels, and potentially are connected to a thermal energy network to serve that area, then the utility can retire that end-of-life gas main rather than replace it.

<sup>1</sup> Groundwork Data: The Future of Gas in NYS, <https://buildingdecarb.org/resource/the-future-of-gas-in-nys>