# New York Gas Utilities Digging Consumers Into a Deeper Hole

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Synapse Energy Economics, Inc.

Gas utilities continue to make expensive investments in their current gas systems. In 2022 and 2023, New York utilities spent almost $400 million extending gas service to new customers, and over $2 billion replacing leaky pipes; these are just a small portion of the total utility investments that ratepayers will pay off for decades to come.[1]

Residential natural gas consumption in New York has decreased an average of 3.5 percent annually for the past five years.[2] Declining consumption is likely due to a combination of weather, energy efficiency, and electrification of end uses. This trend is expected to continue. Meanwhile, market developments and climate policy are driving down the cost of electric heating alternatives.

As sales decline, gas utilities will request rate increases to cover their sunk costs, prompting more customers to fully electrify or otherwise reduce gas use. This will create an unsustainable feedback loop in which fewer and fewer gas customers will be left to cover the utilities' costs. Customers without the means to electrify or invest in efficiency are likely to bear disproportionate costs. New investments will drive rates still higher. In light of New York's legally mandated energy transition away from fossil fuels, it is critical to minimize new investments to mitigate the risk of an unaffordable, unsustainable, inequitable, and unsafe gas system in the future.

Yet the utilities continue to extend their systems to new customers. In 2022 and 2023, the utilities cumulatively added 500 miles of new pipe to the gas system statewide. Over these two years, National Grid installed almost 250 miles of new pipe on Long Island (see Figure 1), nearly half of the state total.

Gas utilities are also proactively replacing their current aging pipes with new pipes. In the New York City metro area alone, ConEd and National Grid installed 427 miles of new pipe to replace old segments in 2022 and 2023 (see Figure 1).

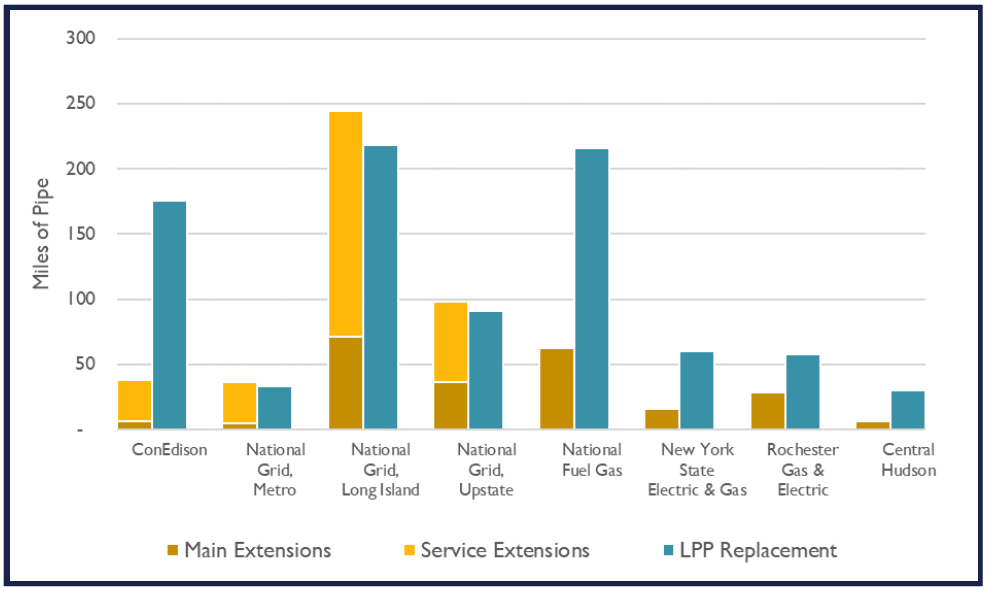



*Figure 1. Miles of pipe installed in 2022 and 2023*

[1] All pipe investment and mileage data come from utility filings on the New York Public Service Commission's "Notice Seeking Further Comments" on NPA Frameworks in Case 20-G-0131, issued on July 3, 2024. Available at: https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=20-g-0131

[2] U.S. Energy Information Administration (EIA). 2024. *Natural Gas Annual 2023*, available at: https://www.eia.gov/naturalgas/annual/.

To make these replacements and extensions, the utilities have made and continue to make massive new investments. The utilities will require ratepayers, as authorized by the Commission, to pay for these new pipes for decades, but the infrastructure will likely be underutilized in just a few years due to falling demand. As Synapse detailed in its analysis of New York's pipe replacement programs, the impact of these investments on gas customer bills will be immense. This analysis found that leak-prone pipe replacement leads to a burgeoning cumulative revenue requirement for New Yorkers through 2100, totaling almost $150 billion in lifetime costs to customers. This is 50 years beyond when New York's climate law (the CLPCA) calls for the state to achieve net-zero emissions statewide.[3]

**Key Terms:**

***Climate Leadership and Community Protection Act (CLCPA):*** New York's landmark climate legislation that requires statewide greenhouse gas emission reductions of 40 percent by 2030 and 85 percent by 2050 relative to 1990 levels

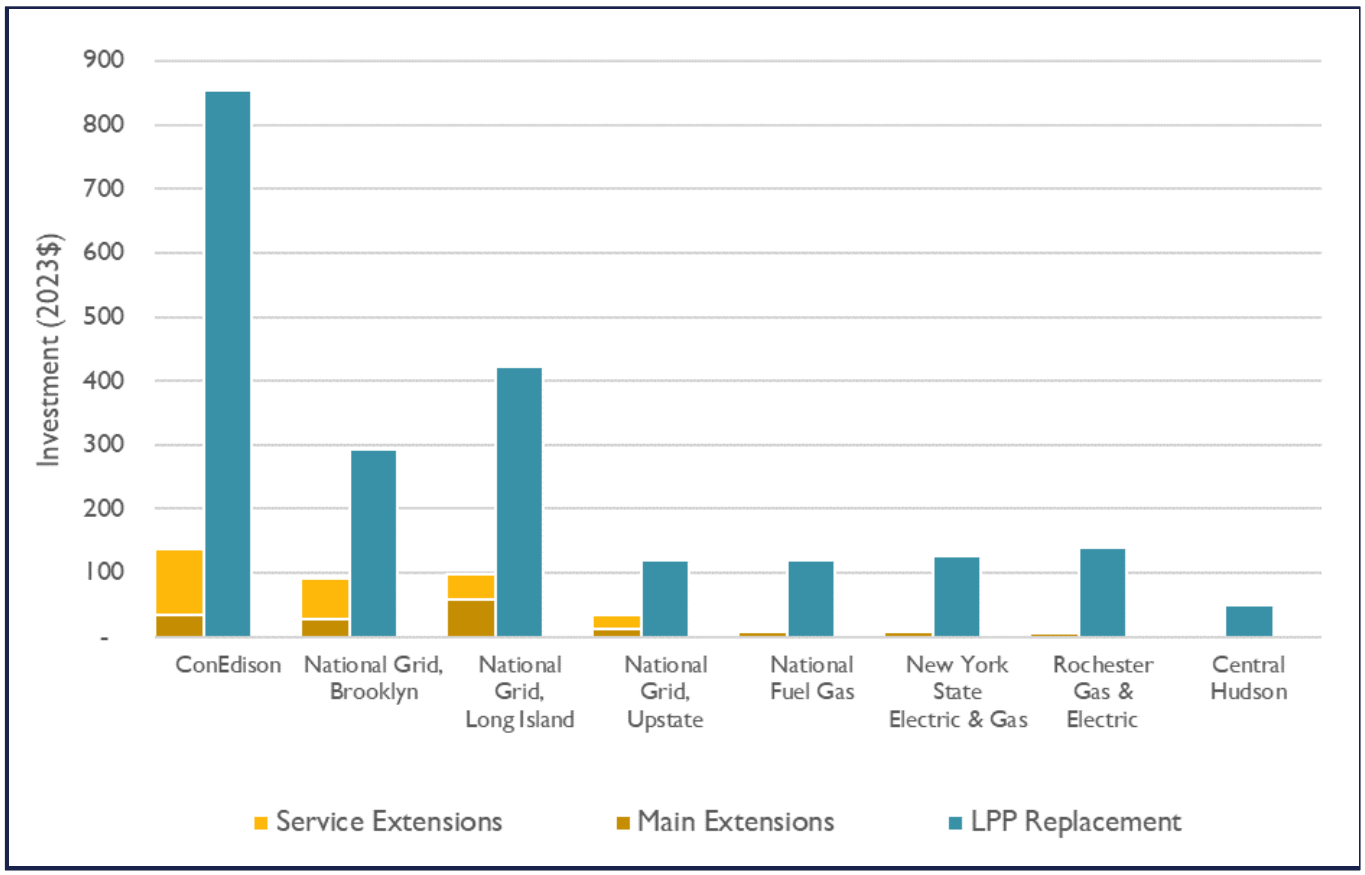
***Leak-Prone Pipe (LPP):*** a catch-all term that utilities use to describe aging pipe made from certain materials

***Extensions:*** additional pipeline installations to serve new customers

***Investments*:** utility spending associated with the cost to install or replace infrastructure

***Non-pipeline alternative (NPA):*** solution that meets customer heating needs through electrification, energy efficiency, or other forms of load management instead of traditional pipe replacement or investments

*Figure 2. Investments in pipe extensions and replacement in 2022 and 2023*




[3] Synapse Energy Economics. 2023. "The High Cost of New York Gas Utilities' Leak-Prone Pipe Replacement Programs." https://www.synapse-energy.com/sites/default/files/22-017_High_Cost_NY_Gas_Utilities_LPP_Programs_0.pdf

Gas utilities' current business models favor traditional pipe investment, but the scale and structure of this problem require something different: out-of-the-box thinking and a new paradigm of regulation. Utilities could take steps to avoid these investments, while maintaining safety and reliability, by implementing programs for non-pipeline alternatives (NPA), leak monitoring, and pipe repair. These solutions in many cases are cheaper than traditional pipeline investments and reduce emissions relative to a business-as-usual scenario. They can fulfill two critical needs for New York: increased affordability and co-pollutant reductions.

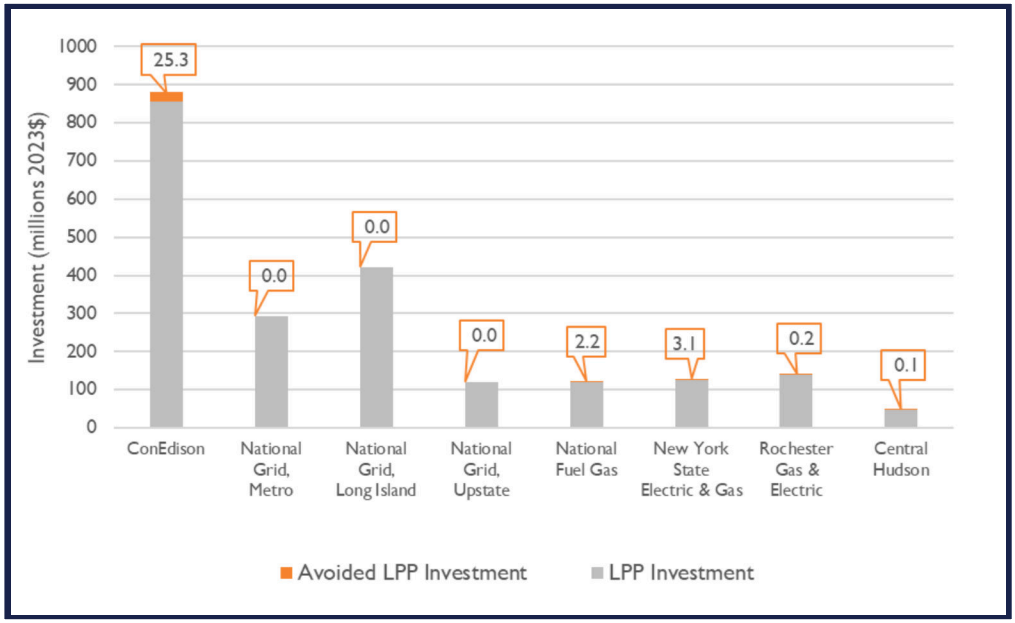



*Figure 3. Investments and avoided investment in leak prone pipe in 2022 and 2023*

To date, New York's utilities have not risen to the challenge. Even those actively pursuing NPAs have only avoided a tiny fraction of overall investments (see Figure 3). Traditional pipe replacement dwarfs avoided investments, highlighting the need to pursue alternatives with more effort and at a quicker pace. However, the Commission has yet to approve NPA screening criteria, leaving gas utilities without clear guidance to develop a more robust and effective NPA process.

| | Main Extensions | | | Service Extensions | | | Leak-prone pipe replacement | | | Cumulative investments |
|---|---|---|---|---|---|---|---|---|---|---|
| | Miles | Cost (M$) | Unit Cost (M$/mile) | Miles | Cost (M$) | Unit Cost (M$/mile) | Miles | Cost (M$) | Unit Cost (M$/mile) | Cost (M$) |
| Con Edison | 6 | 35 | 5.71 | 32 | 102 | 3.13 | 176 | 855 | 4.84 | 992 |
| National Grid, NYC | 5 | 27 | 5.78 | 32 | 64 | 2.01 | 33 | 294 | 8.55 | 385 |
| National Grid, Long Island | 71 | 59 | 0.82 | 173 | 40 | 0.24 | 218 | 422 | 1.91 | 521 |
| National Grid, Upstate | 36 | 13 | 0.36 | 61 | 21 | 0.35 | 91 | 120 | 1.31 | 155 |
| National Fuel Gas | 63 | 7 | 0.11 | - | - | - | 216 | 119 | 0.55 | 126 |
| New York State Electric & Gas | 16 | 8 | 0.50 | - | - | - | 60 | 125 | 2.06 | 133 |
| Rochester Gas & Electric | 29 | 5 | 0.17 | - | - | - | 58 | 140 | 2.40 | 145 |
| Central Hudson | 6 | 4 | 0.68 | - | - | - | 30 | 49 | 1.59 | 53 |
| Total | 236 | 159 | 1.67* | 298 | 228 | 1.43* | 882 | 2,124 | 2.90* | 2,511 |

*Table 1. Line extension summary 2022 & 2023*

*Note: All costs are shown in 2023 dollars; (*) these values are simple averages; unit cost values for National Fuel Gas are from its 2023 rate case; all other unit costs are from utility comments on NPA Framework.*