

# Making New York's Buildings more Sustainable

#### SFY 2023-2024 Budget Memorandum

Contact: Anshul Gupta, (914) 441-2358 or gptnshl@gmail.com

#### **Justification**

<u>Climate & Jobs</u>: New York's buildings account for more climate-destroying carbon emissions and adverse health impacts from the associated pollution than any other state in the US. <u>Buildings</u> are also New York's leading source of greenhouse gases, responsible for 32–40% of its emissions. At the same time, building electrification and energy-efficiency is the leading segment of New York's growing <u>clean energy jobs</u>.

<u>Health:</u> The <u>outdoor</u> and <u>indoor</u> pollution from burning fossil fuels in buildings is linked to myriad <u>health</u> risks and is responsible for thousands of deaths and billions of dollars in healthcare costs each year. Although exposure to gas appliance pollution is harmful to everyone, the following groups of people are at particularly <u>high risk</u>: *Low-Income Communities, People of Color, Infants and Children, Pregnant Women, Individuals with Preexisting Conditions*, and *Older Adults*.

<u>Energy Burden & Construction Costs:</u> New York's Public Service Law allows utilities to <u>recover</u> most of the cost of service lines and meters for new gas customers from all ratepayers through delivery charges. This is akin to a regressive tax levied on ratepaying families and small businesses to fund new gas hookups. This policy also distorts building economics in favor of an <u>uneconomical</u> fuel, and adds roughly <u>\$200 million</u> each year to the rate base.

Aided by subsidized hookups, New York's gas utilities add tens of thousands of new customers each year, creating needless demand that contributes to higher prices of this supply-constrained commodity. With the US becoming the worlds' <u>largest liquified natural gas exporter</u>, the days of cheap gas <u>are over</u>. Multiple studies now show that new buildings with highly efficient and reliable cold-climate <u>heat pumps</u> are cheaper to both <u>construct</u> and <u>operate</u> in almost all of New York State. Continuing to build with fossil-fuel hookups adds to energy burdens that disproportionately impact households with lower incomes.

<u>Grid Impacts:</u> Switching to all-electric new construction, a move endorsed by major energy providers like <u>LIPA</u> and <u>Con Edison</u> (representing 60% of the state's electricity customers), would begin an orderly, decades-long transition to a pollution-free buildings sector while our energy infrastructure and labor force evolve in tandem. In the near term, home electrification can help reduce electricity delivery rates through better <u>utilization</u> of the grid, whose winter capacity is adequate until 2034 (<u>NYISO Gold Book</u>, pp 19).

<u>Barriers for LMI and DAC Households</u>: The energy affordability crisis is exacerbated by lower income New Yorkers residing in an aging housing stock. Black, Indigenous, and New Yorkers of color are often unable to improve their dwellings' energy inefficiency due to deferred maintenance and other unremediated hazards like mold and asbestos. Although helpful state and federal programs exist, New York does not offer an easily accessible, comprehensive package of programs and policies to address these challenges, and many residents and building owners are unable to navigate the disaggregated programs.

#### **Budget Requests**

The climate crisis, the health impacts of pollution, the principles of economic and environmental justice, and the mandates of New York's climate law, the CLCPA demand swift, powerful action by legislators. We call for the inclusion in the budget of three pieces of legislation and funding to expedite a just transition to renewable, affordable, healthy heat and energy.

 The All-Electric Building Act (S.562A|A.920A), which modernizes building codes to require new buildings under seven stories be all-electric starting in 2024 and larger buildings by 2027. The average new single-family home built in New York under this bill would cost less to <u>construct</u> and <u>power</u> when compared to a fossil-fueled home. The Governor's budget proposal includes the provisions of this bill (Part WW of TED) in a significantly weakened form, with an unwarranted two-year delay and at least a year later than what the Climate Action Council (CAC) calls for, a reduced scope of the buildings covered, and process loopholes. <u>The NYS legislature should include the S.562A|A.920A process</u>, <u>building scope</u>, and timeline provisions in their one-house budget resolutions.

Dr. Bob Howarth, the CAC member appointed by Assembly Speaker Carl Heastie <u>stated</u> "... the greatest priority for meeting the goals of the CLCPA should be to reduce emissions from the building sector. I urge the Assembly and Senate to act to mandate that the State move away from fossil fuels more quickly than called for in the Council's Scoping Plan, using the guidance from the December 2021 draft Scoping Plan."

- The NY Home Energy Equitable Transition (HEAT) Act (S.2016|A.xxxx), which reforms the Public Service Law to provide ratepayers relief from the burgeoning costs of subsidizing the gas infrastructure to the tune of \$200 million per year (unconscionable in its own right) and to enable the state legislated neighborhood-scale building decarbonization by eliminating the costly "obligation to serve" gas. It also helps limit households' energy burden to under 6% of their income. Eliminating gas hookup subsidies was part of the Governor's FY 2022-2023 executive budget proposal.
- 3. <u>The Energy Efficiency, Equity, and Jobs Act</u> (S.2469|A.2655), which deploys funding for cost-saving energy-efficiency retrofits where they are most needed, helps remove health hazards from homes so they can undergo energy-efficiency retrofits, and helps ensure that the workers hired for energy efficiency upgrades include members of disadvantaged communities.
- 4. Renewable Heat Now Funding Proposals, which include the following:
  - <u>Green Affordable Pre-Electrification (GAP) Fund for low-to-moderate income households</u>: The GAP Fund, administered by NYSERDA or <u>HCR</u>, would support the state's goal of two million climate-friendly homes by 2030 by assisting low-to-moderate (LMI) households to weatherize and/or electrify their homes. It would provide funds for property improvements to address deferred maintenance and environmental health hazards, to update electrical systems, and to reduce energy bills. It would also enable LMI households to effectively utilize the weatherization and electrification resources available through <u>New Efficiency: NY</u>, the <u>Clean Energy Fund</u>, and the federal Inflation Reduction Act.
  - Low interest financing: These loans would ensure that all New Yorkers have access to no-cost and low-cost capital to finance the up-front costs of weatherization and electrification. We also request expanding the scope of the <u>Green Jobs Green NY</u> program to include financing for all the project types listed in the GAP fund above.
  - <u>Additional funding for the NYSERDA's Regional Clean Energy Hubs</u>: NYSERDA's Regional Clean Energy Hubs, launched in 2022, aim to provide a "one-stop-shop" experience for participants to connect them with state, local, and federal programs that fund weatherization and electrification as well as other agencies that serve low-income residents. Additional resources are needed to provide the hubs with the technology, training, technical support, and staffing necessary to achieve this goal.

#### **Supporting Details**

These bills apply to <u>future</u> new construction/customers only, and do not impact anyone's existing heating/cooking choices. They do not cost taxpayers or homeowners anything, will help lower energy burdens for current gas users, and will lower future energy and construction costs.

Buildings are the largest source of climate-destroying carbon pollution in NY State. This sector is also a top consumer of fossil fuels in the state, and therefore, a top target of fossil-fuel industry's disinformation campaigns. This <u>multimedia report</u> on the topic of disinformation was submitted as part of the written testimony on December 19 for the NYS Senate's joint public hearing on the Climate Action Council's scoping plan.

# All-Electric Building Act, S.562A|A.920A, Kavanagh|Gallagher

#### 1. Labor impacts

#### a. Pipe Trades

This is the only major labor sector that will likely experience a meaningful net reduction in the labor force as our buildings are electrified. However, switching to all-electric **new** construction would begin an orderly, decades-long transition to a pollution-free buildings sector while our labor force evolves in tandem. It would signal new workers to avoid gas delivery trades while supporting the vocational lives of mid- and late-career workers. Building electrification is not a single large event like the closure of a power plant; it's a gradual process that must start in earnest now.

This impact will be further mitigated through the proposed Just Transition Fund and other initiatives of the proposed Office of Just Transition. In suitable areas, <u>utility thermal networks</u> would offer a pathway for union workers with pipe skills to transition to the all-electric future.

#### b. Electrical Trades (IBEW)

Building electrification will result in sustained job growth in this sector. As the energy delivered through pipes decreases, the energy delivered through wires must increase.

We'll need more capacity in generation, transmission, and distribution as electricity demand from buildings increases. A development with electrified buildings will require more substations or larger substations to satisfy the total energy demand. Similarly, electrification could also require upgrades and enhancement to existing distribution networks in established communities as they electrify.

#### c. Building Trades

This transition and an evolution in the way buildings are powered is inevitable, and so is the associated skills update.

Washington state buildings codes council voted on  $\frac{4}{22}/2022$  to mandate all-electric heating and hot water for commercial and multifamily buildings and on  $\frac{11}{04}/2022$  for low-rise and single-family buildings. Both mandates will take effect on 7/01/2023.

The All-Electric Building Act offers a similar duration between enactment and implementation for low-rise buildings (start date of 01/01/2024), but a much more generous one for high-rise buildings (start date of 7/01/2027).

#### 2. Implementation dates: 2024 vs 2025 start

During the <u>10/13 Climate Action Council (CAC) meeting</u> (see Staff Recommendations, Slide 31), NYSERDA/Department of State (DOS) staff surprised everyone, including CAC members, by suggesting delaying the implementation by one year to 2025-2028. This drew protests from activists outside the next CAC meeting on 10/25, and an even bigger action at the 11/21 CAC meeting. 126 organizations sent this letter to Gov. Hochul and the CAC members, asking to restore the original timeline. A follow-up letter was sent to Gov. Hochul's energy/enviro staff and the CAC members on 12/08.

The following is an excerpt from CAC member Dr. Bob Howarth's <u>statement</u> following the CAC vote on 12/19 to approve

"Although I strongly support our final Scoping Plan, I have some disappointments. Chief among these is the decision to postpone the dates by which the State will move away from fossil fuel use for construction of new homes and commercial buildings, which are now one year later than in our draft plan passed in December 2021. For single family homes, for example, our final Scoping Plan calls for the prohibition of fossil fuels in new construction in 2025, not the 2024 specified in the draft plan. The building sector is the largest single source of greenhouse gas emissions, as I discuss further in the next paragraph below. Therefore, the greatest priority for meeting the goals of the CLCPA should be to reduce emissions from the building sector. I urge the Assembly and Senate to act to mandate that the State move away from fossil fuels more quickly than called for in the Council's Scoping Plan., using the guidance from the December 2021 draft Scoping Plan."

Peter Iwanowicz and Raya Salter (Sen. Stewart-Cousin's appointee to CAC) are among other CAC members who strongly support AEBA w/ its current dates/floors.

In short, the 2025-28 date change in the FSP was **not** discussed or suggested by CAC members, but was suggested by the NYSERDA/DOS staff. CAC's work had arrived at the 2024-27 dates in the draft scoping plan. More details on dates are in this <u>Dec 08 letter</u>.

#### 3. Health impacts and disproportionate burdens

The adverse health impacts of gas have been known for a while. Just the <u>outdoor pollution</u> from burning fossil fuels in buildings is responsible for nearly 2000 premature deaths and roughly \$22 billion in healthcare costs in New York.

Although the fossil gas industry misleadingly promotes its product as "clean," numerous studies have shown that gas stoves generate unsafe levels of indoor pollution and pose a serious health risk while avoiding regulatory scrutiny because there are no federal or NY State regulations on indoor air pollution.

Particulate matter, implicated in respiratory and cardiovascular diseases, is the most harmful pollutant released by gas burners. A meta study combining results from 41 different studies found that children living in homes with gas stoves had a 42 percent higher incidence of asthma, primarily due to nitrogen oxides

released by burning gas. <u>Carbon monoxide</u> and formaldehyde are other unhealthy <u>pollutants</u> produced by gas stoves.

A key <u>new study</u> estimates that about <u>18.8% of all childhood asthma cases in New York can be attributed</u> to gas stoves. As an extension, we can now quantify, with a high level of confidence, the number of avoidable additional childhood asthma cases resulting from each month's delay in a statewide all-electric new construction mandate going into effect.

AARP warned its members of elevated dementia risk from exposure to pollution from gas stoves.

The outdoor pollution from burning fossil fuels in buildings accumulates more readily in dense neighborhoods with residents of relatively modest means. Similarly, smaller dwellings suffer higher concentrations of <u>indoor pollution</u> from leakage and combustion of gas linked to myriad <u>health</u> risks. As a result, the adverse health impacts from pollution from gas appliances are inequitable with a disproportionately <u>higher burden</u> borne by <u>low-income communities</u>, people of color, infants and children, pregnant women, the elderly, and those with preexisting health conditions.

## 4. Will heat pumps work in the cold upstate and rural parts of NYS?

In short, yes, they work. Ithaca, Montreal, and Germany, for example, already have zero-emissions new construction mandates that kick in much before the proposed dates in the All-Electric Building Act.

Ground Source (geothermal) heat pumps work very efficiently at all temperatures and all climates. Their installation is more expensive, but substantial financial incentives are available, including but not limited to NYSERDA rebates through utilities, \$5K NYS tax credit, 30% federal tax credit with an 10% in energy communities. In addition to these, there are several income-based as well as income-agnostic rebates.

Cold-climate air-source heat pumps (ccASHPs) can operate at temperatures <u>well below 0 F</u> without a problem, although they become less efficient at colder temperatures. For example, here are <u>models from</u> <u>Mitsubishi electric</u> for <u>up to -13 F</u>. Note that these are relatively new, and many people continue to refer to the limitations of older heat pumps. The low-temperature performance of cold-climate air-source heat pumps has improved greatly in the past decade, enabled by inverter-driven compressors, flash injection technology, and other advances.

ccASHPs' model must be selected based on local climate and the dwellings' thermal profiles, and they need to be sized and installed professionally.

In some ways upstate NY is an even more attractive market for heat pumps than downstate because electricity prices are relatively lower and cost savings from <u>heat pumps are greater</u> when compared with fuels such as oil, kerosene, and propane.

Hundreds of new buildings are already being built with heat pumps all across New York state including apartment complexes, office buildings, hotels, airport terminals, grocery stores, affordable housing and single-family homes ranging from tiny homes to mansions.

<u>Here is a list of 150 buildings in Upstate NY that already heat without fossil fuels</u>, which is not exhaustive. For a few more examples, please see <u>this short video by NYSERDA</u>, or <u>HeatSmart CNY's success stories</u> in upstate/central NY.

# 5. Can the electric grid handle all-electric new construction?

The most compelling reason to be confident that our electric infrastructure can handle a transition to all-electric new buildings is that the summer peak load on our grid is significantly higher than the winter peak load. **Figure 1** below shows the year-long hourly electric customer load in New York during 2021. It is clearly observable that the winter electricity demand in New York State has a comfortable cushion before building electrification causes it to approach or exceed the summer peak demand. According to current <u>NYISO projections</u> (**Figure 2**), this scenario is not likely to be reached until around 2034.

Our grid is stressed in the summer and the NYISO margin warnings apply to summer load. GSHPs air conditioning efficiency is 40-50% higher and will actually help the grid in the summer. Here is a <u>full report</u> on this topic.

Major energy providers like <u>LIPA</u> and <u>Con Edison</u> representing 60% of the state's electricity customers support all-electric new construction (**Figure 3**).

#### 6. What happens in power outages?

Even fossil-fueled heating doesn't work during power failures without expensive generators. A look at <u>poweroutage.us</u> would reveal that beyond severe weather events, power outages are uncommon. However, almost every winter day, HVAC technicians and plumbers crisscross towns and villages all over the state, rushing to rescue hundreds of customers with heat outages from broken boilers, furnaces, and water heaters.

Just like power outages, there are gas outages too. NYCHA tracks its outages at <u>https://my.nycha.info/Outages/Outages.aspx</u> and gas heating and hot water outages are far more common than power outages. There have been instances of gas outages lasting <u>weeks</u> to <u>months</u>.

During the late December cold snap, National Grid <u>issued an alert</u> to all its downstate customers to immediately reduce gas use substantially and turn thermostats down due to gas supply disruptions caused by pipeline malfunctions.

As we shift our heating to electric, that will likely add to the impetus for utilities to harden their transmission and improve reliability.

## 7. How do voters feel about all-electric new buildings?

Please refer to the Data for Progress report below: <u>Voters Support New York's Proposal to End Fossil Fuels in New Construction (dataforprogress.org)</u>

Two-thirds of New York voters support a ban on new gas hookups. All types of organizations, not just climate advocates, support this policy. For example, please see:

- This memo of support from New York State Council of Veterans' Organizations,
- This petition from middle and high school school students,
- <u>This letter</u>, signed by over 200 state-wide organizations that includes support for the All-Electric Building Act in the upcoming FY 2023-2024 Executive Budget.

#### 8. National statistics on electric cooking and space and water heating

According to the <u>latest Energy Information Administration (EIA) data</u>, 26% of US homes are already all-electric; 33% rely on electricity for space heating, 47% for water heating, and 57% for cooking. <u>A majority of Americans</u> **do not** cook on gas.

#### 9. Construction & operating costs. Doesn't electricity cost more than gas?

Heat pumps do not make heat; they transfer heat. Therefore, they use 2-5X less energy than combustion-based appliances. This is the key to their cost efficiency. A heat pump is a single solution for both heating and cooling.

Recent studies (e.g., <u>1</u>, <u>2</u>, <u>3</u>, <u>4</u>, <u>5</u>) show that on an average, new all-electric buildings are more affordable to build and <u>heat</u> than new fossil-fueled buildings almost everywhere in New York state. We must also recognize that new gas hookups are highly subsidized, typically by \$5000 to \$15000 by ratepayers, add to everyone's energy burdens (this is the topic of S.2016), and distort building economics in favor of an expensive and polluting fuel.

Furthermore, cold-climate heat pump technology is relatively new, and the equipment and installation costs are expected to decline significantly due to greater adoption, higher volumes, and more trained and experienced workforce.

#### 10. Macroeconomic benefits for New York state

Due to generous tax credits from the federal Inflation Reduction Act, the more heat pumps we install, the fewer tax dollars will flow out of the state. On the other hand, burning fossil-fuels that New York doesn't produce drains funds from the state.

With the US becoming the world's <u>largest exporter</u> of liquified natural gas, domestic prices will be determined by the highest international bidder. The era of cheap natural gas <u>is over</u>, but New York's gas utilities are still adding tens of thousands of new customers each year, creating unnecessary additional demand that increases pressure on supply prices. The more than <u>200 million dollars</u> of annual cost of free hookups to these customers is also tacked onto everyone's delivery charges. This is akin to a tax levied on ratepaying families and small businesses to fund free new gas hookups.

According to the 2022 <u>Clean Energy Industry Report</u>, energy-efficiency and building electrification is the largest segment of New York's clean energy jobs that grew 13% over five years to 165,000 compared to an 11% decline to 141,000 in conventional energy over the same period.

For example, after prototyping an efficient method for installing <u>geothermal</u> heat pumps, Dandelion Energy chose New York to <u>start</u> a business due to its market potential and supportive policies. The company has never stopped hiring since installing its first system in 2018 and has expanded into three neighboring states. Each year, its systems enable hundreds of new families to start heating and cooling their homes without paying astronomical utility bills or polluting their neighborhoods.

Here is an example of a job opening w/ \$150-200K annual salary for geothermal heat-pump drilling.

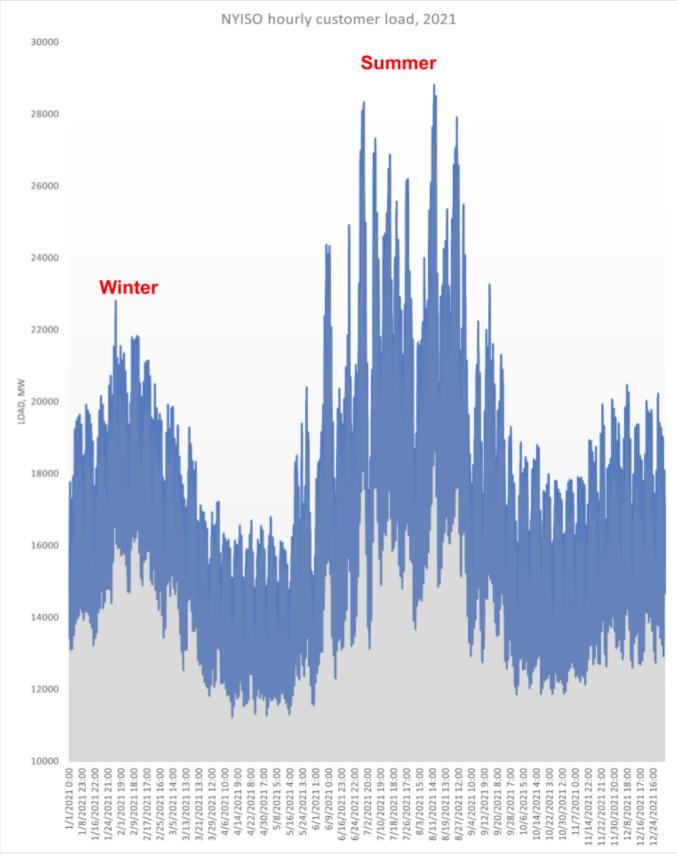
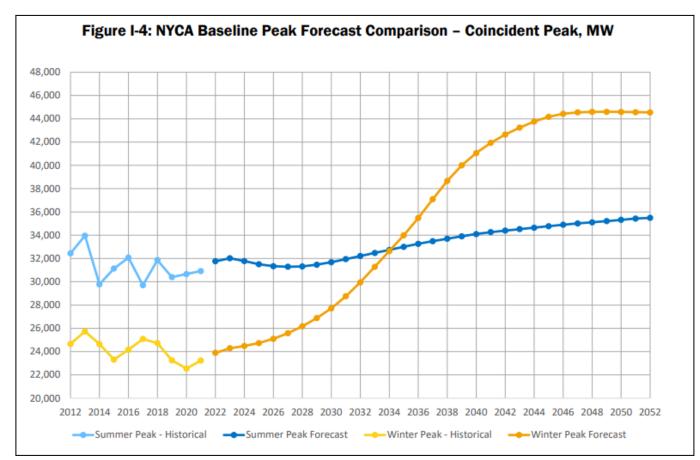


Figure 1: Hourly customer load request, January 1, 2021 through December 31, 2021. Source: <u>https://www.nyiso.com/</u>



**Figure 2:** NYISO's projections in its 2022 Load and Capacity Data report, or the Gold Book, expects the winter peak demand in New York State to stay below the summer peak demand until 2034. Note a mid-century dip in summer peak demand concurrent with beneficial electrification picking up pace. *Source:* <u>https://www.nyiso.com/documents/20142/2226333/2022-Gold-Book-Final-Public.pdf</u>

<u>Con Edison</u>: Con Edison's electric grid is well-poised to support the transition to heating electrification. Because our system is built to serve our customers' energy use during the hottest summer afternoon (about 13,000 MW) and energy use is currently lower in the winter (about 8,000 MW), many parts of our system have the headroom to support the growth of heating electrification for the coming years. At some point in the future – likely in the next decade – that headroom will be used up, and we are already planning system investments for future winter peak demands driven by forecasted heating electrification as well as higher summer peak demands driven by electric vehicle adoption, electric hot water heaters, dryers and stoves, and economic growth.

Long Island Power Authority (LIPA): Today, LIPA has summer peak loads of about 5,000 megawatts (MW). As customers cool their homes with air conditioning but primarily heat with fossil fuels, winter peak loads are less than 3,000 MW. That means LIPA could add about 2,000 MW of winter loads without significant new investment in the electric grid, as shown in Figure 5. Adding this winter load allows LIPA to spread the fixed cost of maintaining the electric grid over more usage, which reduces per kilowatt-hour electric costs. In fact, one of the reasons electricity costs more per kilowatt-hour in the northeast is this large gap between summer and winter electric loads compared to warmer climates in the United States, which have greater year-round usage of the grid.

**Figure 3:** <u>Con Edison</u> and <u>LIPA</u>, which account for about 60% of NYS electricity customers, confirm that building electrification's impact on the grid, if any, would be beneficial during the next decade.

# The NY Home Energy Affordability Transition HEAT) S.2016 A.xxxx, Krueger Fahy

This bill will align utility regulation with state climate justice and emission reduction targets. Specifically, (a) it will repeal the subsidies and the entitlement for new gas hookups, (b) will cap the energy burden of LMI households to 6% of their income, and (c) minimize ratepayer impact from the replacement of leak-prone pipe (LPP) serving existing customers. The bill specifically directs the Public Service Commission (PSC) to include utility sector achievement of the CLCPA's climate justice and emission reduction mandates as a core planning objective in its "public service responsibilities."

#### 1. Ratepayer impact from new gas hookups

A recent <u>analysis by RMI</u> based on a joint <u>utility filing</u> to the Public Service Commission (PSC) indicates that new gas connection subsidies are currently adding over \$200 million dollars per year to the gas delivery rate base. This is an unconscionable subsidy that promotes fossil-fuel expansion on the backs of already overburdened ratepayers. This also distorts the cost comparison with all-electric new construction and distorts building economics in favor of an uneconomical fuel.

Furthermore, these tens of thousands of new customers per year create enormous additional demand that increases pressure on supply prices as well. New gas-fueled buildings are thus helping raise everyone's energy costs, when all-electric new buildings would be cheaper to <u>construct</u> and <u>power</u> in most of New York. Furthermore, with <u>export-constrained</u> supplies, gas will stay <u>expensive</u> in the foreseeable future.

In its 2021-22 legislative session, NY State passed the <u>Utility Thermal Energy Networks and Jobs Act</u> <u>S.9422|A.10493</u>, which offers an extremely energy-efficient pathway for decarbonizing dense developments as well as a pathway for union workers with pipe skills to transition to the all-electric future.

However, the legal entitlement to gas in the PSL can interfere with the implementation of S.9422 (2021-22) because <u>a single customer demanding gas can stymie an entire neighborhood's transition from gas to a</u> <u>thermal energy network</u>.

California is eliminating and Colorado is severely restricting similar gas hookup subsidies.

## 2. Ratepayer impact from Leak Prone Pipe (LPP) replacement

There are other egregious examples of the negative impact of the gas infrastructure investments by utilities on customers' energy burdens. For instance, in 2020, Con Edison received approval for a <u>25% increase</u> in gas delivery charges over three years, largely to pay for maintenance and upgrades of the gas distribution system. More recently, the utility requested <u>a billion dollars a year</u> in ratepayer funds for maintaining the gas system's reliability and distribution integrity, with 40% of it earmarked for replacing LPPs.

One big threat of a future cost spiral stems from the fact that new pipes – whether old mains' replacements or the fresh customers' service lines – will likely be utilized for only a fraction of their 60- to 80-year physical service lives. These pipes won't be delivering much, if any, fossil gas in just a couple of decades, and someone will be on the hook for massive charges associated with their accelerated depreciation.

Every new gas hookup or pipe replacement locks in utility profits, while adding to the burgeoning liability of stranded assets foisted upon ratepayers. It's inevitable that the state will need to come to the ratepayers'

rescue, but that doesn't alter the fact that new gas investments serve the gas utilities' bottom lines at considerable public expense.

This bill directs the PSC to minimize long-term costs to customers by requiring gas companies to restructure plans for addressing LPPs to facilitate an orderly right-sizing of the gas distribution system.

#### 3. Con Edison rate case as example

**Figure 4** and **Figure 5** below use an example of a real rate request to highlight some of the aforementioned issues.

	Summary Info	rmation S	heet for CE	CONY Januar	y 28, 2022	Electric & (	Gas Rate Fil	ing
	Electric and Gas	Rate Filing	- One Year	(2023) Proposa	al; Other Ye	<u>ars (2024 an</u>	<u>d 2025) Illust</u>	rated*
			Electric		Gas			-
	(\$ millions)	Rate Change	Average Rate Base	Capital	Rate Change	Average Rate Base	Capital Expenditure	1
	2023	\$1,199	\$26,286	\$3,472	\$503	\$10,030	\$1,170	1
	2024	853	28,983	3,685	234	10,982	1,186	1
	2025	608	30,618	3,771	218	11,884	1,143	1
		-		Key Drivers of F	Proposed 20	23 Rate Incre	ease (\$ millior Electric	<u>ns)</u> Gas
_				New infrastructure	e investment		\$250	\$161
Pro	roposed Rate of Return and Equity Ratio			Financing costs			201	77
Re	turn on equity		10.00%	Property and other taxes			180	74
Eq	uity ratio	50%	Sales revenue change			259	77	
			ſ	Amortization of de	eferred credits	s and costs	191	(1)
Te	<u>st Year</u>		ſ	Operating expenses			79	32
•	Historic test year: Ty	sended	Depreciation changes			15	64	
	September 30, 2021		Income Taxes and Other			24	19	
•	Rate year: January 1 31, 2023	cember	Total			\$1,199	\$503	

Figure 4: Summary of Con Edison's initial rate request. Con Edison subsequently revised its rate request, but this shows what the utilities will attempt in the absence of suitable legislation. The problem of stranded assets will only get worse.

			Electric	Gas
Bronopod Poto of Poturn and Equity Potio	New infrastructure investment		\$250	\$161
oposed Rate of Return and Equity Ratio	Financing costs		201	77
Return on equity10.00%	Property and other taxes		180	74
Equity ratio50%	Sales revenue change		259	77
	Amortization of deferred credits and costs		191	(1)
<u>Test Year</u>	Operating expenses		79	32
Historic test year: Twelve months ended	Depreciation changes		15	64
September 30, 2021	Income Taxes and Other		24	19
<ul> <li>Rate year: January 1, 2023 – December 31, 2023</li> </ul>	Total	\$1,199	\$503	

New rates proposed to be effective January 1, 2023

#### Other Major Provisions: Proposed

- True up of costs of pension and OPEBs, environmental remediation, and storms (electric).
- Requesting full reconciliation of property taxes, municipal infrastructure support costs, uncollectibles, late payment fees, and long-term debt cost rate.
- Requesting reconciliation for inflation to the extent that actual inflation exceeds the annual inflation rates of 3.4% assumed in the revenue requirement by 1.6% threshold.
- Requesting to reduce certain gas asset service lives by 5 years in alignment with the gas transition that is expected to
  result from CLCPA implementation.
- Continuing the revenue decoupling mechanism for electric and gas service.
- · Continuing provision for recovery of cost of purchased power, gas, and fuel.
- Continuation of earnings opportunities from Earnings Adjustment Mechanisms (EAM) for meeting energy efficiency
  goals and other potential incentives.

# Figure 5: Con Edison proposed to invest substantially in new infrastructure while simultaneously asking for ratepayer-funded depreciation to reduce the lives of some of the existing assets.

#### 4. Limiting energy burden for LMI households to 6% of income

The bill codifies the state's goal of limiting LMI households' energy burden to under 6% of their incomes. The bill does not specify a mechanism to achieve this target, but defers to the PSC to devise such mechanisms through utility rates. One, but not the only, common mechanism for reducing LMI households' energy burden is to use tiered progressive rates that increase with consumption. The premise behind such rate structures is that people with modest incomes would live in smaller dwellings with lower energy consumption.