



**TESTIMONY OF EARTHJUSTICE BEFORE THE JOINT HEARING OF THE
SENATE FINANCE AND ASSEMBLY WAYS AND MEANS COMMITTEES
REGARDING THE FISCAL YEAR 2023-24 ENVIRONMENTAL AND ENERGY
BUDGET PROPOSALS**

February 14, 2023

Good afternoon, my name is Liz Moran, and I am the New York Policy Advocate for Earthjustice. Earthjustice, as the nation's first and largest national nonprofit environmental law organization, brings far-reaching change by enforcing and strengthening environmental laws on behalf of hundreds of organizations and communities. We are dedicated to defending the right of all people to a healthy environment, protecting our magnificent wild places and species, and fighting to curb climate change.

Thank you for the opportunity to testify today on the Governor's SFY2023-24 budget energy and environment proposals. The Governor's proposed budget includes a number of notable policy and funding items. Below we have summarized our positions on several key items:

- **All-electric new construction** – We applaud the Governor's inclusion of this necessary policy, but the Governor and the Legislature should include bill A.920-A/S.562-A in the final budget. The Governor's proposal delays implementation for new construction until 2026 for small buildings, and 2028 for larger buildings and commercial buildings, and exempts any manufacturing facilities.
- **Cap-and-Invest** – This program has potential, but it must align with the CLCPA's equity provisions – while avoiding the numerous pitfalls of similar programs implemented elsewhere. As proposed, much is kicked to regulations, leaving uncertainty towards how much funding the program could raise and how it would ensure emission reductions are prioritized where they are needed the most. As proposed, the scope of "economy-wide" appears to exclude agriculture, despite that sector's important contribution to the state's economy and significant greenhouse gas emissions; to be effective the final program must include large-scale agricultural emissions.
- **New York Power Authority (NYPA) renewable energy projects** – We are pleased the Governor is opening the door to building public renewable projects and urge the Governor and the legislature to strengthen this proposal by including the Build Public Renewables Act (A279) in the final budget.
- **Additional staffing for Department of Environmental Conservation (DEC)** – We are thrilled to see additional staffing devoted to DEC. It is crucial to reverse past damages of staffing cuts and bulk up New York's key agency for protecting New York's climate and environment.
- **\$500 million for the Clean Water Infrastructure Act** – We are pleased to see a continued commitment to the Clean Water Infrastructure Act; however, we urge at least \$1 billion in new funding to align with need.

- **\$400 million for the Environmental Protection Fund** – We are pleased to see a continued commitment to the Environmental Protection Fund, however, *we strongly oppose any offloading of agency staff costs and urge the legislature to reject this.*
 - **Climate-resilient Farming** – We are disappointed that funding has decreased for this program and urge the Governor and the Legislature to include additional support for helping farmers transition into climate-friendly practices and products.
- **Transportation electrification** – The Governor’s proposal continues the trend from past budgets by providing \$20M for electric transit buses and \$17M to electrify the state agency light-duty vehicle fleet, but unfortunately fails to take a step forward. We urge the Governor and Legislature to meaningfully fund these programs and develop new incentive programs, more in line with the \$2.5B recently approved in California for zero-emission vehicle deployment.
- **Addressing childhood lead poisoning** – The Governor’s proposal recognizes the importance of additional funding to protect children with lead, but the funding levels and corresponding policy must reflect the scope of the issue. With New York having the highest reported levels for childhood lead poisoning, this will need to be strengthened and supplemented with additional policies.
- **Cleaning up “Forever Chemicals” (PFAS)** - We are pleased to see the Governor devote attention and financial resources towards cleaning up toxic PFAS and other “emerging” contaminants, particularly in cases where a polluter may not be readily identified. However, more details for this proposal are needed. We also urge for the \$40 million to be a specific line item within the Clean Water Infrastructure Act (CWIA).
- **\$200 million for EmPower Plus** – We applaud the Governor for increasing funding for this program, which will help low-income households retrofit their homes. We strongly encourage the Governor and Legislature to include additional funding to low-moderate income households to provide pathways to electrification.

Earthjustice is excited to see many of these proposals and investments, but it will be critical for the Legislature to strengthen and build upon several of these proposals, which we have detailed in the subsequent sections of our testimony.

Additionally, there are some important areas that have not been addressed in the Governor’s budget proposal. Earthjustice feels a strong budget should have the following:

- **A mandate for all-electric new construction by including A.920-A/S.562-A (The All-Electric Building Act) in the final budget.**
- **A minimum \$10 billion in climate funding.**
- **\$1 billion for the Clean Water Infrastructure Act**, with a line-item breakdown of funding for specific programs.
- **The NY HEAT Act (S.2016)**, which will give the Public Service Commission (PSC) the authority and direction to align gas utility regulations and system planning with the CLCPA, such as elimination of the 100-foot rule.
- **\$300 million for MTA operations to enable #6minutefor service** for more frequent bus service.



- **Green Transit, Green Jobs (A3090-A and S3535-C)**, which will achieve a zero-emissions transit bus fleet by phasing out purchases of new fossil fuel transit buses starting in 2029.
- **A \$2 billion Green Affordable Pre-Electrification (GAP) Fund**, which would address barriers to electrification that are not covered by other programs, such as deferred maintenance, hazard remediation, electrical upgrades, weatherization, energy efficiency, and an all-electric replacement for fossil fuel appliances at the end of their useful life.
- **The Fossil Fuel Subsidy Elimination Act (S.3389)**, which would eliminate some of New York’s most egregious giveaways to the fossil fuel industry and save the state as much as \$330 million annually.
- **S.88 and S.2353 to address lead in housing**. These bills, respectively, require sellers or lessors of pre-1978 housing to disclose to buyers or renters any knowledge of lead-based paint in residences and to close a loophole exempting insurance companies from covering the costs of lead-exposure related expenses.

The remainder of our testimony is organized by topic to provide detailed reactions to what is in the executive budget, as well as those which were left out. We also address some topics the legislature should prioritize this session.

Funding New York’s Environment

The climate crisis is already harming New York’s public health and environment. Recently, an unprecedented bomb cyclone devastated Buffalo and caused flooding on parts of Long Island.¹ In recent summers, New York saw record flooding and heatwaves, resulting in deaths. The remnants of Hurricane Ida killed 46 people across four states that were hit by the storm, which includes 16 New Yorkers.² Devastation like this will only get worse as the climate continues to warm – New York can expect to see more frequent extreme weather events, increased flooding and heat waves, rising water levels, and more.

The cost of inaction is greater than the investments necessary to meet New York’s climate goals – according to the Final Scoping Plan, by more than \$115 billion.³ But the cost benefits of proper investment are tremendous. The Final Scoping Plan estimated the creation of enough jobs to outnumber potential displaced jobs by a ratio of ten-to-one in 2030. According to an earlier report from the Climate Action Council, net benefits of meeting New York’s CLCPA mandates are in the range of \$80-\$150 billion.⁴ Additionally, public health benefits range from \$160-\$170 billion.

¹ Sarah Maslin Nir and Michael D. Regan, “Arctic air hits New York State, along with some flooding,” The New York Times, December 23, 2022, <https://www.nytimes.com/2022/12/23/nyregion/new-york-flooding-winter-storm.html>

² “As Ida Deaths Rise, N.Y. Leaders Look Toward Future Storms,” The New York Times, updated November 12, 2021, <https://www.nytimes.com/live/2021/09/03/nyregion/nyc-flooding-ida>

³ New York State Climate Action Council, “Final Scoping Plan December 2022: Executive Summary,” page 5, accessed January 16, 2022, <https://climate.ny.gov/-/media/project/climate/files/Chapter-1.-Executive-Summary.pdf>

⁴ New York State Climate Action Council, October 14, 2021 meeting presentation, page 34 <https://climate.ny.gov/CAC-Meetings-and-Materials>

The cost of inaction should come as no surprise – New York is already no stranger to the astronomical costs of the climate crisis. Hurricane Sandy, which took the lives of 44 New Yorkers in 2012, inflicted an estimated \$19 billion in damages and lost economic activity in New York City.⁵ There have also been astronomical costs associated with public health damages due to air pollution and reliance upon fossil fuels. As one example, the health impact costs associated with fossil fuel combustion in buildings has cost New York City \$12.5 billion annually, and the rest of New York State \$9.2 billion annually.⁶

Additionally, the warming climate is placing additional strains on New York’s water infrastructure. With increased freeze and thaw cycles and increased precipitation, New York’s aging water infrastructure is suffering. Estimates dating back to 2008 found that New York will need to invest \$80 billion in drinking and wastewater infrastructure to ensure it is properly repaired, replaced, and upgraded.⁷ These needs will only grow without proper investments to meet demands and bold policy and investments to address climate change.

New York must make meaningful investments into a transition to a zero-emissions economy without delay, as well as investments in climate resiliency and adaptation. The Legislature has opportunities this session to advance climate investments by ensuring the state enacts a strong and equitable cap and invest policy, as well as by passing the following bills and policies in the SFY2023-24 budget:

- **The Fossil Fuel Subsidy Elimination Act (S7438/A8483 of 2022)** would eliminate some of New York’s most egregious giveaways to the fossil fuel industry and save the state as much as \$330 million annually. This legislation is a no-brainer for New York. The CLCPA and the Scoping Plan are clear that the state is moving off fossil fuels, and there is no reason the fossil fuel industry should continue receiving subsidies from the people of New York.
- **\$10 Billion for a new Climate and Community Protection Fund**, which would serve as a pool of resources, much like the Environmental Protection Fund, to fund programs necessary for meeting CLCPA mandates. A report to the Climate Action Council found that annual investments to ensure New York is on track to meet its climate mandates must be at least \$10 billion.⁸ Given the goal of creating a historic fund for climate programs through the Scoping Plan’s proposed cap and invest policy, as well as the history of dipping into funds from the Regional Greenhouse Gas Initiative to fund the general budget, the Climate and Community Protection Fund is a necessary measure to ensure accountability, compliance with the CLCPA’s 35% investment mandate in disadvantaged communities, and to safeguard climate funds so that they are used for their stated purpose.

⁵ NYC Recovery, “Impact of Hurricane Sandy,” accessed January 27, 2022, <https://www1.nyc.gov/site/cdbgdr/about/About%20Hurricane%20Sandy.page>

⁶ Talor Gruenwald and Stephen Mushegan, “New York Emits More Building Air Pollution Than Any Other State,” RMI, May 18, 2021, <https://rmi.org/new-york-emits-more-building-air-pollution-than-any-other-state/>

⁷ Matthew Hamilton, “New York’s water infrastructure needs estimated at \$80B over 20 years,” TimesUnion, February 13, 2017, <https://www.timesunion.com/local/article/New-York-s-water-infrastructure-needs-estimated-10930256.php>

⁸ New York State Climate Action Council, October 14, 2021 meeting presentation, page 37 <https://climate.ny.gov/CAC-Meetings-and-Materials>



Implementation of the CLCPA, as well as key programs for climate mitigation and adaptation, must be funded through the budget. The legislature should include at least \$400 million for the Environmental Protection Fund’s critical environmental and climate mitigation and adaptation programs. The legislature should also include \$1 billion for the Clean Water Infrastructure Act. New York’s aging water infrastructure is being further stressed by climate change, and needs in New York are estimated to exceed \$80 billion over 20 years. Finally, implementing the CLCPA will require sufficient funding to agencies so they have the staff and resources to develop new regulations, programs, and investments that will be needed over the coming year.

Cap and Invest Program

The Scoping Plan recommended New York implement a “cap and invest” policy to place a declining cap on emissions and require major greenhouse gas emissions sources to purchase emissions credits. Following this recommendation, Governor Hochul has included a general framework for cap and invest in her Executive Budget; however, it is short on details. There’s potential, but we must get the details right.

A cap and invest policy is a way of placing an enforceable overall cap on New York’s emissions, ensuring they decline over time to meet the CLCPA mandates, and of raising new revenue to fund the transition to a zero-emissions economy. Previous cap and trade programs have had serious flaws, allowing emissions to continue and even rise in overburdened communities while failing to substantially reduce overall emissions.

New York has a chance to learn from experience and implement a better cap and invest program that will not only dramatically reduce emissions and create jobs, but will also prioritize reducing pollution and benefiting disadvantaged communities and protect consumers.

It will be crucial for a strong cap and invest program to include as many sectors and industries as possible, with strict limits to any exemptions. Agriculture, despite being a significant contributing factor to greenhouse gases and other pollution in New York, has historically been left out of “economy-wide” programs – that should end with a cap and invest program in New York. Just as industrial methane sources should be included, agricultural methane sources must also be included, particularly the largest industrial scale agriculture sources (i.e. large concentrated feeding operations, known as CAFOs). Additionally, nitrous oxide, a powerful greenhouse gas almost 300 times more potent than carbon dioxide, and emitted by industrial-scale agricultural and industrial sources must also be included in the program.

A cap and invest program must be in line with the CLCPA’s equity provisions. Recently, NY Renewables released a guide for creating a just and effective cap and invest program.⁹ Earthjustice strongly concurs with the recommendations of NY Renewables.

⁹ “NY Renewables Statement and Guidelines for Cap and Invest in New York State,” NY Renewables, February 9, 2023, <https://www.nyrenewables.org/news/2023/2/1/ny-renewables-statement-on-ci-nys>

Any cap and invest program in New York must include:¹⁰

- 1. Pollution limits must decline every year in every sector**, and these limits must be strongly enforced. The limits must hit key benchmarks to ensure we reduce pollution to 50 percent of current levels by 2040 and at least 85 percent by 2050.
- 2. Facility-specific caps on greenhouse gas and co-pollutant emissions must be non-tradable**, with aggressive penalties for exceeding cap levels. Don't allow permit trading to game the system. Permits should not include trading after purchase, double allowances, offsets, and banking of unused permits year-to-year.
- 3. Revenue collection must be tailored not to harm vulnerable New Yorkers.** The cost burden for New Yorkers who can least afford it must not be made worse. The cap and invest program must include rebates and targeted relief for low- and moderate-income households to ensure energy bills go down. We believe the strongest approach is to create a Climate and Community Protection Fund and direct any funds raised to that fund.
- 4. Any cap and invest system must be part of a broader regulatory approach to reducing pollution**, and must ensure that New York can achieve the greenhouse gas reduction mandates in the CLCPA.
- 5. Pollution reduction mandates for overburdened communities** by agencies including the NYS Department of Environmental Conservation, and the Attorney General's office. In addition to a C&I system, we need a broad array of effective regulation and enforcement to reduce pollution.
- 6. Permits must avoid loopholes.** Cap and invest must avoid loopholes that have weakened or undermined other efforts, including permit banking, offsets, and exemptions. Permit holders should not be allowed to play games with trading after purchase, exemptions, double allowances, offsets, and banking of unused permits year-to-year.
- 7. Permits should have a clear and escalating price**, not set by auction. If the final program auctions the permits, we must ensure a price floor sufficient to support spending and drive emissions reductions and weigh in pricing towards Disadvantaged Communities and environmental justice areas.

Include \$1 Billion for the Clean Water Infrastructure Act

Earthjustice urges the legislature to build upon the Governor's proposal by including a total of \$1 billion to the Clean Water Infrastructure Act (CWIA). Additionally, we strongly urge the legislature to delineate funding for each program within the CWIA so municipalities and the general public can know how much funding is actually available for various programs.

New York's water infrastructure needs are tremendous. In 2008, reports from DEC and DOH found that, over the next 20 years, New York will need to invest approximately \$80 billion for all the needed repairs, replacements, and upgrades for our drinking and wastewater infrastructure.

¹⁰ These are from NY Renews guide on cap and invest (see footnote 9). See also recommendations from Earthjustice in our January 19, 2023 testimony before the NY Senate regarding NY's climate scoping plan: https://www.nysenate.gov/sites/default/files/elizabeth_moran_earthjustice.pdf



Thankfully, starting in the SFY2015-16 budget, New York began to put significant investments towards water infrastructure repairs, replacements, and upgrades through the creation of the Water Infrastructure Improvement Act (WIIA) grant program. In the SFY2017-18 budget, this was built upon with the creation of the Clean Water Infrastructure Act. Today, New York has invested \$4.5 billion towards water infrastructure and other water needs through the Clean Water Infrastructure Act.

But with over \$80 billion in water infrastructure needs, which doesn't include the funding needed towards source water protection, addressing unregulated dangerous contaminants, and replacing lead service lines, this funding remains a chip towards overall need. Additionally, strains upon our water infrastructure have grown due to increased freeze-thaw cycles from the worsening climate crisis.

New York's water infrastructure and clean water needs far exceed the funding that is currently available. A clear example of this can be found within WIIA, a program with demonstrated popularity, but does not have the funding level to align with demand.

A recently released report from Environmental Advocates NY found that in its latest grant cycle, WIIA awarded \$279 million to 73 projects, while \$665 million in local governments asks representing 246 shovel-ready projects went unfunded.¹¹ This pattern aligns with EANY's analyses of WIIA from prior years. They also found that 83 shovel-ready projects went unfunded in 2019, nearly one-third of the total shovel-ready projects submitted,¹² and their analysis of WIIA grant rounds from 2015 to 2018 found that, at that time, only half of shovel-ready projects with complete applications received a grant award.¹³

WIIA, along with the other programs in the CWIA, both protects water and public health, and creates good jobs. The successes of the CWIA should be awarded with increased funding in the SFY2023-24 budget.

Support \$400 Million for the Environmental Protection Fund

The Governor's Executive budget proposal maintains an increased funding level for the EPF with the inclusion of \$400 million. This funding will advance work to protect New York's environment and improve quality of life in every county of New York State. However, the power of that \$400 million could be jeopardized due to language that would allow money to go towards agency staffing. This offloading is an inappropriate use of EPF dollars and should be rejected by the legislature, as it has in years prior.

¹¹ Robert Hayes, *Untapped Potential: A New Era for New York's Water Infrastructure*, Environmental Advocates NY, February 2023, https://eany.org/wp-content/uploads/2023/02/EANY-Untapped-Potential_FINAL.pdf

¹² Robert Hayes, *Untapped Potential: Building the Next Generation of Water Infrastructure*, Environmental Advocates NY, November 2021, p.6, <https://eany.org/wp-content/uploads/2021/11/EANY-water-report-Nov-2021-Final-1.pdf>

¹³ Maureen Cunningham and Robert Hayes, *Untapped Potential: New York's Growing Water Infrastructure Need*, Environmental Advocates NY, 2020, https://eany.org/eanypdfs/eany_2020_water_report_1.pdf

The Environmental Protection Fund offers much needed funding to various sectors in New York's environment, and the benefits are apparent:

- According to a study by The Trust for Public Land, every \$1 invested in land and water conservation through the EPF returns \$7 to the state.
- The EPF supports 350,000 jobs across New York in a broad spectrum of industries including construction, agriculture, recreation, tourism, forestry, recycling, and recreational fishing.
- EPF-supported industries add \$40 billion to the state's economy every year.

Increase Staffing for DEC

Earthjustice is pleased to see the Governor's budget includes the addition of 231 new staffers to the Department of Environmental Conservation. DEC is not only tasked with implementing and enforcing the nation's leading climate law, but must also properly enact and enforce a growing number of environmental laws and regulations. In addition to the need to address an ever-worsening climate crisis, New York must respond to alarming levels of childhood lead poisoning, aging and deteriorating water infrastructure, ongoing contamination from PFAS and other dangerous unregulated chemicals, and a range of other chronic environmental challenges, making it critical to ensure DEC is appropriately staffed.

Last year, Governor Hochul vetoed legislation to expand crucially needed protections for class C streams, citing concerns regarding DEC staffing. These streams are essential for protecting drinking water from contamination, habitats, and recreation. With increases to agency staffing, hopefully policies such as this will move forward.

Building Electrification

Electrifying buildings and making them more energy efficient is a key component of addressing both climate change and the even more immediate public health threats posed by fossil fuels, which disproportionately harm communities of color. Additionally, as the cost of fossil fuels rise, going all-electric for new construction will help New Yorkers save energy costs.¹⁴

Governor Hochul has included some important policies to tackle building electrification in her executive budget proposal, but there are some much needed ways to improve upon these which we have detailed in subsequent sections of our testimony.

On-site fuel combustion in residential, commercial, and industrial buildings generates 32% of the State's total GHG emissions, and combined buildings emissions, including electricity generation used for buildings, constitute approximately 45% of the State's total GHG emissions.¹⁵

¹⁴ Max Shron, Amit Kooner, Juan-Pablo Velez, "The impact of the All-Electric Building Act on the cost of heating new homes in New York State," October 2022, https://drive.google.com/file/d/14cm1hLk4DIIY_vK8gyOwTcRIAlaa3kUT/view

¹⁵ NYSERDA, New York State Greenhouse Gas Inventory: 1990-2016 S-4 fig. S-1 (2019), <https://www.nyserderda.ny.gov/About/Publications/EA-Reports-and-Studies/Greenhouse-Gas-Inventory>; NYSERDA, New York State Greenhouse Gas Inventory Fact Sheet, <https://www.nyserderda.ny.gov/About/Publications/EA-Reports-and->



Additionally, burning fossil fuels in buildings contributes to dangerous air pollution. Stoves and heating appliances that use gas or oil emit nitrogen dioxide—which causes learning deficits, increased susceptibility to asthma and allergies, aggravated respiratory symptoms, and changed lung function—as well as particulate matter—which can increase the risk of heart and asthma attacks, and lead to premature death.

Findings recently published in the *International Journal of Environmental Research and Public Health* found that nearly 19% of childhood asthma cases across New York can be attributed to the use of gas stoves in homes.¹⁶ A study by RMI found that children living in homes with a gas stove are 42% more likely to experience asthma symptoms. Additionally, New York has the most premature deaths in the country from fossil fuel combustion in buildings.¹⁷

Chronic exposure to air pollution also increases the risk of death from COVID-19. Indoor fossil fuel combustion is also a significant source of outdoor air pollution, including particulate matter and smog. Communities of color are exposed to higher levels of this pollution than the general population.

Acknowledging the significance of addressing emissions from the buildings sector, the Final Scoping Plan includes numerous recommendations, including the following, which are also touched upon in the Governor’s proposed budget:

- **Banning fossil fuels in new construction** – legislation that would accomplish this recommendation, and, critically, go beyond the recommendations and the Governor’s proposal, is the *All-Electric Building Act (S562A/A920A)*. We strongly feel that:
 - *A mandate for all-electric new construction must start in 2024* so we do not lock new buildings into fossil fuels and start saving New Yorkers on their energy costs.
 - *Commercial buildings must be on the same timeline as other buildings.* Governor Hochul’s proposal does not include commercial buildings until 2028, which is far too slow.
 - *There are no exemptions for manufacturing facilities.*
- **Banning the sale of new fossil fuel heating equipment, starting in 2028** – Governor Hochul included a proposal in her State of the State address to ban the sale of fossil fuel heating equipment for smaller buildings starting in 2030, and larger buildings in 2035. Earthjustice supports such a policy, however, it must be coupled with policies and funding initiatives, such as the GAP Fund, to assist poor and working class households and upgrades to New York’s grid.
- **Gas System Transition** – the Final Scoping Plan recommends strategic downsizing of the gas system. *The NY HEAT Act (formerly known as the Gas Transition and Affordable*

[Studies/Greenhouse-Gas-Inventory](#); N.Y. Climate Action Council, Draft Scoping Plan ("DSP"), 24 (2021), <https://climate.ny.gov/-/media/Project/Climate/Files/Draft-Scoping-Plan.pdf>

¹⁶ Jeanmarie Evely, “Gas Stoves Contribute to Nearly 19% of NY’s Child Asthma Cases, Analysis Estimates,” *City Limits*, January 7, 2023, <https://citylimits.org/2023/01/07/gas-stoves-contribute-to-nearly-19-of-nys-child-asthma-cases-analysis-estimates/>

¹⁷ Talor Gruenwald, Stephen Mushegan, “New York Emits More Building Air Pollution Than Any Other State,” RMI, May 18, 2021, <https://rmi.org/new-york-emits-more-building-air-pollution-than-any-other-state/>

Energy Act) (S8198/A9329 of 2022), by aligning public service law with the mandates of the CLCPA, is an essential component for this planning process, while protecting costs for consumers.

Include the All-Electric Building Act in the Final Budget

The All-Electric Building Act is essential for New York to meet the CLCPA mandates. The bill aligns with New York City’s Local Law 154 of 2021 and follows the spirit of the CAC’s recommendations in the Final Scoping Plan. Additionally, global scientists and energy experts recommend rapid action – the International Energy Agency (IEA) has recommended that no fossil fuel boilers are sold after 2025.¹⁸

New York’s leadership on this issue is necessary – New York emits more building air pollution than any other state in the country. Not only does All-Electric Building Act align with what leading scientists are telling governments to do, it’s also extremely popular in New York, with September 2022 polling finding that 66% of likely voters in New York support the policy.¹⁹

Additionally, analyses have found that building all-electric would lead to energy cost savings for consumers. As the prices of gas and fuel oil have continued to rise, New Yorkers would save more with an all-electric home. According to Win Climate:

- “The average new single-family home built in New York State would save approximately \$904 per year, if built with a cold-climate Air Source Heat Pump (ccASHP) instead of a furnace or boiler.
- Savings would be higher if builders opted for Ground Source Heat Pumps (GSHP) instead, at an average yearly savings of \$1,165 per home across the state. In 2018, Ground Source Heat Pumps were installed more often in new construction than cold-climate Air Source Heat Pumps, according to NYSERDA.
- Single family homes in every Climate Zone across New York State would enjoy cost savings, on average. This includes both the warmest and coldest parts of the state.”²⁰

New York City recently adopted Local Law 154 of 2021, which bans gas in new buildings 6 stories and under starting in 2024, and 7 stories and larger starting in 2027. RMI recently analyzed the greenhouse gas reduction benefits of New York City’s law, and the impact New York State would have by adopting a similar law, and found that it “would save an additional 4 million metric tons of CO₂ by 2040 beyond the reductions already expected from NYC — the equivalent of keeping 870,000 cars off the road for one year.”²¹

¹⁸ Saleha Riaz, “Global ban on gas boilers proposed from 2025,” Yahoo News, May 18, 2021 <https://money.yahoo.com/global-ban-on-gas-boilers-proposed-from-2025-100204844.html>

¹⁹ Sabrina Jacobs and Kevin Hanley, “Voters Support New York’s Proposal to End Fossil Fuels in New Construction,” January 9, 2023, <https://www.dataforprogress.org/blog/2023/1/9/voters-support-new-yorks-proposal-to-end-fossil-fuels-in-new-construction>

²⁰ Max Shron, Amit Kooner, Juan-Pablo Velez, “The impact of the All-Electric Building Act on the cost of heating new homes in New York State,” October 2022, https://drive.google.com/file/d/14cm1hLk4DIY_vK8gyOwTcRIA1aa3kUT/view

²¹ Yu Ann Tan, Talor Gruenwald, Amar Shah, “New York Set to Pioneer a Move to New All-Electric Buildings,” RMI, March 15, 2022, <https://rmi.org/new-york-set-to-pioneer-a-move-to-new-all-electric-buildings/>



Not only would the All-Electric Buildings Act help improve energy efficiency and protect public health, but it would also save New Yorkers money on energy and create jobs. The Legislature should not hesitate to include this legislation in the budget.

All-Electric New Construction is Already Happening in New York and Around the World

New York City joined over fifty municipalities in California and elsewhere in adopting policy to ban gas in new construction. New York City's Local Law 154 bans gas in new buildings 6 stories and under starting in 2024, and 7 stories and larger starting in 2027.

Constructing all-electric buildings starting in 2024 is entirely feasible and necessary to ensure that New York meets its climate mandates and halts expansion of fossil fuel infrastructure and dependence as soon as possible. It is time for New York to adopt this policy.

Additionally, *all-electric buildings are already being constructed in New York*, including in Upstate. [Over 130 buildings](#) have already been constructed or are in the process of being constructed as all-electric in regions across the state. Some examples include:

- **Zero Place, a mixed-use, 4-story, carbon-free building** in late development in **New Paltz**, 64,000 square feet including 46 apartments and retail.
- **Autumn Gardens, a 72-unit public housing development** at 788 E. High St. in the **City of Lockport** transitioned to geothermal heating in 2015.
- **Horsefeathers, a 30,000 square foot 24-unit building** with restaurant on ground floor in **Buffalo** transitioned to geothermal.
- **Tompkins Financial Corporation Headquarters, 7-story commercial building** in **Ithaca** is all-electric relying on air source heat pumps.
- **City Centre, over 200,000 square feet of apartments, commercial and retail space** completely reliant on air source heat pump at 301 East State St in **Ithaca**.
- **100 Flatbush Ave, a 44-story mixed use tower** in downtown **Brooklyn** with 441 residential units and 30,000 square feet of retail.

Banning gas for new construction starting in 2024 is easily doable and a win for climate, air quality, and jobs.

Myth vs. Fact: Technology and the Grid is Ready for All-Electric Buildings in NY

Unfortunately, opponents to the All-Electric Buildings Act have engaged in a misinformation campaign regarding what this legislation does, and the feasibility of adopting such a policy now. To address common arguments:

- **Can all-electric buildings be done in cold climates? YES.** Households living in cold climates need geothermal or a good quality, cold-climate air-source heat pump specifically designed for harsh winters. Air-source heat pump technologies have

advanced significantly, with leading products now performing well below 10 degrees Fahrenheit. This technology has even been tested as far north as the Arctic Circle.²²

- **Can New York’s grid handle all-electric new construction? YES.** New York’s electricity grid currently experiences peak use during the summer and has excess capacity during the winter. Heat pumps primarily use the most energy in the winter. According to the Long Island Power Authority, adding heat pumps to the grid will help bring down the per kilowatt cost of electricity because they level out electricity use, which improves grid utilization.²³ Additionally, the grid has a surplus of 10,000 MW in annual capacity, and new buildings are only anticipated to need 80-100 MW of new capacity annually.²⁴
- **Is it more expensive to build all-electric? NO.** A report recently released by Win Climate found that, across the state, all-electric new construction would lead to a decline in energy costs – a minimum of \$900 each year.²⁵ Additionally, an analysis from RMI found new all-electric single-family homes are in many cases cost-competitive, or cheaper, to construct than new fossil fuel-based homes.²⁶ Heat pumps also provide inexpensive air conditioning, which adds to their cost-effectiveness.
- **What happens if there is a power outage?** All modern heating systems, whether gas, propane, oil, kerosene, coal, or wood pellets rely on electric power to operate (wood stoves are the only exception). Some very old and inefficient fossil-fueled furnaces can work without electricity, but that is not the case for modern gas furnaces. The All-Electric Building Act would not prohibit the use of fossil fuels for emergency backup or for any use for which an all-electric solution is found to be technically infeasible.

Include the NY HEAT Act in the SFY2023-24 Budget

New York State needs to urgently update how it regulates gas utility service and bring the statewide gas distribution system into alignment with the CLCPA.

Currently, the gas utilities obligation to serve is a major obstacle and prevents utilities from developing neighborhood scale building decarbonization projects. Another barrier to the decarbonization of buildings is the statutorily mandated utility system extension allowances which require existing ratepayers to subsidize gas infrastructure hookups for new customers. This subsidy incentivizes both gas system expansion and gas appliance installation. Removing natural gas line subsidies further tilts economics in favor of all-electric buildings. This bill will end costly ratepayer-subsidized natural gas expansion while ensuring the equitable provision of electric service and efficient heating, cooling, cooking, and hot water services.

²² Michael Gartman, Amar Shah, “Heat Pumps: A Practical Solution for Cold Climates,” RMI, December 10, 2020, <https://rmi.org/heat-pumps-a-practical-solution-for-cold-climates/>

²³ LIPA, “Building Decarbonization on Long Island,” <https://www.flipsnack.com/lipower/lipa-building-decarbonization-fact-sheet/full-view.html>

²⁴ Gold Book page 4 and NYISO Reliability Study page 19 , based on summer peak 2022. <https://www.nyiso.com/documents/20142/2226333/2022-Gold-Book-Final-Public.pdf/cd2fb218-fd1e-8428-7f19-df3e0cf4df3e> and <https://www.nyiso.com/-/how-the-installed-reserve-margin-supports-reliability-in-new-york>

²⁵ Max Shron, Amit Kooner, Juan-Pablo Velez, “The impact of the All-Electric Building Act on the cost of heating new homes in New York State,” October 2022, https://drive.google.com/file/d/14cm1hLk4DIIY_vK8gyOwTcRIAlaa3kUT/view

²⁶ Claire McKenna, Amar Shah, Leah Louis-Prescott, “All-Electric New Homes: A Win for the Climate and the Economy,” October 15, 2020, <https://rmi.org/all-electric-new-homes-a-win-for-the-climate-and-the-economy/>



The NY HEAT Act will ensure that state regulation and oversight of gas utilities provides for the equitable achievement of the climate justice and emission reduction mandates set forth in the CLCPA. This bill provides the Public Service Commission with the authority and direction to align gas utility regulation and gas system planning with the CLCPA's mandate and requires the Commission to take a proactive role.

Bringing about an equitable transition off gas will require intentional planning and dedicated assistance to some disadvantaged communities. This bill orders a managed transition which will avoid burdening any subset of energy consumers with the spiraling costs of natural gas infrastructure. Under this new bill, in order to right size the current distribution system, utilities will be prevented from expanding its gas distribution infrastructure with the goal of expanding the availability of service to new customers.

Reject False Solutions: RNG and Hydrogen

Earthjustice urges the legislature to reject strategies built around combustion of alternative fuels such as RNG and hydrogen. Production and use of these fuels result in significant GHG emissions and other environmental impacts.²⁷ For example, hydrogen combustion creates significant emissions of nitrogen oxides (NOx), a precursor to both ground-level ozone and fine particulate matter.²⁸ These pollutants adversely impact local air quality and can cause serious health problems, and disproportionately affect communities of color.²⁹ In fact, combusting hydrogen may produce NOx emissions at six times the rate of combusting methane.³⁰

Additionally, a growing body of research indicates that blending hydrogen with natural gas for use in buildings is highly inefficient and does little to reduce GHG emissions.³¹ Moreover, because of the difference in chemical properties between hydrogen and methane, *it is not feasible to use the existing natural gas infrastructure to combust hydrogen in buildings.*³² Natural gas pipelines can only handle low hydrogen blends before creating safety risks. Relying heavily on hydrogen to power appliances would therefore require utilities to retrofit or replace most pipelines, a huge capital investment, whereas electrification is significantly less disruptive because equipment and appliance replacements can occur incrementally using existing electrical infrastructure.

²⁷ Sasan Saadat & Sara Gersen, Earthjustice, Reclaiming Hydrogen for a Renewable Future: Distinguishing Oil & Gas Industry Spin from Zero-Emission Solutions 10–11, 28 (Aug. 2021),

https://earthjustice.org/sites/default/files/files/hydrogen_earthjustice.pdf

²⁸ See, e.g., Jeffrey Goldmeer et al., Gen. Elec., Hydrogen as a Fuel for Gas Turbines 5 (2021),

https://www.ge.com/content/dam/gepower-new/global/en_US/downloads/gas-new-site/future-of-energy/hydrogen-fuel-for-gas-turbines-gea34979.pdf

²⁹ See N.Y. State Dep't of Health, New York's State Health Improvement Plan: Prevention Agenda 2019-2024 72–3 (updated Sept. 2, 2021), https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/docs/ship/nys_pa.pdf

³⁰ Lew Milford et al., Clean Energy Group, Hydrogen Hype in the Air (Dec. 14, 2020), <https://www.cleaneenergy.org/hydrogen-hype-in-the-air/>

³¹ Sara Baldwin et al., Energy Innovation Policy & Tech., Assessing the Viability of Hydrogen Proposals: Considerations for State Utility Regulators and Policymakers 2 (2022), <https://energyinnovation.org/wp-content/uploads/2022/04/Assessing-the-Viability-of-Hydrogen-Proposals.pdf>

³² Id.

Additionally, less than one percent of hydrogen is produced via electrolysis and only about 0.02 percent qualifies as green hydrogen (meaning that it is produced from electrolysis powered purely by renewable electricity).³³ Green hydrogen production is currently limited to demonstration projects, with projects “mostly in the single-digit MW scale.” Instead, nearly all hydrogen within the United States is gray hydrogen, produced via steam methane reformation (“SMR”) of fossil gas, an energy-intensive process emitting both GHGs and harmful co-pollutants including NOx, fine particulate matter, carbon monoxide, and volatile organic compounds. And because electrolysis is so energy-intensive, hydrogen produced using grid-average electricity is even more carbon-intensive than hydrogen produced via SMR. Producing hydrogen is also water-intensive, and at a large scale could lead to water stress.

Production and use of other non-fossil fuels such as RNG also results in harmful environmental impacts and can increase net GHGs. Indeed, because RNG is chemically identical to fossil gas, its combustion emits the same level of GHGs.³⁴ Additionally, RNG cannot provide a meaningful source of energy: the supply of true, capturable waste methane (e.g., from uncontrolled landfills and wastewater treatment plants) amounts to less than 1% of current gas demand.³⁵

Moreover, any strategy built around continued reliance on the gas pipeline system necessitates massive investments in replacement of leak-prone pipes. Utilities are collectively planning to invest billions of dollars in LPP replacement over the next several decades. These costs are grossly disproportionate to their climate benefits and most of these costs could be avoided through a more surgical, safety-based approach to focusing instead on the most hazardous and environmentally significant leaks. For these reasons, building decarbonization must be pursued through electrification, and reliance on alternative fuels must be rejected.

Vehicle Electrification and Public Transportation

The Scoping Plan made clear that an expedited transition to zero-emission vehicles is necessary to reach CLCPA-mandated emissions reductions in New York. Vehicle electrification – particularly for medium- and heavy-duty vehicles – has added clean air benefits, since diesel emissions from trucks and buses are a major contributor to poor air quality and health impacts like asthma and other chronic respiratory illness.

The state has been adopting critical electric vehicle sales regulations like Advanced Clean Trucks and Advanced Clean Cars II. This year’s budget offers a key opportunity to keep up and accelerate the state’s progress.

The Governor’s proposal continues the trend from past budgets by providing \$20M for electric transit buses and \$17M to electrify the state agency light-duty vehicle fleet, but unfortunately

³³ Saadat & Gersen, *supra* note 2, at 7; Emanuele Taibi et al., Int’l Renewable Energy Agency, Green Hydrogen Cost Reduction: Scaling Up Electrolysers to Meet the 1.5°C Climate Goal 18 (2020), https://irena.org/-/media/Files/IRENA/Agency/Publication/2020/Dec/IRENA_Green_hydrogen_cost_2020.pdf

³⁴ Alternative Fuels Data Center, U.S. Dep’t of Energy, https://afdc.energy.gov/fuels/natural_gas_basics.html#:~:text=RNG%20qualifies%20as%20an%20advanced,liquefie d%20for%20use%20in%20vehicles (last visited May 31, 2022).

³⁵ Sasan Saadat et al., Earthjustice & Sierra Club, *Rhetoric v Reality: The Myth of “Renewable Natural Gas” for Building Decarbonization 9* (July 2020), https://earthjustice.org/sites/default/files/feature/2020/report-decarb/Report_Building-Decarbonization-2020.pdf



fails to take much needed steps forward. We urge the Governor and Legislature to meaningfully fund these programs and develop new incentive programs, more in line with the \$2.5B recently approved in California for zero-emission vehicle deployment.

The legislature has the opportunity this session to fully fund public transit, reducing our reliance on cars, and to incentivize a faster transition to zero emissions from certain fleets like public transit buses and delivery trucks associated with large-scale e-commerce warehouses.

All of these policies are critical to ensure the state pursues an electrification-first policy for emission reductions across all end uses and in a manner that fully realizes the scope of the CLCPA's equity mandates, while minimizing reliance on combustion fuels and other false solutions.

We are calling for:

- **\$300 million for MTA operations to enable #6minuteforce** for more frequent bus service.
- **Green Transit, Green Jobs (A3090-A and S3535-C)**, which will achieve a zero-emissions transit bus fleet by phasing out purchases of new fossil fuel transit buses starting in 2029.

Pass Green Transit, Green Jobs

The Green Transit, Green Jobs bill (A3090-A and S3535-C) will achieve a zero-emissions transit bus fleet by phasing out purchases of new fossil fuel transit buses starting in 2029. The bill prioritizes a just transition for workers, providing protections to existing transit employees subject to a collective bargaining agreement while spurring the creation of high-quality, green jobs. It is necessary to spur a faster transition to zero-emissions buses, which will improve air quality, especially in disadvantaged communities, and create good, family-sustaining jobs. Passing Green Transit, Green Jobs this session will implement the Final Scoping Plan's recommendation to "transition to zero-emission public transportation fleets"³⁶ and drive investment in a vehicle segment that's primed for electrification now – and one that has a substantial local supply chain.

Electrifying transit buses helps eliminate one of the most harmful sources of local air pollution. A Harvard study from 2021 found that health damages from transit emissions cost New Yorkers \$21 billion in 2016, and pollutants from buses in the New York City area had the highest health impacts of all vehicle types.

Transit agencies are not moving quickly enough to adopt zero-emissions buses. Despite the availability of clean alternatives and the suitability of transit buses for electrification, almost all the state's 8,500+ transit buses burn fossil fuels such as diesel or fracked gas, spewing toxic pollutants into neighborhoods while exacerbating the climate crisis. Transit agencies will have to

³⁶ FSP at 163.

switch to zero-emissions buses eventually under the CLCPA, and the Green Transit, Green Jobs legislation ensures it will be done on an expedited but reasonable timeline.

Electric buses are already cost-competitive with fossil fuel buses. Purchase prices for electric buses are expected to be the same as or even less than for fossil fuel buses, and even now an investment in electric buses yield substantial cost savings over the lifetime of the buses. And federal legislation has boosted funding available to overcome purchase price premiums. Investing in ZEBs makes economic sense today and will not be burdensome for transit agencies in 2029 when the bill’s mandate begins.

Investing in zero emissions buses can create good jobs. The bill ensures investments in electric buses will be done in a way that protects workers and will create good, family-sustaining jobs, by using the U.S. Employment Plan, a “best-value” contracting framework to guide procurements of zero emissions buses and related infrastructure. Procurements using the U.S. Employment Plan have a proven track record of creating hundreds of high-quality jobs.

Pass Legislation to Implement an Indirect Source Rule for Warehouses

The e-commerce sector has experienced exponential growth in the last decade, with consumer demand for online goods surging by over 33% between 2019 and 2020 alone. The influx of demand coupled with online retailers’ same- or next-day delivery guarantees has accelerated the buildout of logistical “last-mile” warehouses, many sited disproportionately within or surrounding lower income communities and communities of color in New York State. The expansion of e-commerce freight delivery is one of the reasons that freight trucks’ total VMT is projected to increase by 54% by 2050 – threatening to stall progress on CLCPA emission reduction mandates, even with newly adopted truck electrification rules.

Massive e-commerce warehouse facilities and the high number of trucks associated with their operations are currently unregulated. To address the problem of increased diesel truck emissions from e-commerce warehouses, and the disparate health impacts in communities where these warehouses are clustered, the legislature should pass A.3090 of 2022 to require an “Indirect Source Rule” which will drive electrification and emission reductions at e-commerce mega-warehouses. Currently, emissions from these facilities are generally not regulated, which threatens to exacerbate the already pronounced inequity in the distribution of transportation emissions as goods movement activity increases. It is clear that targeted policies for warehouses (and other freight hubs) are needed to prioritize clean energy investments and emission reductions in communities most burdened by the status quo freight and goods movement system.

The bill would close the regulatory gap for these facilities, requiring warehouse operators to take measures to reduce air emissions. Key provisions include:

- **An air emissions reduction and mitigation plan** requiring warehouse operators to demonstrate emission reductions efforts by: acquiring zero-emission vehicles & charging infrastructure; installing solar panels on-site; using alternative transportation modes for incoming or outgoing trips; or paying additional fees



- **Enhanced protections** for warehouses operating in disadvantaged communities or that impact schools and similar facilities
- **A permit requirement** for new warehouse developments or those proposing significant modifications
- **Ongoing reporting requirements** related to truck traffic and emissions mitigation measures
- **A zero-emission zones study** on the feasibility, benefits, and costs of implementing low- and zero-emissions designated areas for air pollution and congestion hotspots within New York State

Support Direct, Targeted Emission Reductions Instead of a Low-Carbon Fuel Standard

We are concerned that the Clean Transportation Standard, as proposed in the Scoping Plan and advanced in A964/S1292, is not the right tool to raise revenue or incentivize zero emissions transportation in New York, for three reasons. First, the Clean Transportation Standard is likely to incentivize the use of “low-carbon” alternative fuels and artificially encourage investments that would lock-in combustion infrastructure, even in cases where electrification is viable today. This will result in a slower transition to a zero-emissions transportation sector, and continued tailpipe emissions, particularly of harmful co-pollutants. In other states, similar policies have been found to prop up alternative fuel projects with dubious climate benefits.

Second, the Clean Transportation Standard would create a private market for investment in “clean transportation” not subject to oversight by New Yorkers, public agencies or the legislature. Moreover, investments under the Clean Transportation Standard would not be subject to the CLCPA’s requirement that a minimum of 35% of funds be invested in disadvantaged communities, thus undermining the state’s equity mandates.

Finally, as New York looks to implement an economy-wide cap and invest program that would, as we advocated above, center equity and create a public fund to invest in the transition to a zero-emissions economy, a Clean Transportation Standard would be duplicative and unnecessary. It could also divert agency resources away from other programs that would more directly achieve emissions reductions.

Rather than supporting a Clean Transportation Standard, or any low-carbon fuel standard derivative, the legislature should support and scale-up existing programs to deploy zero-emission vehicles and supporting infrastructure, like NYSERDA’s Truck Voucher Incentive Program and Charge Ready NY.

Transit Authorities Need Robust Funding to Increase Service and Expand Access

The Final Scoping Plan is unambiguous in its recommendation to improve and expand New York State’s public transportation systems. It calls for “historic investments in expanded public transportation and micro-mobility” and “significant increases in the availability of public transportation services” by 2030, and a “large-scale investment in expanded public transportation

and complementary modes of transportation” in advance of the midcentury emission limits.³⁷ Reducing vehicle miles traveled – for discretionary personal trips and as part of a more efficient freight network – must go hand-in-hand with electrification.

We urge the legislature to take immediate action by adding \$300M in funding for the Metropolitan Transportation Authority’s operation budget to achieve 6-minute service across its bus and subway system. More frequent service is needed to ensure New Yorkers continue to rely on public transportation rather than private vehicles for their mobility needs. The legislature should consider additional measures to evaluate funding needs for non-MTA transit systems to enable a doubling of service accessibility and availability, in line with recommendations provided by the Transportation Advisory Panel.³⁸

Rapid Deployment of Charging Infrastructure is Needed Across the State

The Final Scoping Plan notes that New York State “must quickly increase the number of EV charging stations” to support the uptick in ZEV adoption expected by the end of this decade. This is consistent with a study by the National Academies of Sciences, Engineering, and Medicine, which concluded that EV charging infrastructure will have to become “ubiquitous” by the end of this decade to keep deep decarbonization targets on track.³⁹

While specific projections vary, in quantitative terms that means New York State will need up to 45,000+ non-home chargers by 2025 and as many as 129,000+ by 2030; Buffalo alone will need non-home charging to grow from roughly 600 in 2020 to nearly 11,000 by 2030.⁴⁰ A significant portion of these will have to be fast chargers, and those will have to be sited appropriately to best facilitate the transition to EVs across all vehicle classes. Substantial funding and planning will be needed to catalyze charger deployment, and to fill in the gaps where the private sector is lagging.

The Plan calls specifically for intentional focus on deployment at multi-unit dwellings, on-street charging in urban areas, and along travel corridors in rural areas, as part of the state’s commitment to prioritize disadvantaged communities. These are sensible, essential policies and we encourage the legislature to pass legislation this session, to ensure that infrastructure barriers do not inhibit widespread transportation electrification needed to meet the CLCPA’s emission limits.

We also ask that the legislature focus on these additional policies, which will help spur infrastructure deployment at scale while addressing some of the systematic inequities in EV deployment to date:

- **Significantly increase state funding towards public electric vehicle charging stations,** to increase EV charger density in low-income and environmental justice communities, with a focus on highly polluted freight hubs;

³⁷ FSP at 147-49.

³⁸ Transportation Advisory Panel Recommended Strategies, *attached to* Final Scoping Plan at App’x A (p. A-8).

³⁹ See, e.g., Nat’l Academies of Sciences, Eng’g, and Medicine, *Accelerating Decarbonization of the U.S. Energy System* (2021), <https://www.nap.edu/read/25932/chapter/1>.

⁴⁰ Int’l Council on Clean Transp., *Charging Up America: Assessing the Growing Need for U.S. Charging Infrastructure through 2030* (2021), <https://theicct.org/wp-content/uploads/2021/12/charging-up-america-jul2021.pdf>



- **Adopt legislation similar to California’s AB 2127**, to ensure the rollout of EV charging infrastructure is carefully coordinated and sufficient to meet EV deployment targets;
- **Redirect transportation funds away from highway expansion and towards EV charging infrastructure and public transit**, to the maximum extent practicable;
- **Use EV charging investments to bring expanded mobility options to transportation disadvantaged New Yorkers** and facilitate a shift from personal to shared mobility;
- **Pair EV charging with storage, distributed energy resources, and smart charging** to reduce system costs and minimize grid impacts.

Prevent Lead Poisoning

The Governor has opened an important starting point to address lead poisoning in her executive budget proposal with new funding, but the funding levels and corresponding policy must reflect the scope of the issue. With New York having the highest levels for reported cases of childhood lead poisoning, this will need to be strengthened and supplemented with additional policies.

Lead is a potent neurotoxic chemical that has no known safe level of human exposure. Children are especially vulnerable to harm when exposed early in life, including in utero. There is a scientific consensus on the devastating harm that lead causes to children, especially in neurological development. Neurological harm from lead is known to be irreversible. Lead can also cause grave harm to the hematologic, gastrointestinal, cardiovascular and renal systems in children and adults. Lead is also a likely carcinogen, adding to the effect of other carcinogens in a child’s environment.

On top of all of these harms, there is an association between higher childhood blood lead levels and violent or anti-social behaviors resulting in entry into the criminal justice system later in life. The Centers for Disease Control & Prevention (CDC), FDA, and EPA have recognized that there is *no* safe level of human exposure to lead.

New York’s childhood lead poisoning crisis is a serious failure in environmental justice. Children in communities of color and low-income communities shoulder a disproportionate health burden from lead hazards—both in amount and frequency of exposure—and are also more likely to suffer adverse educational and social impacts due to the effects of lead poisoning.

Lead is not just a concern for children. In fact, a 2018 study, which followed adults aged 20 and older from 1988-1994 through 2011, found that “low-level environmental lead exposure is an important, but largely overlooked, risk factor for cardiovascular disease mortality in the USA.”⁴¹

Lead poisoning is a major public health crisis that impacts millions of New Yorkers. Between 2011 and 2015, nearly 100,000 children in the state were newly identified with blood lead levels at five micrograms per deciliter, the Center for Disease Control and Prevention’s (CDC) “blood

⁴¹ Prof Bruce P Lanphear, MD, “Low-level lead exposure and mortality in US adults: a population-based cohort study,” *The Lancet Public Health*, Volume 3, Issue 4, April 1, 2018, [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(18\)30025-2/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(18)30025-2/fulltext)

lead level of concern.” New York is home to three of the top five cities with the highest rates of childhood lead poisoning in the country: Syracuse, Buffalo, and Poughkeepsie.⁴²

There are several pathways of exposure to lead including:

- **Homes built prior to 1978 that contain lead paint.** Exposure occurs when the paint peels and cracks, which causes lead dust. Children can be poisoned when they swallow or breathe in lead dust, or consume chips of lead paint.
- **Water pipes.** This route of exposure has often been overlooked, but can be significant. *Formula-fed infants can receive most of their lead exposure from drinking water used in the formula.* New York has at least 360,000 lead service lines. Additionally, many homes may still have lead plumbing fixtures.

Unfortunately, the federal government has long dropped the ball when it comes to preventing lead exposure, so there is a lot of catch-up for the federal, state, and local governments to do.

The lead crisis is particularly acute in New York. Relative to other states, New York has both the greatest number (3.4 million) and the highest percentage (40.9%) of its housing stock built before 1950 – making New York housing particularly likely to contain deteriorating lead paint.⁴³ Parts of the state are at even higher risk of childhood lead poisoning. For example, in Buffalo, approximately 90% of the housing stock was built before lead paint was banned in 1978.

From 2014 to 2016, New York State recorded 6,348 cases of elevated blood lead levels of 10 µg/dL or higher in children under 6 years old. To put that into context, 10 µg/dL level is very high - in fact, it is two times higher what NYS now considers to be an elevated level. This means that during that same timeframe, far more children had blood lead levels New York would now consider unsafe.

To ensure New York has a strong set of policies and funding to prevent lead poisoning, Earthjustice calls for the following in the budget:

- **Address childhood lead poisoning outside of NYC:** Governor Hochul has included a proposal to address lead paint in homes, modeled to some degree off of the program in Rochester. We feel this proposal should be strengthened and coupled with increased funding.
- **S.88 and S.2353 to address lead in housing:** These bills, respectively, require sellers or lessors of pre-1978 housing to disclose to buyers or renters any knowledge of lead-based paint in residences and to close a loophole exempting insurance companies from covering the costs of lead-exposure related expenses.

⁴² Leland F. McClure, PhD, Justin K. Niles, MA, and Harvey W. Kaufman, MD, “Blood Lead Levels in Young Children: US, 2009-2015,” *The Journal of Pediatrics*, 2016, <https://www.jpeds.com/action/showPdf?pii=S0022-3476%2816%2930206-2>

⁴³ U.S. Census Bureau, 2016 American Community Survey 1-Year Estimates, B25034: Year Structure Built, https://factfinder.census.gov/rest/dnldController/deliver?_ts=523447588517 (data accessed Sept. 14, 2017) (numbers derived by adding the data from the “Built 1940 to 1949” and “Built 1939 or Earlier” columns and dividing the sum by the third column, which represents the total number of housing units).



- Increase funding for the NYS Children’s Environmental Health Centers (NYSCHECK) from \$4 million to \$5 million.
- \$50 million to support the existing and additional counties within the Childhood Lead Poisoning Primary Prevention Program responsible for NY’s children with elevated blood lead levels.

Agriculture

The contributions of the agriculture sector to greenhouse gas (“GHG”) emissions are often overlooked in the discussion on climate change, yet there are numerous policies and tools New York could adopt to transform this sector to help mitigate catastrophic climate change. Unfortunately, the Governor’s proposed budget does not offer the kind of funding or policies we need to address emissions from the agricultural sector.

Food systems contribute approximately one third of global and U.S. greenhouse gas emissions,⁴⁴ and agriculture is the largest contributor of non-CO₂ greenhouse gases.⁴⁵ Even if all other emissions sources immediately stopped, emissions from the global food system would still raise temperatures by more than 1.5°C above pre-industrial levels (the target limit for warming under the Paris Agreement) within 30 to 45 years, and might exceed a 2°C increase within 90 years.⁴⁶

The State Department of Environmental Conservation (“DEC”) indicates that agriculture is responsible for 6% of total state GHG emissions, and that 92% of those emissions come from livestock.⁴⁷ Unlike other sectors in New York where emissions have already decreased, livestock management emissions have increased 44% since 1990.⁴⁸ And unlike the energy sector, whose contributions to climate change are largely in the form of carbon dioxide, agricultural emissions include methane, nitrous oxide, and carbon dioxide. Over 20 years, methane has a global warming potential about 84 times greater than carbon dioxide, and nitrous oxide has a global warming potential about 264 times greater than carbon dioxide.⁴⁹

⁴⁴ Crippa, M. et al. (2021). Food systems are responsible for a third of global anthropogenic GHG emissions. *Nat Food* 2, 198–209. <https://doi.org/10.1038/s43016-021-00225-9>

⁴⁵ United States Environmental Protection Agency, U.S. State-level Non-CO₂ Greenhouse Gas Mitigation Potential: 2025-2050: Agriculture Overview, Last visited January 18, 2023 <https://cfpub.epa.gov/ghgdata/nonco2/usreports/#page6>

⁴⁶ Clark, M. A. et al. (2020). Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets. *Science* 370(6517), 705-708. <https://doi.org/10.1126/science.aba7357>

⁴⁷ N.Y. Dep’t of Env’t Conservation (“DEC”), Agriculture Forestry, and Other Land Use: 2022 NYS Greenhouse Gas Emissions Report, at 2, https://www.dec.ny.gov/docs/administration_pdf/ghgafolu22.pdf

⁴⁸ Id.

⁴⁹ Intergovernmental Panel on Climate Change Working Groups I, II and III, Climate Change 2014: Synthesis Report 87 box 3.2 tbl.1 (2014), https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf

Food systems emit greenhouse gases at all stages of food production:

- Fertilizers and pesticides are made from fossil fuels in an energy-intensive manufacturing process.⁵⁰
- Deforestation, destruction of grasslands, and other land clearing releases tremendous amounts of carbon stored in soils and plants.
- Excess fertilizer applied to crops releases nitrous oxide, a greenhouse gas with 300 times the warming power of carbon dioxide over 100 years.⁵¹ On average, producers apply about twice as much fertilizer as the crops can use.
- Cows—both beef cattle and dairy cows—release “enteric” methane with every breath. Methane is about 25 times more potent than carbon dioxide over 100 years. Manure from cows, swine, and poultry also releases methane and nitrous oxide.
- A small number of large facilities are responsible for the majority of methane emissions. Mitigating emissions from the most concentrated facilities would make a large impact on total emissions.
- Food processing is energy intensive and releases carbon dioxide. New York has over 2,600 food processing facilities.⁵²
- About one third of the food produced is wasted. Most of that ends in landfills where it rots and releases methane. This is the largest source of methane emissions in New York State.⁵³ About 40% of this waste comes from the retail/restaurant stage and about 40% from our homes.

Earthjustice was pleased to see the Final Scoping Plan included key strategies to reduce emissions from the food production and food waste systems, including expanded incentives and assistance for farmers to adopt soil health practices on cropland and reduce manure methane emissions and tax incentives for private forest landowners to manage their land for conservation and carbon sequestration. We also support the Climate Action Council’s recommendation for limits on the use of biogas.

However, the Final Scoping Plan’s strategies for reducing emissions from the State’s agricultural sector are—in contrast to the CLCPA itself—fairly modest in scope and imagination. We are disappointed that key strategies were left out of the Final Scoping Plan, including establishing methane emissions limits on the largest livestock facilities; phasing in fertilizer fees to help fund farmers transitioning to climate-friendly practices; banning winter manure spreading; strategies to reduce herd size, and setting statewide goals for the adoption of climate-friendly practices. Without these key strategies, the Final Scoping Plan is far less effective in reducing emissions

⁵⁰ EPA (2022). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020. U.S. Environmental Protection Agency, EPA 430-R-22-003. <https://www.epa.gov/system/files/documents/2022-04/us-ghg-inventory-2022-chapter-5-agriculture.pdf>; Center for International Environmental Law. (2022). Fossils, Fertilizers, and False Solutions. www.ciel.org/wp-content/uploads/2022/10/Fossils-Fertilizers-and-False-Solutions.pdf

⁵¹ IPCC. (2007). *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. [Solomon, S. et al. (eds.)]. Cambridge University Press. Cambridge, United Kingdom. 996 pp.

⁵² USDA. (2021). Food and beverage manufacturing. US Dept of Agriculture. www.ers.usda.gov/topics/food-markets-prices/processing-marketing/manufacturing/

⁵³ Find the final scoping plan at: <https://climate.ny.gov/resources/scoping-plan/>



from our food production system, and the state cannot achieve its climate goals without greater participation by the agriculture and food sectors.

The legislature should consider policies that fill the gaps left in the Final Scoping Plan, identified above, along with the following pieces of legislation that tackle ways to reduce the climate impact of food:

- **Good Food New York (S.7534/A.8580 of 2022)**, which would allow municipalities to prioritize values-based standards for food procurement;
- **Greenhouse Gas Emissions Standards for Food Purchasing (S740/A6241 of 2022)**;
- **Healthy Food Service Guidelines (S4644C/A5682C of 2022)**, which directs the Department of Health to develop standards for healthier foods and beverages in all state facilities and state-supported programs;
- **Food Donation and Food Scraps Bill (S9562 of 2022)**, which expands the State's food donation and food scraps recycling program; and,
- **Community Gardens Bill (S629)**, which directs the community gardens task force to determine whether New York community gardens located on public land qualify for designation as Critical Environmental Areas (CEAs).

Pass Good Food New York

Currently, New York State food procurement laws require that local governments and institutions choose the lowest responsible bidder without considering other criteria. These laws, which have not been updated for over fifty years, are among the most restrictive in the nation and do not take into account the many externalities associated with food production and distribution.

The Good Food New York bill (S.7534/A.8580 of 2022) would permit local governments to adopt values-based standards for food procurement based on the national Good Food Purchasing Program (GFPP). These standards include benefits to local economies, environmental sustainability, valued workforce, animal welfare, nutrition, and racial equity. The law would allow local governments to select bids that fulfill one or more of these values provided their cost is no more than 10% greater than the cost of the lowest bid for that project.

This new model will push large contractors to improve their practices and move toward more ethical, clean, and climate-friendly production and supply practices. It will also expand access to opportunities for small and historically marginalized farmers, producers, and suppliers, who may not be able to achieve competitive pricing under the current procurement model. The bill allows New York municipalities to use their tremendous buying power to support safe, healthy, and sustainable food production and influence the market not just regionally, but nationwide.

Earthjustice supports this bill for both its climate benefits, as well as its consideration of the effects of food contracts on local economies, workers, public health, and animals. We envision a holistic food system, of which environmental sustainability is just one component. The Good Food New York bill will enable municipalities to invest in local business and promote practices

that work for people, animals, and the planet. By implementing the Good Food New York bill, New York can help create a food system that nourishes our communities, celebrates our work force, treats animals with compassion, and protects the planet.

Pass Greenhouse Gas Emissions Standards for Food Purchasing

The Greenhouse Gas Emissions Standards bill (S740/A6241 of 2022) would require that, in consultation with the Department of Environmental Conservation (“DEC”), the Office of General Services (“OGS”) establish a methodology for state agencies to estimate the greenhouse gas emissions that occur through the life cycle of all food and beverages purchased by said agency. The bill also requires that the OGS establish best practices for sustainable food procurement, and that state agencies give preference to food and beverage procurement practices that achieve the goal of reducing greenhouse gas emissions.

This system builds off the GFPP, with a focus on our food system’s greenhouse gas contributions. The first requirement of the bill will help regulators understand the current impacts of the State’s food systems and inform policies to mitigate those impacts. The second requirement, like the Good Food New York bill, leverages the government’s buying power to push markets to adopt climate-friendly practices.

In addition to helping New York reach its emissions reduction targets, prioritizing sustainability in food and beverage procurement practices will benefit the health of New Yorkers. A Tulane University study found that climate-friendly diets are generally also healthier than emissions-intensive diets.⁵⁴ Foods and beverages with lower greenhouse gas footprints also tend to cost less, and shifting procurement practices should save state agencies a significant amount of money. Earthjustice supports this bill as an important step toward achieving emissions reductions and building a more sustainable food system.

Pass Healthy Food Service Guidelines

The Healthy Food Service Guidelines (S4644C/A5682C of 2022) for New York Act would direct the Department of Health to develop standards for healthier foods and beverages in all state facilities and state-supported programs. The bill mandates that food standards be consistent with the most recent federal Dietary Guidelines for Americans, prohibits the offering of sugar-sweetened beverages, and encourages the purchase of plant-based whole foods.

One of the most effective and low-cost ways a state can promote the consumption of healthy foods is through meals provided by state agencies, facilities, and programs. Millions of employees, visitors, students, people in state custody, and recipients of state services rely on state-provided meals, but New York does not have a comprehensive policy ensuring the healthfulness of the food and beverages it procures. New York City provided a model for the state in 2008, when it became the first major city in the country to set nutrition standards for

⁵⁴ Rose, D. et al. (2019). Carbon footprint of self-selected US diets: nutritional, demographic, and behavioral correlates. The American Journal of Clinical Nutrition 109(3),526-534. doi: 10.1093/ajcn/nqy327



foods purchased or served by the city—as a result, city agencies decreased their use of added sugars, saturated fats, and sodium, and took an important step toward improving public health.

The bill’s promotion of plant-based foods will, in addition to improving public health, help build a more environmentally sustainable food supply chain. The meat and dairy industries’ enormous carbon footprints are a major hindrance to achieving the CLCPA’s emissions reductions goals. By helping to shift New Yorkers’ diets toward lower climate impact, plant-based foods, this bill encourages healthy eating habits and reduces reliance on carbon-intensive food products. Earthjustice supports this bill in hopes that it will support public health and climate-friendly food practices across the State.

Pass the Food Donation and Food Scraps Bill

Each step of food production—growth, harvesting, processing and packaging, transportation, and storage—releases greenhouse gases into the air. Yet an alarming proportion of that food is thrown out, resulting in a wasteful and unnecessarily large carbon footprint. These food scraps, often perfectly edible, end up in landfills where they decompose and release even more greenhouse gases in the form of methane emissions. Meanwhile, millions of New Yorkers face food insecurity and inadequate access to healthy foods.

This legislation (S9562 of 2022) would expand the State’s food donation and food scraps recycling program by gradually scaling down the annual average tonnage of food scrap generators that are required to join the program, and by removing exceptions regarding recycler capacity. This will increase the number of participants in the program, in turn increasing the amount of food waste the state can redirect to New Yorkers in need. The bill builds upon the 2020 Excess Food Act, which streamlined the donation process from food suppliers to food banks.

Pass the Community Gardens Bill

The Community Gardens bill (S629) would amend the agriculture and markets laws to direct the community gardens task force to determine whether New York community gardens located on public land qualify for designation as Critical Environmental Areas (CEAs) under state law. The bill builds on S3152A/A735, which required the Commissioner of Agriculture and Markets to convene a task force to assess the state of and promote the expansion of New York’s community gardens.

Community gardens provide numerous important benefits for communities and the environment, among them: alleviation of food insecurity, access to fresh produce, space for community organizing, local air pollution mitigation, wildlife habitat, heat reduction, and carbon sequestration. Despite the many gifts that these spaces offer, they have very few legal protections, and real estate development currently threatens numerous gardens. This bill would help increase protections for these important areas by facilitating their designation as CEAs under the State Environmental Quality Review Act. This designation would trigger additional procedural steps for any projects that may threaten a designated garden, and require decision

makers to evaluate the impacts of such a project. This evaluation process would also provide an important opportunity for gardeners and nearby residents to participate in development decisions in their communities. Earthjustice supports this bill and the climate, health, and community benefits it would bring to New York.

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Thank you for the opportunity to testify today. Earthjustice looks forward to working with the legislature to ensure New York's final SFY2022-23 budget rises to the challenge New Yorkers face from the climate crisis and other environmental harms.