Testimony of the Green Education and Legal Fund on the draft Climate Plan of the NYS Climate Advisory Council February 14, 2022 – Albany, NY

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On April 4, 2022, the Intergovernmental Panel on Climate Change once again issued a warning to the governments of the world that the window to prevent climate collapse was rapidly closing. The actions taken by governments since the Paris accords six years ago to halt the burning of fossil fuels and to transition to 100% clean renewable energy have been grossly inadequate to keep global warming below the tipping point 1.5 degrees Celsius. This includes the goals outlined in the Climate Leadership and Community Protection Act. GELF helped write legislation with far stronger climate actions – the Off Fossil Fuels Act, 100% Renewables by 2030 – that was unfortunately not adopted.

To avoid climate collapse, the most important step is to quickly halt the burning of fossil fuels, which includes natural gas and related methane emissions. The IPCC said it was still technically possible, and even economically viable, for nations to curb carbon pollution on the scale that's required. However, it "cannot be achieved through incremental change."

U.N. Secretary-General António Guterres berated leaders of the industrial pollution nations such as the United States for putting the profits and campaign donations of fossil fuel companies ahead of the needs for continued life on our planet. Such leaders "are choking our planet, based on their vested interests and historic investments in fossil fuels." The IPCC report serves as a "file of shame," he said, "cataloging empty pledges that put us firmly on track towards an unlivable world."

Some have sought to defend the weaknesses and shortcomings of the document we are testifying today on by pointing out that it is limited by the framework of the CLCPA, not only with its inadequate goals but by its call for a scoping document, more of an academic white paper, rather than a real climate plan that outlines the detailed steps, benchmarks, timelines and funding needed to ensure that New Yorkers avoid climate chaos. New York will not survive such a limited role for the Climate Action Council and its draft plan.

The Council needs to craft a true climate plan that can help save life on the planet. It needs to at least match the climate goals adopted by the Biden administration. President Biden for instance recently issued an Executive Order to move the nation to 100% renewable energy for electricity by 2035, five years faster than the CLCPA. He has also established a goal of reducing greenhouse gas emissions by 50 to 52% by 2030, rather than the 40% goal in the CLCPA.

One of the great weaknesses of the draft Climate Plan is that if fails to detail how much funds will be needed to be raised for the climate transition. That plan should recommend some form of a carbon tax (not cap and trade like the anemic RGGI program) as part of the revenue stream. Economists have embraced a carbon tax as perhaps the most effective way¹ to speed up the transition to renewable energy by ensuring that companies that burn fossil fuels have to reflect the actual costs in the price of their products. When the International Money Fund says that the world's government provide an annual subsidy of more than \$5 trillion² to fossil fuels they

¹ https://www.washingtonpost.com/business/2019/01/17/this-is-not-controversial-bipartisan-group-economists-calls-carbon-tax/

² https://www.imf.org/en/Topics/climate-change/energy-subsidies

primarily mean that they fail to require such companies to pay for the massive damages caused by their operation.

GELF helped draft back in 2015 a state carbon tax bill (A77 / S3336). It is also supportive of the polluter penalty CCIA bill (A6967 / s4264). A significant portion of any carbon fee should be rebated to low and moderate income consumers. (more information below).

A paper by NYSERDA presented to the Council estimated that the overall transition costs by 2050 would approach \$3 trillion, with an estimated \$15 billion needed annually by 2030 and \$45 billion annually through 2050. Those numbers need to be both verified and far clearer than the outline provided so far. In addition, the paper assumed that 90% of the transition costs would be able to be obtained by transferring the existing funds already invested annually in the energy system. That is a huge assumption which has not been verified. The only other time I have seen such as estimate the figure was 75%,

GELF has previously submitted commits to the various advisory working groups to the Council. Unfortunately, most of our comments, as well as those by many other climate groups, were not incorporated into the draft plan.

The Plan needs to incorporate a swift halt to greenhouse gas emissions, starting with a ban on new fossil fuel infrastructures and use, and a timeline for each existing fossil fuel facility (including power plants) in the state to be rapidly phased out.

Both the IPCC and the climate encyclical by Pope Francis recognized that capitalism is a root cause of the climate crisis. The idea that we can prevent climate collapse by tinkering with 'the market" is preposterous. We need to embrace a political and economic system that puts the needs of the 99% ahead of the profits and wealth of the 1%. At a minimum, we need public ownership of the energy system and democratic control of the overall economy. (see section below on public ownership)

New York needs to recognize that we are in a climate emergency. After Pearl Harbor, former New York governor Franklin Roosevelt as President seized control of the national economy, requiring that the nation's resources be dedicated to meeting the nation's needs. We need similar action now.

Perhaps the most noteworthy part of the CLCPA was establishing a goal of providing 35% of the "new" climate funding to benefit disadvantaged communities. So far that has been a hollow promise. The Council recently determined that at least 50% of the state's residents meet the definition of being disadvantaged. The Plan should recommend that the goal be increased to at least 70% of new funding going to disadvantaged communities. I also urge the council to rescind its decision to exclude funding for large projects from the equation of how much funds should go to such communities.

Probably the strongest section of the draft plan is its goal for reducing emissions from buildings. It is disappointing that the Council failed to publicly weigh in during the recent budget negotiations in support of the effort to ban gas in new buildings starting in 2024. It was also disappointing that the Council failed to speak up for the need for significant annual funding for climate action in the state budget, such as the proposal by the Renewable Heat Now campaign for at least \$1 billion a year to assist low and moderate income families to decarbonize their buildings (GELF would support at least \$5 billion annually). (see more on buildings below)

The Council should also look at how to reduce the demand for electricity and energy. Our present overconsumption of resources and excessive energy use is not sustainable.

Twenty years after Governor Pataki established some modest goals to expand the percentage of electricity provided by renewable energy, the state still only gets 5% of its electricity from wind and solar capacity. The recent changes in Article 10 permitting are welcome, but insufficient to move at the scale and speed urgently needed. New York State needs to rapidly change direction. New York State should not ignore the supply side in setting in place a plan to exceed the CLCPA's targets.

The climate plan should include a binding schedule that sets yearly closures of facilities starting in 2022 and which concludes with conversion of the entire electrical grid to 100% renewable energy by 2035 at the latest Such a binding schedule should act in concert with a vastly accelerated deployment of renewable energy, grid modernization and energy efficiency, including unleashing the New York Power Authority's capacity to help achieve this rapid growth. In these comments, we focus on utility-scale generation.

The Climate Action Plan should support efforts to use geothermal as a way to power the State Capitol complex in Albany, finally ending more than a century of pollution in the low-income Sheridan Avenue neighborhood to heat and cool those buildings. While the legislature directed NYPA to halt the addition of new fracked gas turbines for the project, they still plan to operate six gas boilers and install diesel emergency generators. Sheridan Hollow should be selected as a model of how the state will ensure environmental justice in the transition to a clean energy future. Legislation to transition the Capitol Complex to 100% renewable energy in 3 years has been introduced. (S8221 / A9341).

GELF Endorses the Principles outlined by NY Renews for the Climate Plan

Environmental Justice, Public Health, and a Just Transition Must Come First

The Climate Plan should prioritize the health and welfare of low-income communities and communities of color at the frontlines of the climate crisis. When it comes to creating the inclusive green economy of New York's future, the plan must include strong public health guidelines and labor standards including prevailing wage, benefits, and local hire; funding for workforce development; and more.

No False Solutions

New York's Final Scoping Plan must not contain false solutions to the climate crisis like biofuels, "renewable" natural gas, biomass, waste incineration, and so-called "green" hydrogen. It must focus on renewable zero-emission technologies that have been proven to work, like solar and wind technologies. (see more below)

Fund the CLCPA

New York must establish a dedicated funding mechanism—by legislation if necessary—to ensure reductions of both greenhouse gas and co-pollutant emissions and to begin the state's large-scale transition to an equitable renewable energy economy

New York Needs "Scenario Three" for Clean Air and a Healthy Environment

The Climate Action Council put forth three scenarios for our climate future. Of the three, NY Renews is advocating for scenario three: low-to-no bioenergy and hydrogen combustion and the simultaneous acceleration of electrification of both buildings and transportation to ensure clean air and a healthy environment. In order to reach a zero-emissions power sector by 2040, New York

needs a rapid, large-scale transition away from fossil fuels.

The CLCPA Is Law—Treat It Like One

The Scoping Plan must ensure that the mandates put forth by the Climate Action Council are legally enforceable against industries and include timelines for the reduction of emissions by sector. Provisions for environmental justice and emission reduction mean nothing if they cannot be enforced or if there aren't rules in place for what happens when our climate justice laws are broken.

Public Ownership and Democratic Control of the Energy System

The climate crisis has been driven by the overreliance upon market forces and the drive for maximization of profits within the energy system rather than a focus on the public good. No discussion has taken place in the Council on the benefits of an increased role of public ownership and democratic control of the state's energy system.

GELF continues to support the proposal made several years ago by Governor Cuomo to have NYPA build, own and operate new renewable energy facilities. GELF supports the NY Public Power Renewables Act (A1466 / S64530). Which would enables the New York Power Authority (NYPA) to build affordable renewable energy to meet our climate targets and to retrofit public buildings with weatherization measures, electric heat pumps, and toxic remediation by 2030. This will create between 28,000 and 51,000 jobs, with NYPA requiring prevailing wages on all projects.

NY should also provide funding to local municipalities to build and own renewable energy systems, which would reduce the siting problems. If Solar City has a business plan to put solar on homes for free in exchange for part of the savings in reduced energy costs, state and local governments should implement a similar program.

More than 50 communities in NYS already have public power, offering significantly lower electric rates than the investor-owned utilities. Local public power systems would enable governments to build and/or purchase its own clean, renewable energy sources for electricity, heating, and cooling and the smart grid infrastructure needed to accommodate distributed nature of renewable energy sources. It could oversee the development of community-owned solar and wind, including enabling the participation by low- and moderate-income consumers who often find themselves gentrified out of such initiatives.

Local public power systems could finance the construction of many forms of community energy projects. Rooftop solar and/or small-scale wind shared by a group of households with different solar and wind exposures could be built with the public power system financing the upfront costs and the households paying them off over time out of savings from lower cost renewables,

Democratic community control must go hand and hand with public ownership, starting with the need to democratize NYPA and LIPA.

Enact a State Carbon Tax; Make Polluters Pay

GELF supports a state carbon tax such as the proposal we helped draft (A77/S3336) or the Climate and Community Investment Act (A6967/S4264-A) by NY Renews. A carbon tax must be set high enough to drive down emissions, while providing a significant rebate to low-and-moderate income

New Yorkers to offset the regressive nature of any energy tax. It should invest in speeding up the transition to renewable energy.

New York needs to adequately price carbon to reflect the true economic, health and environmental costs associated with its use. NYS DEC has estimated the "value" of carbon at \$53-421 per ton. The prime purpose for carbon pricing is to make polluters pay for the damages they cause while accelerating the transition to clean energy sources by making fossil fuels reflect their actual costs.

Former Governor Cuomo used the social cost of carbon to justify his \$7.6 billion bailout of three small upstate nuclear plans. This had led the NYS Independent Systems Operator to seek similar handouts for other electric producers.³

The biggest obstacle to clean energy is that the market prices of coal, oil and gas don't include the true costs of carbon pollution. A robust and briskly rising carbon tax will transform energy investment, re-shape consumption, and sharply reduce the carbon emissions that are driving global warming.

A carbon tax is an "upstream" tax on the carbon content of fossil fuels (coal, oil and natural gas) and biofuels. A carbon tax is the most efficient means to instill crucial price signals that spur carbon-reducing investment. A carbon tax can also be used to recapture some of the costs pushed on to taxpayers and consumers from burning fossil fuels,

In New York, it is estimated that allowing the burning of fossil fuels increases health care costs by \$30 billion or more while leading to at least 3,000 annual deaths from air pollution.

It would be better to enact a robust national carbon tax. However, New York should take the lead and enact a state carbon tax. In Canada, British Columbia has successfully implemented a provincial carbon tax. The tax has helped BC reduce its carbon emissions 3.5 times more than the rest of Canada while their economy performed slightly better than the rest of the country.

There is significant interest in the northeast in a regional carbon tax. Northeastern states are continuing to examine the possibility of some form of regional approach to address transportation / gas under the Climate and Transportation Initiative.⁴ Several years ago Gov. Cuomo had publicly raised the possibility of a regional gas tax to support mass transit.

In 2015, GELF helped draft carbon tax legislation (A77 Cahill / Parker). The various options in the bill (e.g., price of carbon, how to invest the proceeds) were selected bill after surveying several hundred climate change activists — we adopted the positions with the most support. The proposed carbon tax would start at \$35 a ton (should be increased in view of DEC carbon value) and then increase in annual increments of \$15 a ton up to \$185 a ton. 60% of the revenues would be rebated to low- and moderate-income consumers.

The remaining forty percent will support the transition to one hundred percent clean energy in the state, to support mass transit to reduce carbon emissions, and to improve climate change adaptation. Such funds shall include payments and subsidies for renewable energy, energy conservation and efficiency measures, improvements in infrastructure, improvements in mass

³ https://www.rtoinsider.com/nyiso-new-york-carbon-pricing-80527/

⁴ http://www.transportationandclimate.org/northeast-and-mid-atlantic-states-seek-public-input-they-move-toward-cleaner-transportation-future

transit capacity, agricultural adaptation measures, protection of low-lying areas including coastlines, and emergency responses to extreme weather events.

We recognize there are differences of opinions as to how to best invest the revenues: offset the regressive nature of any energy tax; do a 100% rebate of the tax to consumers (e.g., 100% fee and dividend); invest in the transition to renewable energy; and to meet other social needs such as job creation. The issue of what revenue options is agreed to is less important than adopting a carbon price high enough to effectively reduce the amount of greenhouse gases emitted.

The Climate and Community Investment Act (CCIA) developed by NY Renews would raise \$15 billion per year from corporate polluters and uses it to create good, green jobs, invest in frontline communities, and build a renewable economy for New York State. One-third of the funds raised will go to community-based organizations in frontline communities for local programs like community-owned solar, making homes, apartments, and schools more energy-efficient, and investing in adaptation infrastructure. Additional funds will be available for current fossil fuel workers and host communities.

Research shows that the CCIA would create and sustain over 150,000 good, green jobs over the first decade. The CCIA includes strong labor provisions, including prevailing wage and apprenticeship requirements. People in frontline communities, formerly incarcerated New Yorkers, women in non-traditional trades, and people coming off of unemployment will be prioritized for jobs building our renewable economy.

New York already has a limited carbon pricing scheme through the Regional Greenhouse Gas Initiative for electrical production. However, the Congressional Research Service⁵ concluded that the pricing was set too low to have any significant impact on reducing carbon emissions. It is presently around \$6 a ton. The emission reductions resulted from invested the proceeds from auctioning the carbon permits into renewable energy.

We are not supportive of the approach by the Transportation and Climate Initiative to introduce a limited carbon pricing to transportation, supporting instead the economy wide approach of a carbon tax. We especially oppose the possibility of expanding RGGI to transportation, giving RGGI's poor track record with electricity production and emission reductions. Cap and trade programs are subject to market manipulation and often shift the pollution burden to poorer communities and nations, which is why they were condemned by Pope Francis.

Oppose Carbon Capture, Renewable Gas, Garbage Incineration and BioEnergy

GELF is a strong opponent of carbon capture and sequestration, a technology that many scientists and prior Gubernatorial administrations have expressed concerns about with respect to its financial and technological feasibility. Food and Water Watch ⁶have outlined the myriad problems with carbon capture. Last year Swedish climate activist Greta Thurnberg in her address to the United Nations chided the IPCC (International Panel on Climate Change) for relying so heavily on

⁵ https://fas.org/sgp/crs/misc/R41836.pdf

⁶ The Case Against Carbon Capture: False Claims and New Pollution | Food & Water Watch (foodandwaterwatch.org) https://www.foodandwaterwatch.org/insight/case-against-carbon-capture-false-claims-and-new-pollution

⁷ https://www.npr.org/2019/09/23/763452863/transcript-greta-thunbergs-speech-at-the-u-n-climate-action-summit

the development of a miracle technology as a way to save future life on the planet. Many view CCS as potentially the largest <u>corporate boondoggle</u>⁸ in history.

GELF opposes other troubling approaches such as <u>biofuels</u>⁹ (not included in the CLCPA), "<u>renewable natural gas</u>¹⁰", and the importation of hydroelectric energy from HydroQuebec. Hydropower that depends on the use of reservoirs has a <u>significant negative climate impact</u>¹¹ due to the methane emissions from such reservoirs. Others point out that the billions of dollars needed to provide for transmission lines for the project would <u>be better invested</u>¹² in the development of local renewable energy sources.

GELF continues to oppose the use of garbage incineration¹³ or utility scale burning of wood¹⁴ such as Vermont does as a way to produce electricity.

Biofuels

Biofuels are primarily liquid fuels used for transportation, derived from a variety of plant matter including grains, grasses, tree fiber, and vegetable oils. Biofuels, especially for transportation, have long been promoted as "carbon neutral" by industry. But the most common biofuels in use or development today are not carbon neutral if accounted for on a life-cycle basis including direct and indirect land-use changes, disruption of carbon recycling, processing and transport emissions, and end-use emissions. Biofuels of different types are net contributors to atmospheric emissions for between 52 and 167 years. In other words, it takes at least 5 decades before biofuel emissions are reabsorbed by regrowing plants and restoring land-uses! This puts biofuels on a collision course with current timeframes for mitigating the climate crisis.

<u>"Renewable" Natural Gas</u>

Biomethane (termed "renewable natural gas,") is biogenic gas captured from the breakdown of waste materials in landfills and livestock operations and processed into nearly pure methane for blending with fossil gas. Biomethane—methane captured from landfills and other waste streams or potentially gasified from waste materials or energy crops—is being proposed as a clean, "decarbonizing" substitute for burning fossil gas for electricity, heating, transportation, and industrial processes. This "renewable natural gas," like fossil gas, is nearly pure methane; if produced and distributed into the existing gas network, it will add to methane leakage and related serious warming effects, as well as local environmental health harms.

The promotion of renewable gas is also arguably—indeed self-identified as— a strategic bid to buffer the fossil gas industry from policy and market changes that threaten its very existence. Further, such an effort raises serious concerns about the expansion of carbon-intensive land-uses to grow feedstocks necessary to "green" the fossil gas system, as existing feedstock capacity is only sufficient to replace between 6 and 13 percent of current gas demand (according to the industry's own analysis).

⁸ https://cleantechnica.com/2019/10/29/carbon-capture-bright-promise-or-senseless-boondoggle/

⁹ https://www.climatecentral.org/news/study-biofuels-worse-for-climate-than-gasoline-20634

¹⁰ https://www.vox.com/energy-and-environment/2020/2/14/21131109/california-natural-gas-renewable-socalgas

¹¹ https://www.ucsusa.org/resources/environmental-impacts-hydroelectric-power#

¹² https://www.theguardian.com/commentisfree/2019/may/20/bill-de-blasio-energy-plan-green

¹³ https://www.no-burn.org/why-incineration-is-a-very-bad-idea-in-the-twenty-first-century/

¹⁴ https://www.nrdc.org/resources/our-forests-arent-fuel

Biomass

Biomass is the raw feedstocks of biofuels, primarily woody matter, which are burned directly for energy instead of being processed into liquid fuels. Biomass energy—particularly involving direct combustion of woody matter—is expanding, causing climate and environmental justice harms. Markets for woody biomass, primarily in Europe for the replacement of coal, are driving deforestation and local pollution in the Southern United States.

Biomass energy is another false solution said to be carbon neutral. In fact, it is acutely disruptive of carbon neutrality, because carbon recycling from the atmosphere by regrowing trees takes decades even as wood-burning for energy is copiously adding emissions today. Further, side by side studies of biomass plants and gas plants, drawing on actual air permit data, find dramatically higher rates of local pollution from biomass.

Waste Incineration

Waste incineration is the incineration of biogenic municipal waste (food, paper, cloth, wood) to reduce waste volume and recover energy for electricity and/or heat. Waste-to-Energy, which recovers energy for electricity and heating by burning municipal solid waste, is considered a renewable energy source in multiple states (not including New York State). Compared to burning coal, local pollutant emissions and GHG emissions from waste incineration are generally higher.

From a GHG perspective, lifecycle analyses counting reduced landfill emissions as a net improvement of incinerator emissions show mixed results. But carbon-neutral analyses of waste incineration that ignore local pollution raise serious environmental justice concerns. For one or more pollutants, seven of New York State's waste incineration facilities are counted among the 12 most polluting such facilities across the United States. New York's waste incineration facilities perform significantly worse on cancer-causing hazardous air pollutants compared to other power plants in the state. In 2018, New York City shipped 12 million tons of its own municipal solid waste to landfills and incinerators in other places, often in or near low-income communities.

Waste incineration is incompatible with climate action. While trash incinerators are considered waste-to-energy facilities, incineration is the most expensive way to produce electricity and the amount of electricity they produce is quite modest, relative to the harms caused by the air pollutants released. Most trash incinerators are located in marginalized communities, where the median income is depressed and the proportion of people of color is often relatively high. Burning waste is an acutely unhealthy, racially inequitable, false solution to waste management problems that require much bolder solutions such as waste reduction and recycling.

"<u>Green" Hydrogen</u>

The concept of green hydrogen is taking hold in clean energy discussions. But often, the potential climate benefits of hydrogen can be far outweighed by potential harms. Targeted, potentially beneficial uses for energy storage and hard-to-electrify niche sectors could be positive. Larger scale substitution of hydrogen for fossil fuels, especially for electricity, buildings, and light-duty vehicles, ring alarm bells. Blending or substituting hydrogen into the fossil gas network reinforces gas combustion and gas infrastructure as part of our economy, while also raising fuel costs and facing multiple technical challenges.

Turning hydrogen into fuel is extremely resource-intensive. More than 95 percent of hydrogen in use today—mostly for industrial heat processes—is produced using fossil fuels, with the perverse

emissions effects of using dirty energy to produce clean energy. At the same time, the prospect of "green" hydrogen—produced by electrolysis of water using renewable electricity—raises a host of other concerns. Diversion of renewable electricity to produce energy instead of power cars and buildings could have perverse effects of grid destabilization and slowing economy-wide decarbonization.

Producing hydrogen is also water-intensive, and severe water stress, already a significant issue in some parts of the country, is another potential harm. Producing 1kg of hydrogen via electrolysis uses 18.04 kg of water, in addition to the water lost in the distillation process, which nearly doubles that amount. Combustion of hydrogen for electricity, heating, and industrial processes also raises serious environmental justice concerns, threatening significant emissions of ozone-forming nitrogen oxides that contribute to respiratory distress.

Transportation

GELF supports a transportation policy that emphasizes the use of mass transit and alternatives to the automobile and truck for transport. We call for major public investment in mass transportation, so that such systems are cheap or free to the public and are safe, accessible, and easily understandable to first-time users. We need ecologically sound forms of transportation that minimize pollution and maximize efficiency.

This section of the draft scoping plan does not adequately address our need to expand and improve public electrified and intercity rail, which would improve transportation coverage and create good, green, unionized jobs in the process. Additionally, the sector fails to put forward policies that would influence economic growth and investments in new transportation technology and infrastructure in order to address deep-rooted systemic racism, poverty, and more.

Meeting the requirements of the new climate law, CLCPA, will require a reduction in vehicle miles traveled: that is, people will have to get out of their cars and onto public transport, bicycles (or other micro-mobility devices) or their own two feet.¹⁵

Massive subsidies to the auto and fossil fuel industries, as well as an unworkable approach by urban planners, maintain the auto's dominance of our cityscapes. The present-day approach of upgrading streets to accommodate increased traffic generates new traffic because access is now easier, and people will now take jobs further from their homes or purchase homes further from their jobs. Some people shift from public transit to private cars due to the trip time in cars being shorter. As patronage for public transit decreases, public transit loses funding, becomes less viable, and service deteriorates thus encouraging even more people to use their cars.

Mass transit needs a lot of money, far more than state lawmakers agreed to in 2019. One committee convened by the Governor and State Lawmakers put the capital costs just for the MTA at \$60 billion. There is also a need to improve and strengthen bus service in the city – and statewide. There is also a need to improve and strengthen bus service in the city – and statewide.

NYC has more than two million cars. Transportation in NYC accounted for 29.7% of the city's greenhouse gas emissions in 2015. Gasoline is by far the largest contributor to transportation GHG emissions, with approximately 80 percent of the total, followed by diesel with approximately 16

¹⁵ https://nyc.streetsblog.org/2019/06/25/to-meet-new-yorks-new-climate-law-well-have-to-break-the-car-culture/

¹⁶ https://www.citylab.com/transportation/2019/01/fix-new-york-city-subway-mta-funding-congestion-pricing/579262/

¹⁷ https://www.timesunion.com/news/article/NYC-s-issues-overshadow-upstate-NY-transit-needs-12532394.php

percent, and electricity (mass transit) with approximately 4 percent.¹⁸ (NYC's overall carbon footprint is the third highest for a city on the planet.¹⁹)

The transportation sector emissions showed by far the greatest growth in New York State, with emissions increasing by nearly 20% from 1990 to 2015. This is due to an increase in the consumption of gasoline and diesel fuels associated with an increase in vehicle miles traveled in New York State."²⁰

As will all climate initiatives, any program to address transportation must be done in a way that centers environmental justice, racial justice, Indigenous rights, and equity. It's also necessary that impacts on women and youth are prioritized. It is critical that disadvantaged and frontline communities receive a minimum of 35% of the funding and are centered in the policy strategies as they are most harmed by the impacts of pollution and climate change.

Expanding, electrifying and improving public transportation must be a top priority, to reduce emissions, improve access especially for disadvantaged communities, and improve public safety per passenger mile, saving many lives and preventing serious injuries even more. Passenger convenience and service frequency are key factors in increasing ridership

All forms of transportation now burning fossil fuels should convert to zero emissions, especially battery electric, as fast as feasible, starting with public fleets: Albany County Executive McCoy just committed to electrify their entire fleet by 2025. The state should fund all public fleets in New York to do likewise.

Financing should be available to cover the FULL front end costs of new and secondhand electric cars, especially for working people struggling to make ends meet, because electric vehicles still have higher purchase prices but lower energy and operating costs.

"Fee-bates" - fees on gas-guzzling vehicles with the money rebated to subsidize purchase of clean energy vehicles as the draft plan suggests would encourage purchasers to afford making sustainable choices.

A new "cash for clunkers" program with the money only available to purchase ZEVs would be a further incentive for vehicle purchasers.

Likewise, large financial incentives to capture refrigerant gasses such as HFCs from cooling systems would prevent release of super-pollutants at the end of product useful life.

The plan should recommend that express bus systems aka Bus Rapid transit, on the model of Curitiba Brazil, be created (all-electric) in all metro areas especially those with insufficient density to support local trains or light rail.

Diesel powered trucks and buses should be removed from over-polluted EJ communities first, rerouted and/or replaced by electric or fuel cell powered heavy vehicles.

¹⁸ https://www.dec.ny.gov/docs/administration_pdf/nycghg.pdf, table 1, p. 14; also p. 24

¹⁹ https://www.weforum.org/agenda/2018/07/these-are-the-cities-with-the-biggest-carbon-footprints/

²⁰ https://www.nyserda.ny.gov/About/Publications/EA-Reports-and-Studies/Energy-Statistics - page S8

Major investments to electrify, expand, and improve intercity rail transportation of both people and freight would reduce emissions, improve access, and create many good jobs, which should be open to unionization.

High-Speed and especially Very High Speed Rail can be a practical alternative to energy-intensive intercity air travel for distances up to a few hundred miles. Saved travel time would be greater for VHSR but investment costs and deployment times would also be greater. New York should make a detailed cost benefit study comparing HSR and VHSR for a line from Buffalo to Montauk with an Albany to Montreal branch, taking into account total life cycle costs and benefits, including external social and environmental costs and benefits, pick one and complete it before 2030.

Workers from disadvantaged communities and/or displaced from fossil-dependent jobs should be in the front of the line for the many jobs that the transition to clean energy would create.

Green Transit Green Jobs

The ElectrifyNY coalition has introduced the <u>Green Transit Green Jobs proposal</u>. One bill requires all new transit bus purchases starting in 2029 to be of zero-emission buses (ZEB). The second would create contracting incentives for public transit agencies to procure these buses from manufacturers that utilize labor from high-need communities within New York State and create good green jobs.

This legislation will help decrease air pollution and protect New Yorkers' health, while also helping to achieve the GHG emissions reduction goals in the CLCPA (which is too slow in its timetable). By transitioning all the buses in New York to zero-emissions electric vehicles, transit agencies would eliminate 900,000 metric tons of CO2 and save approximately \$870 million in health costs.

The value of zero-emission buses in combating climate change is enormous. According to Bloomberg researchers, approximately "270,000 barrels a day of diesel demand will have been displaced by electric buses." Experts estimate that the total greenhouse gas savings of converting all buses at 900,000 metric tons of carbon dioxide equivalent, which is the same as removing over 190,000 passenger vehicles (or 2.2 billion miles driven) from New York's roads for one year.

The "Green Transit" component would task the New York State Department of Transportation with facilitating this conversion. NYSDOT would be explicitly tasked with considering ZEB purchasing in the disbursement of their five-year capital plans and would also help coordinate non-MTA transit agencies on purchasing, installation, and sharing of services.

The timeline included in the bill mirrors a commitment that the MTA has already made to purchase only electric buses starting in 2029. Other transit agencies, including the Capital District Transportation Authority and Rochester-Genesee Regional Transportation Authority, have already launched pilot initiatives or are planning to do so shortly. Governor Andrew Cuomo echoed similar principles in his 2020 State of the State address, calling for five of the largest upstate and suburban transit systems (CDTA, RGRTA, NFTA – Buffalo, Suffolk County, and Westchester County) to also take steps to shift to zero-emission bus fleets.

There are approximately 8,500 transit buses in New York State, most of which (5,800) are controlled by the MTA. There are at least twelve transit systems across New York State that have a minimum of 25 buses, and many more with fewer than that.

Green Transit Green Jobs also means more local, good-paying jobs because it will encourage electric bus manufacturing in New York and will contribute to the growth of a green economy that no longer exacerbates the risk to public health and our climate. There are 8,500 transit buses in operation throughout the state and transitioning all of them to electric vehicles will greatly improve the health, environment, and economy of the entire state and its people.

Decarbonize buildings

New York's commercial and residential buildings are older than the national average, and nearly 48% of households are of low-to-moderate income. New York must phase out fossil fuels and combustion appliances and technologies, support electric construction, and particularly all-electric new construction by 2024 and make residential homes safer for all. With targeted investment in disadvantaged communities for affordable housing, we can ensure that nearly half the residents in our state are less vulnerable to extractive financial practices and unsafe housing conditions.

The current draft scoping plan does not adequately front-load investment and resources for disadvantaged communities, and it fails to put protections for consumers and communities on rate increases, predatory business practices, mistreatment by landlords, and gentrification. New York needs stronger regulations on investor-owned utilities and subsidies to private landlords in order to mitigate rent increases and evictions.

GELF supports a 2024 timeframe for prohibiting fossil fuels in new building construction.

GELF's support the Draft Scoping Plan's recommendations to:

- Align state laws governing utility service with the Climate Act, eliminating the requirement of utilities to supply gas service to anyone who requests it and supporting the transition to equitable, energy-efficient electrification;
- Immediately end State and utility marketing of fossil gas, and ramp up marketing and incentives for air-source and ground-source heat pumps;
- Deny new gas infrastructure permits, which would only increase GHG emissions and create more stranded assets. Additionally, urge the Climate Action Council to include language directing utilities to end expansion of the gas distribution system into new geographic areas.

GELF supports the Scoping Plan's focus on efficient electrification as the appropriate pathway to eliminating emissions from buildings, not false solutions like renewable natural gas (RNG) and hydrogen.

The plan should initiate a managed transition from utility gas to clean heating and cooling in existing buildings to be completed by 2040, with an interim target of 2 million decarbonized buildings by 2030.

We support the Draft Scoping Plan's recommendation to:

- Develop a plan for a managed and equitable transition to clean heating and cooling systems that maintains affordable, safe, and reliable utility service and protects low- and moderate-income households from an undue burden in the transition. Urge the Climate Action Council to include in the Scoping Plan the Gas Transition and Affordability Act (S.8198) to begin this process.

Include target dates for zero-emissions standards when replacing fossil fuel equipment at the end of its useful life, together with a program to affordably weatherize and upgrade buildings.

GELF supports the Scoping Plan's recommendations to:

- By 2030 (2025 a better goal), enact zero-emissions standards for end-of-useful-life replacements of heating and hot water equipment in single-family homes and low-rise residential buildings up to 49 housing units;
- by 2035 (2025 a better goal), extend these zero-emissions standards to large multifamily and commercial buildings, and also include end-of-useful-life replacements for gas appliances (e.g., stoves, dryers) in all buildings.

We urge the Climate Action Council to:

- As soon as possible, launch a major, sustained statewide public education and information campaign to support climate-friendly choices by consumers for building improvements and equipment. Most people are unaware of the benefits of these improvements to their homes and buildings.
- Ensure cost parity with fossil systems before 2025 in upfront costs for electrification, with incentives and financing assistance as necessary.
- Immediately and significantly ramp up easily-accessible incentive programs to encourage households and residential building owners to weatherize and undertake electrical upgrades in preparation for future electrification.
- require an energy audit and basic weatherization and electrical service upgrades as a condition of home sales.

Commit at least \$5 billion annually to support energy efficiency and electrification for Disadvantaged Communities and low- and moderate-income households. Create a revolving loan fund for building decarbonization and the reuse of buildings and building materials, modeled on the Clean Water State Revolving Fund.

Just Transition

The climate plan legislation that GELF helped draft would have guaranteed for five years wages and benefits for existing workers in the fossil fuel and nuclear industries, while given them priority if job retraining and new job openings.

The CAC must establish a Worker and Community Assurance Fund. Right now, this chapter fails to identify a mechanism to provide adequate support for displaced workers in fossil-fuel-dependent industries as well as to communities who rely on such industries, including wage replacement, pension support, and funding for lost tax base funding. In order to ensure a just transition to a renewable energy economy, we must uplift our workers while advancing policies to attract new family-sustaining unionized green jobs to New York. The CAC must come down in strong support of labor standards, including policies to require prevailing wage and benefits, local hire, project labor agreements, community benefits agreements, and protect existing workers' wages. The state should leverage its purchasing and contracting power to prioritize companies and contracts that

support local hires and job access for traditionally excluded groups, creating jobs along the clean energy, clean transport, and low-carbon supply chains.

To support the at least 211,00 new jobs coming to NY, the State must direct funding toward workforce development, apprenticeship, and pre-apprenticeship programs. This could include training for public transit and school bus workers, training for fossil fuel industry employees on clean energy technologies, and more; as well as support for workers to attend existing training. This would help expand our green economy workforce to achieve our CLCPA goals as well as provide a pathway for members of our disadvantaged communities, environmental justice communities, and traditionally excluded workers to join the green workforce.

Waste

As noted earlier, GELF opposes garbage incineration, which continues to be promoted by DEC.

GELF embraces a Zero Waste approach.

The best-documented contributions to greenhouse gas emissions come from the mismanagement of waste from landfills, with 70% of municipal waste generating emissions. In light of this, New York must implement a combination of incentives and legislation, such as an effective and targeted extended polluter responsibility (e.g., proposal from Assemblymember Engelbright), to design new approaches to waste and food scraps rather than sending them off to landfills where they contribute to emissions. Drastically reducing waste will also reduce the level of toxic emissions to which vulnerable communities are exposed.

Current waste management practices contribute to 12% of state-wide emissions, mainly from fugitive methane leaks. This section of the plan promotes problematic strategies that are not consistent with the CLCPA or environmental justice tenets such as capturing and "beneficially" reusing fugitive biogas, creating markets for biogas utilization, and increased utilization of biogas via large scale, industrial anaerobic digestion.

Some wastes do not have any "beneficial use," due to their toxicity. That is the case for sewage sludge ("biosolids"), which continues to be used as a fertilizer/soil amendment and to make compost and biochar. Yet hazardous levels of PFAS "forever chemicals" have been detected whenever sewage sludge is tested. NYS DEC has not yet even tested sewage sludge or sewage sludge-based products. Neither wastewater treatment plants nor sewage sludge fertilizer producers are required to test for PFAS. This is crisis in the making.

The Scoping Plan also recommends that the state operate co-digestion programs at anaerobic digesters with existing capacity for organics deemed difficult to compost, such as post-consumer food scraps, and fats, oils, and grease. We strongly oppose allowing food wastes of any kind to be co-digested with sewage sludge because of its toxicity. Doing so would render a larger volume of materials unsuitable for land application than anaerobically digesting sewage sludge alone.

In the state of Maine, where high PFAS concentrations have been found on farms and farm wells as a result of sewage sludge being land applied as fertilizer and some farmers can no longer produce crops or livestock products for market, the legislature is considering establishing a \$100 million fund to compensate affected farmers.

GELF supports the Waste Reduction, Reuse and Recycling strategy. A per ton surcharge on waste is a tried and true approach to creating a funding stream for waste reduction, reuse, and recycling

infrastructure and programs. These fees should be deposited in a dedicated fund, to be managed by designated state employees, who would be responsible for funding waste reduction, reuse and recycling programs and whose salaries it would fund.

Allowing retail outlets and food service to give single use disposable products to their customers "by request only" is a sound way to reduce the proliferation of unwanted, unneeded plastic stuff. Such a policy is also called "Skip the Stuff." As recommended by the Scoping Plan, all eateries and retail outlets should be required to provide reusable and refillable options (such as for tableware in eateries and in place of disposable bottles for beverages).

We support the phase-out of single-use packaged items. And we strongly support the expansion and update of the 1982 Bottle Bill.

Financial support for local reuse enterprises, repair cafes and businesses, and materials exchanges, as recommended in the Scoping Plan, would be of immense value.

Agriculture

We endorse the comments submitted by the Northeast Organic Farm Association.

the Scoping Plan is currently organized divides food and agriculture into different sections. As a result, damage to the environment from the existing food system is understated and, at the same time, the benefits that a transformed food system can bring are understated as well. When we engage in full cost accounting for the entire food system, it becomes clear that we must move NYS to a much more localized way of producing, distributing and eliminating the wastes from food production and consumption.

In the place of overextended distribution chains, concentrated corporate control, and fossil fuel-derived inputs, we must shift our investments and incentives to smaller-scale, locally controlled farms, processors, and distribution outlets, both urban and rural. We must build a food system grounded in agroecological systems that originated in indigenous cultures coupled with optimal use of the latest social and technological innovations to bring greater health to both the farmers and workers who produce food and the eaters who benefit from food that is local, fresher, and more nutrient-dense because grown in healthier soils.

The plan needs to match expectations for production with management aimed at restoration of the carbon cycle. Restoration of the carbon cycle leads to restoration of hydrologic cycles, which is critical to climate change impact mitigation. To that end, NYS should implement a program of Payments for Ecosystem Services that takes into account the reality that farming that sequesters carbon is a long-term proposition. Land managers using regenerative principles will require a steady guaranteed income. Every farm will experience ebbs and flows in sequestration, but there is not a farm or forest, garden, backyard or park that can't build more soil organic matter. It is the cumulative effect that is exponentially important and why payment should be equitable across the board for all land managers participating in soil health management regardless of acreage. Misnaming regenerative, agroecological farming as "carbon farming" narrows the focus to one element of a very complex set of interconnecting social and environmental systems.

Small diversified and intensively managed farms have the flexibility and resilience to best withstand the shocks and disruptions that are coming our way. According to the United Nations FAO, small farmers (25 acres or less) are still providing 70% of the world's food. Adopting regenerative climate-resilient systems will reverse the trend towards fewer, larger farms that has

put so many NY farms out of business. We ask that small diversified and intensively managed farms be mentioned explicitly throughout the revised Scoping Plan dealing with agriculture.

The Draft Scoping Plan refers repeatedly to Regenerative Agriculture without providing a definition. Since there is still so much that human beings do not know about the soil resource on which we depend, it is important that the definition of Regenerative Agriculture in this Scoping Plan remain aspirational rather than prescriptive.

Definition of Regenerative Agriculture. Regenerative agriculture refers to farming that grows nutrient-dense crops and healthy livestock by increasing biodiversity, building healthier soils, improving water catchment, and enhancing nutrient cycling, with the aim of increasing soil organic matter and microbial life, as well as aboveground biomass, thereby helping to reverse the current global trends of atmospheric accumulation of Green House Gases (GHGs). Regenerative agriculture is grounded in a culture of soil care that prioritizes soil health while simultaneously encompassing high standards for animal welfare and worker fairness in order to create farming systems that work in harmony with nature to improve the quality of life for every creature involved.

Some specific recommendations;

Invest in organic farms

Invest in certified organic and agroecological farms that build soil carbon, increase resilience to extreme weather, and reduce erosion, run-off, and nitrous oxide emissions.

- Convert 25% of NY farmland to organic by 2030.
- Establish a comprehensive soil health program that nurtures a <u>culture of soil care</u> among farmers, their neighbors, and their customers with sustained support from public policy.
- Require agriculture and forestry projects that receive public funding to use soil health practices as defined in Agriculture and Markets law (<u>Agriculture & Markets (AGM) Chapter 69</u>, Article 11-B, § 151-l).
- Set statewide soil health goals to track progress, increase accountability, and ensure the permanence of soil-sequestered carbon.
- Discourage the use of synthetic nitrogen fertilizers.²¹
- Include out-of-state production of synthetic nitrogen fertilizers in the greenhouse gas inventory of NY farms.

Address inequities and barriers to success in farming

Address inequities in our farming and food systems, including systemic racism, to build a "stronger, more resilient, and more equitable agricultural community in New York State."²²

• Include programs and targeted funding to enable access to land, capital, and farming resources for underserved groups including BIPOC, women, LGBTQIA+, low income, veteran, beginning farmers, and undocumented farmworkers.

²¹ The prohibition of synthetic fertilizers in organic production reduces a significant agricultural source of nitrous oxide as well as energy use. According to the EPA, Nitrous oxide emissions from soils comprise 50.4% of all domestic agricultural emissions: https://www.epa.qov/qhqemissions/sources-greenhouse-gas-emissions

²² Quote from Commissioner of Agriculture Richard Ball's letter introducing the 2021 Diversity and Racial Equity Working Group Report: https://agriculture.ny.gov/system/files/documents/2021/08/diversityracialequityreport_1.pdf

- Ensure that at least 40% of all funds expended by the state under this plan are invested in underserved communities.
- Ensure that members of all underserved communities are represented and able to participate in the design and implementation of all new initiatives.

Build resilient local economies

We can protect and restore our soil resources, and strengthen urban and rural economies, by providing income to those who regenerate soil while producing food, fiber, building materials, and medicine.

With community involvement, design and implement a Payment for Ecosystems Services (PES) Program that rewards farmers for the many interrelated and essential ecosystem services that their farms provide.

Cease public funding of CAFOs

Cease public investments in technologies, including expensive cover and flare systems and biodigesters that enable the accelerating concentration of livestock farms, known as Concentrated Animal Feeding Operations (CAFOs).²³

- Regulate and hold accountable the small number of very large NY dairies whose manure storage systems produce the majority of agricultural GHG emissions, while also polluting wetlands and waterways.²⁴
- Fund transformative practices that work upstream of manure storage, and prioritize practices that smaller producers can adopt.
- Ensure that Climate Resilient Farming Program funds are directed towards reducing both enteric and manure sources of agricultural methane emissions, and utilize these funds to build climate resiliency rather than entrenching current manure management practices that rely on liquid systems of manure handling and storage.

²³ CAFOs are regulated by the NYS Department of Environmental Conservation: https://www.dec.ny.gov/permits/6285.html

²⁴ In 2017 out of over 4600 dairy farms in New York, only 561 farms had herd sizes over 200 milk cows and only 142 farms had herd sizes over 1000 milk cows. Just 12% of New York dairies account for nearly 70% of New York's dairy cow population and are responsible for the vast majority of associated methane emissions from both enteric fermentation and manure management. (United States Department of Agriculture, National Agricultural Statistics Service. *Census of Agriculture New York.* (2017).

https://www.nass.usda.gov/Publications/AgCensus/2017/Full Report/Volume 1, Chapter 1 State Level/New York/nyv1.pdf At table 17.

Based on EPA emission factors and DEC data on livestock inventory, annual methane emissions from enteric fermentation alone at the five largest individual CAFOs in New York was over 1000 metric tons per year. An additional 20 of the next largest facilities each released over 500 metric tons of methane per year, and 89 facilities released between 250 and 500 metric tons of methane per year.