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**Testimony of the Green Legal and Education Fund Inc.
To the New York State Legislature Joint Budget Hearing on the
2020-21 Executive Budget Proposal on Environmental Conservation
Jan. 27, 2019**

My name is Mark Dunlea and I am chair of the Green Education and Legal Fund (GELF). Thank you for the opportunity to testify on the state budget on environmental and energy issues.

We urge the Governor and the State Legislature to dramatically accelerate and increase NYS' commitment to avoid catastrophic climate change. We continue to call for the state to officially declare a climate emergency, which need to include a **halt to any new fossil fuel infrastructure and an investment of at least \$10 billion in renewable energy and other Green New Deal initiatives**. The state must make surviving climate change the number one priority for all actions at every level of government. Something that the political leadership of the state focuses on every single day.

We agree with the Governor about the urgent need to **accelerate the siting of renewable energy** projects and support his budget proposal that the state (through NYPA and NYSERDA) take the lead in developing shovel-ready sites. However, unlike the Governor, rather than turning the project and profits over to the private sector, thus driving up costs to consumers, we support **public ownership** at both the municipal and state level.

We view the Climate Leadership and Community Protection Act (CLCPA) as a first of several foundation blocks – not a ceiling - upon which the state will build upon. The climate goals laid out in the CLCPA - while among the most ambitious in the US when enacted – are still inadequate to avoid catastrophic climate change. We recognize however that it is unlikely that even the minimal goals set out in this law will be met.

Among the budget issues we wish to address are:

- accelerating the timeline to transition to 100% clean energy / net zero carbon emissions to as soon as possible (e.g., 2030) for all energy (including buildings, transportation and agriculture.) The transition must include a strong commitment to environmental justice and a Just Transition;
- require NYSERDA to release at least a draft of its study on how fast it is possible scientifically to move to 100% clean energy;
- halt any expansion of fossil fuels and related infrastructure in New York State.
- establish a short-term requirement that all new buildings be net zero carbon emissions; that all new electric vehicles be zero emission by 2025; and, provide funding to expand regenerative agriculture;
- fund a \$100 billion capital plan for the MTA and other mass transit, including congestion pricing;
- enact a state carbon tax that include all sources;
- divest the state pension plan from fossil fuels;

- expand the state effort to end the use of single-use plastics, including adopting the Governor's proposal to ban Styrofoam and to expand the bottle bill;
- oppose DEC's efforts to weaken the ban on plastic bags law due to take effect this March; and
- enact single payer health care.

The legislature needs to require the Governor to documenting his assertion that the State will be **investing \$33 billion over the next five years in climate change efforts**. What is the source of such "funding", and where will it be spent? How much is private investment that state expects to attract? The \$33 billion (other than the \$3 billion for bonding for nature projects) appears to be existing commitments rather than new additional investments. Does this figure include the \$7.6 billion subsidy to bail out 3 upstate nuclear facilities?

Over the summer I worked on a climate research project that included trying to document how much New York is spending on renewable energy. After extensive discussions and meetings with the Governor's office, legislative committees, NYSERDA, NYS Comptroller Office, Public Service Commission, and renewable energy industry representatives, no one was able to provide the answer. The most comprehensive "guess" was that in 2018-19, the state invested \$190 million in renewable energy. This investment was dwarfed by the amount that the PSC is requiring utility customers statewide to pay to bail out upstate nuclear plants.

There were many factors for state officials' inability to document state funding in renewables. Most of the funding is off-budget, being done through PSC (Public Service Commission) levies on utility bills, thus reducing state oversight of such funding. Individual agencies, authorities and staff largely monitor their own expenditures on individual programs under their control, rather than having a comprehensive overview of all state actions. There can be a decade or more delay between when a subsidy for a renewable energy project is approved and when that project is actually operational. And programs like the State Clean Energy Fund (whose ten-year funding was actually cut when it was renewed) is divided into broad vague categories such as Market Development and Innovation that even senior state staff had difficulty articulating what was included. There is also confusion about how to report utility expenditures on renewables now that the renewable energy mandate is on individual utilities.

The Climate Crisis Threatens Life on the Planet – And New York is moving way too slow

The United Nations last year announced that we have 12 years left (now 11) for an emergency worldwide mobilization - unprecedented in human history - to halt the use of fossil fuels and eliminate greenhouse gas emissions. They also made clear that we need to try to keep global warming under 1.5 degrees (C), rather than the 2 degrees which has been the target of much of New York's climate policy.

Failure to take such dramatic action increases the likelihood that human civilization as we presently know it will cease to exist. Floods, sea level rise, wildfires, heat waves and droughts will make parts of the planet uninhabitable. Climate refugees will likely be in the hundreds of millions. Support systems involving energy, food and water will break down, leading to wars over such resources. Hundreds of millions, if not billions, could die. The UN warns that civilization as we know it may cease to exist. Scientists now provide analysis over the possibility of the extinction of the human species.

A year after the Intergovernmental Panel on Climate Change (IPCC) warning, the consensus is that climate efforts still fall far short of what is needed. Indeed, global greenhouse emissions increased last year.

Many scientists believe that we have less than 11 years left for action. The IPCC by nature is a conservative body, with its pronouncements needing agreement from countries including the US, Saudi Arabia, Russia and Brazil. Every one of IPCC's previous predictions has underestimated the speed and severity of climate change. It is important to recognize that the IPCC's warning is overly optimistic. The IPCC relies on the development of a miracle technology (carbon capture and sequestration) that has failed to produce results despite the investment of tens of billions of tax dollars in research. Even with such a Hail Mary pass, the IPCC estimates the chance of avoiding catastrophic climate change is only 50%.

One recent Harvard-based study estimated that the deadline may be five years. A number of prominent European climate researchers recently raised the fear that we have already passed the tipping point for runaway climate change, as feedback loops such as the melting of polar ice accelerate.

Civilization is a complex web of social and economic interactions that takes centuries to reach its peak, but once it begins to unravel, collapse can occur swiftly. Prior collapses have often been due to environmental factors. Some scientists contend that in many cases, solutions to the problems existed but they threatened the power and wealth of the ruling elite. The elite chose the status quo.

Scientists increasingly raise the possibility of human extinction. We are in the midst of the sixth mass extinction of species which continues to accelerate. Insects and pollinators are rapidly disappearing. Humans are dependent on other species for many things critical to human survival, such as food Plankton, which produce half of the world's oxygen, are rapidly dying off.

The NY Times Magazine last year devoted its entire Sunday edition to the proposition that life on the planet is doomed since we lacked the political leadership to take action to stand up to the fossil fuel companies.

Pope Francis was correct when in his climate treatise he said we could not solve climate change unless we also solved injustice, since it is the same mentality that allows the wealthy to exploit the poor that drives humanity to exploit the planet. We need to change our political and economic system, our values, to focus on meeting the needs of all not just enrich the wealthy.

\$10 Billion for a Green New Deal in 2020

I first began calling for a NYS Green New Deal back in 2010 when I was the Campaign manager for Howie Hawkins in his Green Party campaign for Governor. Since then, Governor Cuomo, Congresswoman Alexandria Ocasio-Cortez, the democratic candidates for President, and many climate groups have embraced the concept of a Green New Deal.

The Green New Deal will convert the old, gray economy into a new, sustainable economy that is environmentally sound, economically viable and socially responsible. It seeks to solve the climate crisis by combining a WW-II type mobilization to get to net-zero greenhouse gas emissions and 100% renewable energy by 2030 along with an "Economic Bill of Rights" – the right to single-payer healthcare, a guaranteed job at a living wage, affordable housing and free college education. Our transition to 100% clean energy will be based on community, worker and public ownership and

democratic control of our energy system, rather than maximizing profits for energy corporations, banks and hedge funds.

The Campaign for a Green New Deal in NYS is calling for \$10 billion annually through a tax on the rich to cut combat pollution, fund investments in mass transit and housing, and create a publicly-owned power grid solely reliant on renewable energy. The Campaign has four elements: transitioning to 100% renewable as soon as possible, banning all new fossil fuel projects, municipalizing our power supply and taxing the wealthy in order to invest that money back into the community. The proposal would raise revenue by increasing the state personal income tax by 5% on income over \$500,000 per year.

Sen. Sanders last year introduced a NYS Green New Deal (S2878 / S5344) similar to the AOC Congressional proposal (to develop by 2020 a plan for 100% clean energy by 2030).

The Green New Deal largely pays for itself in health care savings from the prevention of fossil fuel-related diseases, including asthma, heart attacks, strokes and cancer. Moving to 100% clean energy means many more jobs, a healthier environment, and far lower electric costs compared to continued reliance upon fossil fuels.

NYSERDA Should Release its Study on Moving to 100% Renewable Energy

When professors from Cornell and Stanford did a study on how much it would cost for the state to transition to 100% renewable energy for all uses by 2030, their estimate was \$460 billion. While most of these funds will be raised by diverting funds away from the existing fossil-fuel dominated energy system, it will still require significant additional funds. So far the Governor and State legislature have not answered how NYS will fund the transition to 100% renewable energy / zero carbon emission.

Three years ago we were able to get the Governor to announce in his State of the State that he had directed NYSERDA within a year to do its own study related to the timeline on how fast the state could move to 100% renewable energy. That study has not been released, partially because the costs for renewables are declining so rapidly. Last year NYSERDA said that instead of releasing the study as planned, it would instead roll it out as part of the update to the State Energy Plan. Now that the state is not going to update the state energy master plan until the 4 year planning process under CLCPA is completed, we once again urge the legislature to have NYSERDA release whatever information it has compiled, including on cost.

Accelerate the Timeline to Achieve 100% Renewable Energy, Zero Carbon Emissions

The strongest part of the CLCPA is the goal to get 70% of the state's electricity from renewable energy by 2030.

The sobering reality is that 17 years after Governor Pataki first announced bold goals to increase renewable energy – and 9 years into the Cuomo era – New York gets a mere 4 to 5% of its electricity from wind, solar and geothermal energy¹. Setting goals is one thing, achieving them is something else.

¹ Net Generation by State by Type of Producer by Energy Source (EIA-906, EIA-920, and EIA-923), <https://www.eia.gov/electricity/data/state/> - lines 46674-46686

California in contrast announced last year that it expects to get 50% of its electricity from renewable energy by 2020 – ten years faster than they planned.²

New York's poor performance to date on renewables hinders job growth and economic development in our state. Still, nationwide, jobs in the renewable electric industry already outstrips those in the fossil fuel industry by 5 to 1.³ In NYS, the US Department of Energy estimates that jobs in clean energy outnumber those in oil, coal and gas by 13 to 1, though most of the jobs are in "energy efficiency," which including 30,000 in HVAC. NYS has about 13,200 jobs in solar and wind and 5,850 in hydro.⁴ California in contrast has 157,000 in solar and wind (mainly in solar).

Halt all new Fossil Fuel Infrastructure

The biggest missing part of the CLCPA is its failure to require an immediate halt to new fossil fuel infrastructure. Putting money into new fossil fuel infrastructure will intensify the pressure to burn fossil fuels during the 30 plus years of the operating life of the investment while diverting needed funds from renewable energy and efficiency.

To achieve the emission reduction goals of the CLCPA, NYS needs to halt the Cricket Valley and Danskammer Fossil Fuel Projects and the Williams Pipeline. NY should also rescind the permit for CPV in Orange County, particularly following the conviction of the Governor's campaign manager and top aide for his involvement with the project.

While New York has halted fracking in New York, we continue to allow the state to be flooded with imported natural gas from neighboring states. methane is 80 times more potent short term as a greenhouse gas compared to carbon. New York must reject natural gas as a cheap bridge fuel to a clean energy future; in reality, it is a gangplank to climate disaster.

Make New York's ban on fracking the strongest ban it can be

In 2015, New York State banned the dangerous practice of fracking. However, this administrative decision could be overturned by a future administration. Banning fracking in statute is a common-sense next step for New York State to affirm its decision and ensure future New Yorkers will always be protected from this dangerous practice.

However, there are some crucial ways the governor's proposed language can be improved. New York's fracking ban should:

- Apply to low-volume drilling by changing the volume of fluid used from 300,000 gallons to 80,000 gallons; and,
- Include other fluids besides water that can be used for fracking, such as propane gel.

Such changes would ensure that New York's fracking ban is the strongest in the country and would solidify New York's role as a climate leader.

Ensure fracking waste is subject to hazardous waste regulations

² California Public Utilities Commission, "Renewables Portfolio Standard," Annual Report, November 2017, http://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Reports_and_White_Papers/Nov%202017%20-%20RPS%20Annual%20Report.pdf – p. 1

³ <https://www.nrdc.org/experts/lara-ettenson/us-clean-energy-jobs-surpass-fossil-fuel-employment>

⁴ https://energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report%20State%20Charts%20202_0.pdf

We agree with the testimony by NYPIRG that the Legislature should pass S.3392 (May)/A.2655 (Englebright), which would close a loophole that exempts oil and gas waste from being considered hazardous waste. Most industries are not exempt from hazardous waste regulations – there is no reason to treat the oil and gas industry any differently.

Despite New York's important ban on high-volume fracking, New York still accepts dangerous oil and gas wastes in its landfills and allows some waste to be used for de-icing or dust suppression on roads. Fracking produces massive quantities of waste, which commonly contains carcinogenic chemicals such as benzene, toluene, and formaldehyde, along with heavy metals and radioactive materials. Additionally, waste from conventional drilling, which still takes place in New York State, often has the same dangerous constituents as fracking waste.

Fracking and drilling waste from states like Pennsylvania is shipped to New York, where it is dumped into landfills. From there, leachate from the landfills can contaminate rivers and streams, some of which serve as sources of drinking water. In fact, since 2010, over 650,000 tons and 23,000 barrels of oil and gas waste has been disposed of in New York landfills from Pennsylvania's drilling operations.

New York's Department of Environmental Conservation (DEC) recently revised the state's solid waste regulations; however, the changes do not, and cannot, ensure that this waste is safe for disposal in solid waste facilities. DEC sought to address concerns raised by banning certain types of oil and gas waste, like flowback fluid and brine from the Marcellus shale region, from landfill disposal. However, without required testing of the waste before disposal, there is no way to ensure this waste still isn't making its way to New York's landfills. In fact, according to reporting from Pennsylvania, prohibited waste types are still coming into the state.

Power the Empire State Complex with 100% Clean Renewable Energy

GELF was pleased that last year the state legislature amended the budget to require that the \$88 million previously appropriated for the Sheridan Ave. complex in Albany to power the state capitol complex use 100% renewable energy to the extent practical, rather than adding two new fracked gas turbines. NYPA has now agreed to scrap the turbines and will obtain electricity from a solar power complex outside of Utica. It also started the process to replace the chillers in the Plaza with ones that use electricity.

However, there are still six gas boilers used to provide the steam to heat and cool the complex.

The 2020-2021 NY State budget should include \$600,000 for a study to convert the Empire State Plaza Complex to renewable energy, with the goal of eliminating steam production in Sheridan Hollow and closing the Sheridan Avenue Steam Plant. The study should emphasize geothermal and building efficiency measures, and involve experts with demonstrated experience in geothermal and thermal load-share technology for large-scale systems.

Require New Buildings to be Net Zero Carbon Emissions

Buildings account for more than a third of the state's carbon footprint. California already requires new residential buildings to be net zero carbon emissions by 2020 (and to incorporate solar); all buildings have to meet such goals by 2030. We support amending state building codes to requires all

new buildings to have net zero greenhouse gas emissions.⁵ We support mandatory building retrofits to invest in cost-effective energy efficiency upgrades.

We support the efforts of the **Renewable Heat Now campaign to accelerate the adoption of ground-source (geothermal) and air-source heat pumps in New York.**⁶ NY should halt the subsidy utilities presently provide for gas hookups and instead increase subsidies for heat pumps and geothermal.

On Oct. 9, 2009, then New York State Governor David Paterson signed the Green Jobs/Green New York (GJGNY) bill into law. Supporters projected that the bill would 'green' one million homes throughout the state, and create 14,000 new jobs. Seven years past its passage, the legislation's results are mixed at best.⁷ Only a few thousand homes were retrofitted, and it's estimated that the program yielded only a thousand or so new jobs—1,069 as of two summer ago, according to state officials. The implementation of this program unfortunately has been impeded by the Cuomo administration, utilities and the financial community. The legislature needs to take action to enable it to achieve its goals.

Increase Funding for Mass Transit – Congestion Pricing – 100% New ZAV Vehicles by 2025

We support the acceleration of efforts to expand mass transit and to move to 100% Zero Emission Vehicles. New York should work with California to adopt goals similar to Norway which requires 100% of all new car sales to be 100% ZAV by 2025. California has committed 10 times the funding that NY has to support the transition to all electric vehicles like charging stations. California already has 6 times as many cars.

Enact ecological and progressive taxes to fund \$100 billion subway fix.

GELF supports a multi-year \$100 billion capital spending plan to fix the MTA, expand it to so-called "transit deserts," and improve commuter trains from the suburbs. The \$100 billion for these capital improvements should be funded by a variety of revenue sources, including congestion pricing, a carbon tax, land value taxation, and increased taxes on the incomes and stock trades of the wealthy.

The Fast Forward modernization plan proposed by transit authority president Andy Byford calls for \$19 billion in capital spending the first five years and \$18 billion more the next five years for a total of \$37 billion. The Regional Plan Association estimated it will take another \$62 billion to extend subway lines to the city's unserved "transit deserts" and make needed improvements to commuter rail service.

The new revenues will also help stabilize the operating budget and enable free or reduced fares, as many cities around the world are now doing. Lower fares will help struggling working-class commuters and serve as an incentive to use public transit and reduce the negative impacts of cars in the city.

The MTA acts too much like an ATM for Wall Street. At 16% of the operating budget, debt service for the capital plan consumes far too much of the operating budget. 52% of the capital budget is finance

⁵ https://newbuildings.org/code_policy/zero-net-energy-policies/; and, https://www.iea.org/publications/freepublications/publication/Building_Codes.pdf

⁶ <http://renewableheatnow.org/>

⁷ <https://www.nvserda.nv.gov/Researchers-and-Policymakers/Green-Jobs-Green-New-York/GJGNY-LMI-Working-Group>, see chart page 7

by bonding. It is better for average taxpayers to tax the rich upfront than to borrow money from them and pay them interest for it.

Congestion pricing, the carbon tax, and land value taxation are ecological taxes on resource-depleting and environmentally-damaging activities that diminish the finite commonwealth of land, air, water, and life-sustaining ecosystems. Eco-taxes are generally progressive because they shift taxation away from incomes and savings earned by labor.

But we need to also increase state income taxes on the wealthy. The share of all income in New York City going to the top 1% has increased from 12% in 1980 to 41% today. Income taxes on high personal incomes, corporations, and stock trades were cut over the same period, while public austerity budgets, including for public transit, have become the norm.

GELF supports the clawback of a portion of the \$10 billion annual windfall to New York corporations from the Trump corporate tax cuts that is not used by companies to raise worker pay or create new jobs. NYS should end the rebate of the Stock Transfer Tax to Wall Street brokers, which has generated between \$6 billion and \$16 billion a year over the last decade.

Energy Democracy, Public Ownership, Just Transition

New York State should promote energy democracy, with community control / ownership of the energy system, ensuring that low and moderate income New Yorkers can participate in our energy future.

To build large renewable energy projects in New York takes 6 to 10 years for the permit process; places like Kansas take less than a year.⁸ [MOU1] We agree with the Governor that the State must devote resources to solving this barrier. One solution is to have municipal power systems develop renewables, as is done widely in other places like Germany. With public power, the proposal is viewed as a common good and tends to have more public acceptance and support.

GELF supported the Governor's Article VII proposals several years ago to allow NYPA to own renewables. We support public ownership of much of the energy system at both the state and local level in order to reduce costs and to ensure that the energy systems meets public needs rather private profits.

We need a Just Transition to ensure that workers and vulnerable communities are assisted. We support increasing the investments in a Just Transition to clean energy.

We need to avoid the gentrification of our energy system, ensuring that low-income individuals and communities can fully participate in our clean energy future. We need to support energy democracy, including the development of community shared renewables, Community Choice Aggregation, and public ownership / worker / community cooperatives.

We support New York allowing Community Choice Aggregation in NY to operate under rules similar to those in California, giving CCAs the power to negotiate directly for the purchase of electricity in order to support the development of local renewable energy sources. GELF is on the steering committee of a CCA being organized in the Capital District.

The state should provide upfront funding to any local government, including schools and other districts, that want to construct a publicly-owned renewable energy system in their community.

⁸ <http://www.cjonline.com/news/local/state-government/2017-05-07/kansas-wind-power-takes-expected-continue-growing>

The state should evaluate the proposal by NYC Congressmember Alexandria Ocasio-Cortez to create Public Banks as a financing mechanism for the transition to renewable energy.

Enact a State Carbon Tax; Include Funding in State Budget for a Study

Make Polluters Pay

The “Jacobson” study a few years ago showed that NY could move to 100% clean energy by 2030 based on existing technology estimated the transition cost at around \$480 billion. While much of this involves redirecting existing funds from the fossil fuel industry to renewable energy, and routine expenditures already budgeted for system and distribution upgrades, it still requires new additional spending of tens of billions of dollars a year.

New York needs to adequately price carbon to reflect the true economic, health and environmental costs associated with its use. New York should enact a carbon (greenhouse gas) tax or fee to accomplish this purpose (this needs to include methane). 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.

The Governor used the social cost of carbon to justify his \$7.6 billion bailout of three small upstate nuclear plants. This had led the NYS Independent Systems Operator to seek similar handouts for other electric producers, a proposal which the Governor has embraced through the Public Service Commission.⁹

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,

The International Monetary Fund estimates that worldwide we provide \$5.3 trillion in annual subsidies to the fossil fuel industry. We need to stop paying to make the world inhabitable for humans. 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, since the present Congressional gridlock on climate change makes this unlikely, 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 /

⁹ <https://www.rtoinsider.com/nyiso-new-york-carbon-pricing-80527/>

gas under the Climate and Transportation Initiative.¹⁰ Several years ago Gov. Cuomo had publicly raised the possibility of a regional gas tax to support mass transit.

GELF helped draft carbon tax legislation¹¹ which has been introduced. We actively support A107(Cahill) / S2846 (Parker). We are also supportive of the polluter pay carbon tax proposal that has been developed by NY Renews, including its proposals for investment in a Just Transition and environmental justice.

In the Cahill / Parker bill, we selected the various options included in the 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 and then increase in annual increments of \$15 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 transit capacity, agricultural adaptation measures, protection of low-lying areas including coastlines, and emergency responses to extreme weather events.

At the base rate of \$35, according to Prof. Sara Hsu of SUNY New Paltz, the revenues would amount to over \$3.5 billion. In Year Two of implementation, with an increase of \$15 per ton, the revenue would be \$6.2 billion, in Year Three, \$7.9 billion, in Year Four, \$9.5 billion, and in Year Five, \$11 billion. At the last point, revenue would amount to \$14.3 billion. It is estimated that the initial carbon price of \$35 a ton would increase the cost of gasoline by 35 cents a gallon. At \$180 a ton, the cost would rise by \$1.58 per gallon.

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 the legislature agrees to is less important than adopting a carbon price high enough to effectively reduce the amount of greenhouse gases emitted.

As an interim step, we urge the legislature to include funding in the state budget for a study of the impact and potential of the various levels and variables for a state carbon tax. Oregon and Massachusetts have conducted such studies. A 1919 / S4598¹²

New York already has a limited carbon pricing scheme through the Regional Greenhouse Gas Initiative for electrical production. However, the Congressional Research Service¹³ 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. The recent effort to reform RGGI regionally to set higher goals fell far short of what advocates were calling for but some highest goals for carbon emission reductions was agreed to. There is the possibility that RGGI may expand to gasoline as other cap-and-trade programs have done. Cap and trade programs however 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.

¹⁰ <http://www.transportationandclimate.org/northeast-and-mid-atlantic-states-seek-public-input-they-move-toward-cleaner-transportation-future>

¹¹ http://assembly.state.ny.us/leg/?default_fld=&leg_video=&bn=A00107&term=&Summary=Y&Text=Y

¹² http://nyassembly.gov/leg/?default_fld=&leg_video=&bn=A01919&term=2017&Summary=Y&Memo=Y&Text=Y

¹³ <https://fas.org/sgp/crs/misc/R41836.pdf>

We continue to monitor the efforts by the NY Independent Systems Operators to develop a carbon pricing proposal for the wholesale electric market based on the Governor's bailout of nuclear. We remained concerned about how the revenues will be invested, including how low and moderate income consumers will be protected against the regressive nature of any energy tax.

End the \$7.6 Billion Tax for Nuclear Subsidies

We urge you to direct the Public Service Commission and other relevant state entities to halt the mandate that consumers provide \$7.6 billion in subsidies to keep old, unsafe, uncompetitive nuclear power plants open in upstate New York. Energy efficiency measures and newer, cleaner, renewable sources of power are more cost-effective, better for human and environmental health and create more jobs.

The Nine Mile Point, FitzPatrick and Ginna nuclear plants -- like the Indian Point power plant you negotiated to shut down by 2021 -- are inefficient and dangerous power sources and should be decommissioned. Most of these plants were built in the Vietnam era. New York's overburdened ratepayers simply should not have to fork over billions of dollars in higher utility bills to subsidize such aging, economically uncompetitive nuclear plants.

Utility reports filed with the state show that more than 800,000 consumers in New York State are already in arrears on their utility bills. Many more New Yorkers currently struggle to pay electric rates that are among the highest in the nation. Increasing the monthly charges for these vulnerable New Yorkers will only make a bad situation worse.

Higher utility bills will also place a strain on businesses, schools, charitable organizations and local governments. New York communities are already straining against the limits of the local property tax cap. We cannot afford to see our municipal energy costs go up even further to bail out an industry that brings no economic development to our communities. We want to keep this money in our own communities to support our own local needs, including our own municipal energy efficiency and clean energy projects.

New York State's proposed multi-billion-dollar subsidy, which is essentially a "ratepayer tax," is also a misallocation of resources that New York should be investing in energy efficiency and cleaner, safer alternative energy sources.

The \$7.6 billion ratepayer-funded subsidy to keep nuclear plants open will save only about 2,000 jobs in one region of the state, and only until the subsidy expires in 2029. A job creation or retention initiative financed statewide by consumers should have a positive impact throughout the state, not only one community.

Unfortunately, the Public Service Commission, which approved the \$7.6 billion ratepayer-funded bailout without any legislative involvement or approval, failed to evaluate alternative proposals for how most effectively to create jobs, help local taxpayers and promote clean energy. Further, in a matter of weeks, the price tag for this bailout soared from \$59 million to \$7.6 billion -- a staggering sum, and far more than the state is investing in renewable energy.

In July of 2017, Amory Lovins, who served as a consultant to the state in its REV process, released an analysis which debunks the notion that highly unprofitable, economically distressed nuclear plants should be further subsidized to meet financial, security, reliability and climate goals. The analysis showed that closing costly-to-run nuclear plants and reinvesting their saved operating costs in energy

efficiency provides cheaper electricity, increases grid reliability and security, reduces more carbon, and preserves (not distorts) market integrity—all without subsidies.¹⁴

End Fossil Fuel Subsidies in the NYS Budget

We support legislation by Sen. Krueger and As. Cahill ((S6881/A8675) to identify and eventually eliminate the \$1.5 billion in fossil fuel tax expenditures in the NYS budget. The legislation would require the Governor to submit an annual analysis of all fossil fuel related tax expenditures, including recommendations regarding continuation, modification or repeal of some of the worst offenses. It also implements a 3-year sunset provision for all current and future fossil fuel related tax expenditures. The state-level measure is the first in the country to specifically target fossil fuel tax subsidies and create a regular public review process.¹⁵

Divest Public Funds from Fossil Fuels (A8011 / S5873)

We urge that language to require the state to divest its pension funds from fossil fuels be included in this year's state budget. The leadership of the NYC pension funds have committed to divestment. Governor Cuomo has called for the state pension to be divested.

The bill was recently amended to reflect the findings of the Decarbonization Panel that was convened by the Governor and State Comptroller, and to respond to concerns raised during last year's Senate hearing on the bill. The Decarbonization Panel recommended the immediate divestment from coal, and that the pension fund be more aggressive in selling off stocks that failed to adequately respond to the climate risk. This legislation would implement such recommendations.

The Fossil Fuel Divestment Act will require the State Comptroller, after due consideration of his or her fiduciary responsibility and the prudent investor standard, to divest the state Common Retirement Fund (the Fund) from major coal, oil, and gas producers. This will protect the fund, as well as its members and retirees, from the growing risk of rapid devaluation these companies present, while also sending a powerful message that it is no longer acceptable to invest in a business model that is driving the climate crisis.

New York must take the lead in fighting global warming, and divestment is a winning strategy. Already, over 1,100 institutions throughout the world with portfolios totaling more than \$11.5 trillion have pledged to divest from the fossil fuel industry. These include New York City, the Village of Cooperstown, Ithaca, Syracuse University, the nation of Ireland, hundreds of universities and health institutions, among others.

It is fiscally irresponsible to invest in fossil fuels. The industry's returns have significantly lag the rest of the market over the last five years. According to a recent report from Corporate Knights, if the NYS Common Retirement Fund had divested from fossil fuels 10 years ago, it would be \$22 billion better off today. That's nearly \$20,000 per fund member. The NYS Fund, with assets of \$210 billion, has approximately \$13 billion invested in fossil fuels.

Going forward, the worldwide transition to renewables and the prospect of massive climate litigation are expected to accelerate the decline of the industry. Reserves kept in the ground will become stranded assets resulting in significant devaluation of fossil fuel stocks.

¹⁴ <https://www.rmi.org/about/news-and-press/press-release-subsidizing-unprofitable-nuclear-plants-not-solution-grid-reliability-security-carbon-emissions/>

¹⁵ <https://www.nysenate.gov/newsroom/press-releases/liz-krueger/senator-krueger-and-assemblymember-cahill-announce-first-nation>

As a state, New York cannot fully commit to the steps necessary to prevent climate change while maintaining a financial interest in companies whose profits depend almost exclusively on the continuation of practices that cause climate change.

It is morally inexcusable to invest in the continued destruction of our environment and damage to our economy caused by climate change. We therefore call on the legislature to immediately pass the Fossil Fuel Divestment Act to protect our communities from climate disaster. Divestment is a financial and moral imperative for the long-term survival of the climate, economy, and communities of the state.

Ban Polystyrene

GELF strongly supports the Governor's proposed ban on polystyrene food containers and loose-fill packaging, known as packing peanuts. We copy here statements from NYPIRG.

This legislation could be strengthened by tightening the enactment timeline from 2022 to 2021 and should also apply to rigid polystyrene, which, like expanded polystyrene, also doesn't have a recycling market.

Polystyrene, more commonly known as Styrofoam, has become ubiquitous alongside, and in, waterways due to its very nature – it is lightweight and it floats. When it is littered, it is easily carried from streets and through storm drains leading to rivers and, ultimately, lakes and oceans.

According to the Ocean Conservancy, during their 2017 coastal cleanup, foam takeout containers were the 10th most frequently found item. During Hudson Riverkeeper's 2018 Sweep, foam pieces were the second most frequently found item, with foam cups and plates, and foam takeout containers also taking 7th and 9th place respectively.

Once in the environment, polystyrene, like other plastics, it lasts for centuries. They break down into smaller and smaller pieces, leading wildlife to mistake polystyrene for food. Additionally, polystyrene cannot be recycled by most municipalities – to recycle polystyrene, it must be sent to a limited number of companies – making it too costly for most municipalities to do so. Additionally, when people place foam containers in recycling bins, the lightweight nature often leads to litter, and the containers add bulk to the bins, making recycling more difficult for municipalities. The easier, and more cost-effective option, is to ban single-use polystyrene containers – as New York City, Albany and Suffolk Counties have done.

Not only is polystyrene wreaking havoc on our public spaces – it's also a threat to public health. Polystyrene threatens public health throughout its entire life cycle. Polystyrene is made using styrene, a known animal carcinogen and possible human carcinogen. Additionally, over 50 byproducts made during the manufacturing process contaminate air and water, leading to ozone depletion, and when polystyrene is incinerated for disposal, it releases styrene gas into the air.

Continue to Ban Plastic Bags

The State Legislature adopted a law last legislative session that banned plastic bags at food stores. The Legislature affirmatively decided that all plastic bags would be banned. However, last month the NY Dept. of Environmental Conservation proposed a new regulation, Part 351, governing the plastic bag ban and remarkably allowed for the free distribution of thicker plastic bags. Namely, plastic bags that are 10 mils or thicker are authorized to be given out for free according to the current DEC draft regulations. The comment period on these draft regulations closes on February 3, 2020. This clearly

was not the legislative intent - banning thin plastic bags and allowing for thicker plastic bags. Members of the legislature should contact the DEC on this important new regulatory loophole.

Expand New York's Bottle Deposit Law

Updating New York's Bottle Bill is a key solution to New York's, and the country's, current recycling challenges. China, which had been accepting massive amounts of plastic waste, stopped accepting plastic waste imports in January 2018.¹⁶ This has caused global shockwaves and significant strains on municipal recycling programs in the U.S. We support the following expansions:

1. Add a deposit fee to most beverage containers, including: wine, liquor, cider, sports drinks, juices, coffee beverages, iced tea, and other non-carbonated beverages. More containers with deposits will incentivize consumers to recycle these containers, making them less likely to be littered or take up rapidly disappearing landfill space.
2. Increase the deposit from 5-cents to 10-cents. States with higher deposit fees have higher redemption rates than states with a five (5¢) cent fee. In Michigan the deposit fee is ten (10¢) cents, and the redemption rate in 2016 was 92.2%. Vermont has a fifteen (15¢) cent fee on liquor bottles and the redemption rate for liquor containers in 2017 was 84%. The data shows that increasing the deposit fee increases the incentive for recycling. A ten (10¢) cent deposit fee would ensure that even more beverage containers get recycled in New York State.
3. Increase the percent requirement for recycled content in new plastic and glass beverage containers. This will strengthen the market for recycled content. The Fahey / Metzger bill wisely requires this for plastic water bottles.

Enacted in 1982, the Bottle Bill, requires a 5-cent refundable deposit to be placed on eligible beverage containers. The program originally covered beer and soda sold in New York and was later expanded to include wine coolers. In 2009, the law was expanded to include bottled water, and the handling fee was increased from 2 cents, which it had been set at since 1997, to 3.5 cents.

Over its 30-year history, New York's Bottle Bill has proven to be a highly effective means of diverting these containers from the waste stream, significantly reducing litter and increasing recycling rates. This program is recognized as New York's most effective litter-reduction measure. In 2017, New York's redemption rate was at 65%.¹⁷ According to DEC, the bottle bill reduces roadside container litter by 70%, and in 2016, 5.1 billion containers were recycled.¹⁸

Expanding the Bottle Bill to include plastic containers is urgently needed to reduce plastic pollution littering New York's waters and beaches. During Riverkeeper's 2018 Hudson River Sweep, plastic beverage bottles were the third largest type of litter found. The 2018 New York State Beach Cleanup, which had cleanup sites from the shores of Lakes Erie and Ontario to the shores off Long Island, found plastic bottles as the 7th largest type of litter cleaned up – 13,072 plastic bottles were collected.

Additionally, states with bottle deposit laws have far better recycling rates than non-deposit states. According to the Container Recycling Institute, states with bottle deposit laws have a beverage container recycling rate of around 60%, while non-deposit states only reach about 24%.

¹⁶ Watson, Sara, "China Has Refused To Recycle The West's Plastics. What Now?," *NPR*, June 28, 2018, <https://www.npr.org/sections/goatsandsoda/2018/06/28/623972937/china-has-refused-to-recycle-the-west-plastics-what-now>.

¹⁷ Container Recycling Institute, Bottle Bills in the USA: New York, <http://www.bottlebill.org/legislation/usa/newyork.htm>.

¹⁸ DEC, New York's Bottle Bill, <http://www.dec.ny.gov/chemical/8500.html>.

Not only would the expansion of the Bottle Bill increase recycling rates and make New York's environment and communities cleaner, it would also help municipal recycling programs that are currently facing a recycling crisis. China, which had been accepting massive amounts of plastic waste, stopped accepting contaminated plastic waste imports in January 2018, creating a standard many municipal recycling programs cannot meet.

Municipal recycling programs are particularly struggling with glass contaminating their recycling streams. When glass breaks in curbside containers it contaminates other materials, making it far more difficult to recycle and sell. The expansion of the Bottle Bill to include wine, spirits, and hard cider would take a significant amount of the containers that municipal recycling programs are struggling with out of curbside recycling containers. Additionally, municipalities would save money from the costs of litter clean-ups and transportation costs associated with recycling.

Other states with bottle deposit programs have already moved forward with the recommended policies above. Maine's Bottle Deposit Law includes all containers covered in New York's existing Bottle Bill, plus wine, spirits, hard cider and most non-carbonated beverages. Maine has a 5-cent deposit for all beverages, except wine and liquor, which have a 15-cent deposit. Maine's redemption rate in 2017 was 84%. Other states with Bottle Deposit Laws that include non-carbonated beverages include: California, Hawaii, and Oregon. Oregon, in 2017, raised its deposit fee from 5-cents to 10-cents, which led to the state reaching a 90% redemption rate.¹⁹

It has been ten years since the bottle bill was last updated. It's time to finish the job.

Farmer Tax Credit for Regenerative Agriculture (A3281)

We support the legislation by Assemblymember Barrett to create a new financial incentive to farmers for land management practices which help improve soil health and reduce greenhouse gas emissions, making New York a leader in promoting new agricultural strategies that combat climate change. The state legislature did include \$50,000 in the state budget to study the issue. California has devoted significantly more resources to support various pilot programs and studies. The IPCC recent report highlighted the importance of regenerative agriculture and other steps to reduce the carbon footprint of our food system.

Climate-smart land management practices improve soil resilience and increase productivity for our state's farmers while simultaneously addressing the state's climate change goals. The aim of a statewide carbon farming initiative is twofold: as a land stewardship program, it would improve soil health and productivity by holding nutrients in place; as a climate-smart initiative it would mitigate carbon's release into the atmosphere as carbon dioxide (CO₂). Carbon dioxide contributes to climate change as a greenhouse gas by trapping heat in the atmosphere.

A tax credit for farmers who practice land management strategies which store, or sequester, carbon in the soil is a new model for combatting climate change. Reductions in net CO₂ emissions can be quantified by existing methods for measuring air pollution, especially the USDA's COMET-Planner software which was developed following the enactment of the 2014 federal Farm Bill. New York would be the first state to offer this type of tax credit, specifically for carbon farming, to all taxpayers who make farm products and not only the largest agricultural businesses.

By using no-till systems, planting cover crops, trees and perennial forages, and managing compost application, farmers can see improvements in water holding capacity, nutrient storage, and reduced

¹⁹ Profita, Cassandra, "Oregon Bottle Deposit System Hits 90 Percent Redemption Rate," OPB, January 18th, 2019, <https://www.opb.org/news/article/oregon-bottle-deposit-redemption-rate-2018/>.

erosion. All of these farming practices have the collateral benefit of sequestering carbon in the soil, thereby reducing its release into the atmosphere as CO₂. The carbon farming program outlined would incentivize farmers who are currently using these strategies to continue them and would encourage others to undertake the prescribed soil health methods now widely accepted as beneficial not only to productivity but for the reduction in greenhouse gases.

In general, more attention needs to be paid to greenhouse gas emissions from agriculture. According to the EPA, Greenhouse gas emissions from agriculture come from livestock such as cows, agricultural soils, and rice production account for about 9% of the country's carbon footprint. Changing weather patterns will also pose significant challenges in growing food crops, including changes in growing seasons, rainfall patterns, and spread of insects.