

## Introduction

I am submitting these comments on the New York's Regional Greenhouse Gas Initiative (RGGI) Operating Plan Amendment ("Amendment") for 2022 document because I think current state policy is relying too much on the RGGI proceeds for Climate Leadership and Community Protection Act (CLCPA) greenhouse gas emissions reduction goals at the expense of the electric generating unit RGGI emission goals. RGGI is an electric sector emissions reduction program and it is inappropriate to use those funds for any program that will increase emissions in that sector.

I have been involved in the RGGI program process since it was first proposed prior to 2008. I follow and write about the [details of the RGGI program](#) because its implementation affects whether I will be able to continue to live in New York. I have extensive experience with air pollution control theory, implementation, and evaluation of results having worked every cap-and-trade program affecting electric generating facilities in New York including the Acid Rain Program, Regional Greenhouse Gas Initiative (RGGI) and several Nitrogen Oxide programs. The opinions expressed in these comments do not reflect the position of any of my previous employers or any other company I have been associated with, these comments are mine alone.

## Background

The draft Amendment explains that New York State invests RGGI proceeds to support comprehensive strategies that best achieve the RGGI greenhouse gas emissions reduction goals pursuant to 21 NYCRR Part 507. The programs in the portfolio of initiatives are designed to support the pursuit of the State's greenhouse gas emissions reduction goals by:

- Deploying commercially available energy efficiency and renewable energy technologies;
- Building the State's capacity for long-term carbon reduction;
- Empowering New York communities to reduce carbon pollution, and transition to cleaner energy;
- Stimulating entrepreneurship and growth of clean energy and carbon abatement companies in New York; and
- Creating innovative financing to increase adoption of clean energy and carbon abatement in the State.

## Environmental Justice

The Operating Plan amendment for 2022 notes that:

RGGI programs have and will continue, alongside other state programs, to contribute to economy-wide greenhouse gas emissions reductions and provide benefits to New York's historically overburdened and underserved communities. NYSERDA's CO2 Allowance Auction Program regulations reflect the provision of the Climate Leadership and Community Protection Act "that 40%, and no less than 35%, of the overall benefits from the investment of the [CO2 Allowance Auctions] proceeds" will be realized in disadvantaged communities.

It is entirely appropriate that there should be an emphasis on environmental justice but I have concerns about the State's approach.

The CLCPA and the draft Amendment emphasize support to disadvantaged communities. Given that all other jurisdictions that have attempted to reduce GHG emissions have increased the cost of energy, it is likely that will be the case in New York too. Therefore, I think there are two priorities to reduce the regressive impact on those who can least afford those increased costs. Overall, the funding emphasis should be on the most cost-effective GHG reduction programs to lower overall costs. The exception to that emphasis are programs that directly reduce costs for anyone, regardless of location, who is living in energy poverty or has a disproportionate energy burden. I worry that the emphasis on disadvantaged communities will hurt energy paupers living outside of dis-advantaged communities, particularly those in rural areas.

## Proposed Programs

In this section my comments on the text are indented and italicized. Because RGGI is an electric sector emissions reduction program I believe the emphasis on proceed investments should be on programs that reduce emissions or energy use. I also think that it is inappropriate to use auction proceeds for any program that will increase emissions.

### Residential PV Plus Storage

The Amendment proposes \$9 million in FY23-25 to provide incentives to new and existing residential solar projects coupled with new energy storage. This program would allocate \$3 million to Long Island and \$6 million targeting the rest of the state. The program is expected to deliver 2,000 - 3,000 residential storage systems over more than two years, totaling around 10 megawatts (MW) of storage. Similar to the current offering on Long Island, the rest of state engagement is anticipated to leverage utilities by region. These storage projects will provide renewable resource integration, peak power support to the utility (e.g., virtual power plants, dynamic load management, other), with resiliency and clean power to homeowners.

*According to these numbers 3,000 residences will get a 3.33 kW energy storage system at \$3,000 per residence. A key point is that these homeowners will only have a resilient wintertime system if their energy storage system can operate during a power outage and covers the electricity needs over the duration of the power outage when solar resources are low during the winter. It would be appropriate that this program size the energy storage systems based on solar availability and likely blackout durations.*

### Community Heat Pump Systems

Heat pump technology has become a proven decarbonization solution, providing buildings with clean thermal energy for space heating, cooling and domestic hot water. Existing heat pump programs to-date have targeted customers on an individual building-by-building basis, but community heat pump systems use a network of pipes to share heating water among a cluster of buildings. The Amendment proposes \$9.7 million in FY23-25 to implement community heat pump systems as part of a statewide program. This program will also provide support for systems in state and local government facilities, as well as Affordable Housing Developments. A community-based program will develop the infrastructure for larger-scale distribution and accelerate the deployment of heat pump systems across the state.

*I believe this is in response to concerns from the Climate Action Council regarding more widespread deployment of ground source heat pumps. It is not clear if this technology will work as envisioned so the only way to find out is try it.*

### LIPA Energy Efficiency and Renewable Energy

These funds enhance the portfolio of clean energy activities for energy consumers on Long Island, as approved by the Long Island Power Authority (LIPA) and administered by PSEG-Long Island. Funding and reporting requirements are established through a Memorandum of Understanding between NYSERDA and LIPA, which ensure that RGGI funds meet the requirements of the RGGI regulations that funds are used to support energy efficiency and clean energy activities, as well as advancing the goal of benefits of investments in disadvantaged communities. For this 3-year budget proposal, this operating plan

amendment proposes to repurpose \$40 million in previously approved funds for energy storage projects on Long Island. LIPA has agreed to procure 200 megawatts of bulk storage or non-wires alternatives storage, allowing funds originally allocated for storage incentives on Long Island to be repurposed to support continuation of funding for LIPA's energy efficiency program. NYSERDA is working with LIPA to maintain the level of market activity designed with the previous RGGI allocations. With this funding re-allocation, as well as additional funds, the Operating Plan is proposed to maintain support for LIPA-implemented energy efficiency and clean energy activity in the amount of \$20 million each year for the calendar years 2022-2024. The LIPA Board of Trustees approves an annual energy efficiency program plan, which details the activities that these funds will support.

*Other than to note that this seems like a lot of money to target to one particular area of the state I have no comment.*

#### **EmPower Plus: Decarbonizing Buildings for Low- and Moderate-Income Households**

To maintain statewide access to fuel neutral, whole buildings energy efficiency opportunities, these funds will maintain support for low-to-moderate-income (LMI) customers of municipal utilities and/or customers using delivered fuel, which cannot be funded through the Clean Energy Fund, to access incentives through EmPower or Assisted Home Performance with ENERGY STAR, comprehensive energy efficiency services programs for income-qualified residents in existing one-to-four family homes. An additional \$8 million in proposed funding over FY22-25 will fund high-efficiency electrification upgrades for low- and moderate- income municipal utility customers using electric resistance heating or delivered fuels.

*I expect that consistent with every other jurisdiction that has tried to implement GHG emission reduction programs that New York energy costs will explode in the coming years. As a result, providing support to those least able to afford regressive energy taxes is appropriate.*

#### **Disadvantaged Communities Schools and Buildings**

The Amendment proposes an additional \$12 million through FY24-25 to fund high-performance energy efficiency and electrification in affordable housing. NYSERDA has partnerships in place with NYS Homes and Community Renewal (HCR), NYC Housing Preservation and Development (HPD) and the New York City Housing Authority (NYCHA) and seeks to continue supporting decarbonization projects with these agencies. In particular, this funding will allow HCR-regulated affordable housing located in non-SBC territories, including municipal electric territory or Long Island, to access building decarbonization grant funding as part of HCR's financing processes and 2) provide training, technical assistance, and strategic planning resources to support NYC HPD's development of a long-term portfolio-wide decarbonization strategy. Additionally, this initiative will support work with public housing authorities, like NYCHA, to decarbonize building with an emphasis on advancing packaged heat pump systems to develop clean heat for all.

*I expect that consistent with every other jurisdiction that has tried to implement GHG emission reduction programs that New York energy costs will explode in the coming years. As a result, providing support to disadvantaged communities that are least able to afford regressive energy increases is appropriate.*

Also, the Clean Green Schools Initiative will provide low-carbon solutions for schools located within disadvantaged communities. The Amendment proposes \$5 million of the \$12 million expansion over the three-year plan to invest in K-12 STEM, workforce activities, hands-on training, and technical training scholarships for students within disadvantaged communities. This program will meaningfully increase the number of students from within DAC schools who are trained on clean energy solutions, have on the job training and internships with companies, have scholarships for additional education including vocational training, and create family-sustaining jobs within the clean energy workforce.

*However noble the intention of this funding, the fact is that it will not directly reduce energy use or GHG emissions so I do not support this aspect.*

#### **ChargeNY**

ChargeNY has been pursuing three strategies to promote plug-in electric vehicle (PEV) adoption by consumers across New York. First, NYSERDA implemented the Drive Clean rebate program for PEVs in March 2017, accelerating purchases of PEVs by reducing higher upfront costs. Second, NYSERDA will continue to invest in marketing and awareness-building activities to build interest in PEVs among the public. A focus on building greater public knowledge and awareness of the capabilities of PEVs is essential to spur more private investment in PEV purchases and PEV charging stations. This work may also include other market development activities, such as policy and business model development studies that support new ways for critical stakeholders, such as utilities, local governments, and car dealers, to get involved in the PEV market. Third, NYSERDA will also support the installation of PEV charging stations at workplaces, municipal lots, and multi-family buildings – location types that have been seen to be effective drivers for PEV adoption based on usage data reported from previous installations. Regions of the State that have seen faster PEV adoption will be identified for additional charging station support, which ensures investments in infrastructure support areas with the greatest potential for additional PEV drivers. This Operating Plan Amendment proposes to provide additional funding of \$35 million from FY22-23 through FY24-25 to support continuation of current and additional ChargeNY strategies to ensure effective engagement with the market to build scale and ensure a focus on a just transition into future years.

*I realize this is not a new program but I want to re-iterate my comment from the last update. Promoting plug-in electric vehicle (PEV) adoption will increase energy use. It is inappropriate to use RGGI funds for this purpose.*

#### **Natural Carbon Solutions**

Achieving a net-zero carbon economy will require reducing emissions across all sectors. The agriculture and forestry sectors are looked upon to contribute carbon sequestration (i.e., negative emissions) as well as emissions reductions. The amendment proposes \$7 million over FY22-25 to catalyze technology and business solutions and lay the foundation for an economically self-sustaining bio-economy in New York State. By establishing a marketplace of natural emissions-lowering solutions the program will demonstrate pathways to support disadvantaged rural communities, economic development, existing agriculture, and forestry industries, while increasing jobs and revenue.

*This program is intended to reduce GHG emissions so funding this with RGGI auction proceeds is appropriate.*

#### **Equity and Climate Transformation Research**

The amendment proposes an allocation of \$2 million over FY22-25 to establish an Equity and Climate Transformation Research Program. While the techno-economic pathways for decarbonization have been mapped out in the literature and in analysis for the Climate Action Council, less is known about the social and institutional dimensions of this deep and rapid transformation. This program would establish an engaged, participatory research framework to study the social dimensions of an equitable and inclusive transition in a manner that centers the lived experiences of underserved and overburdened communities and prioritizes beneficial outcomes for disadvantaged communities. This initial funding would provide the investment necessary to develop both formal proposals for long-term funding as well

as pilot initiatives. These pilot initiatives would aim to 1) test initial research hypotheses, 2) engage with a diverse set of NYS communities to understand how they would most benefit from this research and how they can be most effectively engaged in the process and 3) convene academics. The creation of an Equity and Climate Transformation Research Agenda would support scientifically rigorous inquiry that also advances transformative, inclusive solutions to climate action challenges in New York State. The work would inform strategies for effective climate awareness and consumer education initiatives.

*Until such time that zero-carbon energy production alternatives are available that are cheaper than fossil-fuel alternatives without contrived societal benefits, research is needed to develop those resources for those global underserved and overburdened communities that do not have access to New York's electricity benefits. New York State should harness its intellectual capital to develop solutions that will truly benefit the world.*

*I do have one concern about the focus of this research. The Scoping Plan notes that the 100% carbon-free by 2040 goal "presents significant challenges" that cannot currently be met by deploying existing technologies, with current studies finding that even after full deployment of available clean energy technologies, "there is a remaining need for 15 GW to 25 GW of electricity generation in 2040." The priority for any research and development should be to focus on providing this necessary but presently unavailable technology.*

#### **Climate Mitigation and Resilience Research**

The proposed allocation of \$1.5 million over FY22-24 seeks to support additional work done by the Climate Action Council Integration Analysis team and leverage current research investment to expand on energy and environmental analyses. This would include additional sensitivity analyses on land-use and climate change impact scenarios. This research would map out the risks and vulnerabilities related to climate change impacts for both the business-as-usual energy system and the carbon neutral energy system.

*This allocation will not reduce GHG emissions or energy use so it is inappropriate for this to be funded by RGGI auction proceeds.*

#### **Healthy New Home Design & Construction Challenge**

The Amendment proposes a \$7 million investment to go towards creating a healthy home builder and developer network to get builders to design and offer carbon neutral homes. Funding will also be used to run a healthy Neighborhood Design Challenge to support all electric sub-divisions and planned communities, as well as promote the benefits of healthy homes. Through this program, we can accelerate the pivot to decarbonization of residential new construction and build market capability across (i.e., focus on Long Island area to complement existing activities already using Clean Energy Funds elsewhere in the state), which will support requiring decarbonized new construction via code and regulations on an accelerated 5-year track.

*The Draft Scoping Plan claims the net direct societal costs are on the order of \$300 billion. Assuming that this is a necessary condition for carbon neutral homes it represents a cost not included in the Plan. It does represent an indirect way to reduce energy use and GHG emissions so it is appropriate for RGGI auction proceed funding.*

#### **Workforce Development Talent Pipeline & Priority Population**

The proposed allocation of \$8 million over the three-year plan focusing on the workforce development talent pipeline and priority populations. Specifically, to expand access to NYSERDA's On-the-Job Training program, will provide wage subsidies to businesses that hire new workers in clean energy positions and career pathways training to prepare new and incumbent workers for clean energy jobs. All activities will have a focus on priority populations and disadvantaged communities.

*The comments for the previous paragraph are applicable here. Note that it is not clear if clean energy is in fact cheaper than the alternatives while these subsidies are needed.*

#### **Clean Energy Hubs: Community and Stakeholder Engagement**

NYSERDA will continue building local capacity within disadvantaged communities and improve stakeholder engagement through this Amendment, which proposes \$10 million in additional funding from FY22-23 through FY24-25 to increase engagement of residents and communities in New York City, support the participation of community-based and advocacy organizations in stakeholder meetings, and supporting local projects. This will leverage the more than \$4 million for Clean Energy Hubs supported by the Clean Energy Fund. In 2022, NYSERDA will launch a network of Community Energy Hubs, which will build on the success of the Community Energy Engagement Program, wherein community and locally-based organizations across New York State provided outreach and education services to help low-income residents and small businesses make informed energy choices and access incentives and other resources to implement clean energy projects. The Hubs will be designed to enhance community-level engagement and capacity building by supporting clean energy concierge services. These services will be provided to residents, small businesses, nonprofits, and multifamily building owners in disadvantaged and underserved communities to increase awareness and adoption of clean energy programs and solutions, with the focus of creating a more inclusive clean energy economy.

In addition, NYSERDA will help to increase the capacity of organizations to advance clean energy projects at the local level. NYSERDA will advance a pilot effort to increase the potential for community-based organizations to plan for and develop community-scale clean energy projects that can benefit disadvantaged communities with capacity development grants. Funds allocated in this operating plan will allow for statewide activities alongside efforts supported through the Clean Energy Fund. NYSERDA will also seek to improve the ability for community-based organizations to actively participate, and formalize the process, for stakeholder engagement. Many local organizations often lack the resources and capacity to effectively engage on policy and initiative development, often excluding perspectives from their communities and constituents from the planning process. To ensure that community-based organizations have the resources to engage in stakeholder meetings and public comment processes, NYSERDA will allocate resources to provide stipends to offset the cost of participation as part of a pilot initiative to identify solutions for improving and increasing stakeholder engagement.

*This is a transparent allocation to meet the Climate Act mandates for supporting disadvantaged communities. Any connection to actual emission or energy reductions is tenuous at best. I cannot support providing RGGI auction proceeds for this program.*

#### **Climate Action Consumer Awareness & Education**

The amendment proposes \$10 million over three years to increase awareness and understanding of the critical need for and benefits of climate action in New York State. This investment will include an umbrella campaign to encourage broad engagement that is coordinated with a targeted marketing effort to impact the purchase decisions and actions that are needed to reach the State's goals. The targeted effort will address specific barriers across critical sectors and encourage adoption of new technologies that will improve quality of life and help decarbonize our buildings and economy.

*There is no connection whatsoever for emissions and energy reductions for this program. Indoctrinating the public to meet the Climate Act goals is inappropriate for RGGI auction proceed funds.*

**Community Air Monitoring**

The amendment proposes \$8 million to support a program for community air monitoring. The statewide initiative will be designed to monitor air quality in 10 disadvantaged communities, home to approximately five million New Yorkers living in areas historically overburdened by environmental pollution. Using cloud-based software coupled with air monitoring technology, this initiative will be a first-of-its-kind effort to measure hyperlocal, community-based air pollution levels. The initiative will collect this hyperlocal data to inform solutions to reduce greenhouse gases and other harmful air pollutants.

*This is a perfect example of New York State's misuse of RGGI auction proceeds. It is no less egregious a use of funds than the NYS Budget Transfer debacle when the State raided the RGGI proceeds to politically doctor the State's budget. Because this has much more to do with a legislative mandate within the Climate Act than anything to do with GHG emissions it is inappropriate for RGGI auction proceeds funding.*

**Conclusion**

My comments address my primary concern. RGGI is an electric sector emissions reduction program and it is inappropriate to use the auction proceeds for any program that will not materially decrease emissions directly or indirectly through energy use reductions. There are multiple programs in the amendment that do not meet that criterion. Those funds should be re-allocated elsewhere.

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