WE ACT FOR ENVIRONMENTAL JUSTICE
&
THE NORTH SHORE WATERFRONT CONSERVANCY OF STATEN ISLAND, INC.

COMMENTS ON THE REVISIONS TO

6 NYCRR Part 242
CO_2 BUDGET TRADING PROGRAM

6 NYCRR Part 200
GENERAL PROVISIONS AND ACCEPTANCE OF THE SUPPLEMENTAL DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT (DGEIS)

NYSERDA Part 507
CO_2 ALLOWANCE AUCTION PROGRAM

PROVISIONS RELATING TO THE REGIONAL GREENHOUSE GAS INITIATIVE (RGGI)

June 23, 2008

TABLE OF CONTENTS

Executive Summary

WE ACT is concerned that the proposed revisions to the New York state Regional Greenhouse Gas Initiative (RGGI) regulatory program[1] fail to protect and promote public health and economic stability in low-income communities and communities of color in New York City and New York state. The following comments address the need to increase the clarity and scope of the regulations to ensure that these communities are not unduly burdened by the implementation of a cap-and-trade system regulating carbon emissions from electric facilities. Therefore, the New York State Department of Environmental Conservation (DEC) and New York State Energy Research and Development Authority (NYSERDA) regulations governing RGGI must be revised to:

- Ensure public transparency in the regulation, auctioning and trading processes;
- Ensure agency and industry accountability;
- Establish public participation processes and standards throughout each phase of the program;
- Include provisions specifically addressing and mitigating the unique public health and economic impacts of polluting facilities on low-income communities and communities of color;
- Establish standards to address localized criteria pollutants that are emitted from electric facilities;
- Ensure that the carbon auction process does not result in windfall profits for the regulated industry and impose disproportionate burdens on consumers;
- Establish a limited, equitable and effective offsetting program;
- Establish categories for the use of auction-generated revenues to protect low-income communities and communities of color from the localized public health and economic impacts of a carbon trading system and to encourage the shift of our regional economy from a fossil fuel-based model to clean, renewable energies;
- Establish efficient, comprehensive and effective monitoring mechanisms throughout the RGGI process;
- Ensure that environmental justice communities and concerns are taken into account throughout the RGGI process;
- Establish a stakeholder group that adequately represents low-income communities and communities of color and creates accountability, access and involvement in decision-making;
- Establishes enforcement and penalty mechanisms that ensure the goals of the program are being achieved and that no communities are disproportionately burdened in the process.

[1] The New York State Department of Environmental Conservation and the New York State Energy Research and Development Authority released revisions to three regulations relating to the New York state implementation of RGGI. *See* 6 NYCRR §242 (CO_2 Budget Trading Program); 6 NYCRR §200 (General Provisions and Supplemental Draft Generic Environmental Impact Statement); NYSERDA §507 (CO_2 Allowance Auction Program).

Introduction

WE ACT for Environmental Justice (WE ACT) is a non-profit, community-based, environmental justice organization dedicated to building community power to fight environmental racism and improve environmental health, protection and policy in communities of color. Originally founded in West Harlem, WE ACT's work has expanded to focus on environmental health and justice issues in Northern Manhattan. Over the past twenty years, the organization has become a leader in the nationwide movement for environmental justice, influencing the creation of federal, state and local policies affecting the environment and children's environmental health.

WE ACT has served as a founding member of the DEC Environmental Justice Advisory Group since the workgroup was created in 2002. Through its service on the EJ Workgroup, WE ACT has sought to ensure the inclusion of the environmental justice perspective in DEC operations and programs that impact our communities, and to achieve environmental health and economic protection for Northern Manhattan residents and residents of environmental justice communities throughout the nation. More recently, the organization has served as the chair of the EJ Workgroup's Committee on Climate Change. Through participation in government task forces and working groups, and more traditional public participation and commenting processes, WE ACT and other New York environmental justice organizations are able to continue combating environmental racism and improving environmental health and policy in communities of color.

Over the past decade, scientists, academics and policymakers have come to general agreement that the global climate is changing due to human activity.[2] Worldwide emissions of carbon and other pollutants through the use of fossil fuel technologies is creating a "greenhouse gas effect" whereby excessive heat is staying trapped within the Earth's atmosphere. This trapped heat is causing the Earth's temperature to warm at an unnaturally rapid pace, resulting in widespread and significant climate changes.[3] Though the activities that have led to the greenhouse gas effect began centuries ago with the advent of the Industrial Revolution, the current and potential future impacts of this effect only began to be noted by scientists in the latter half of the 20th century.

The nature of climate change and the greenhouse gas effect means that the longer that worldwide emissions of fossil fuel pollutants continues unabated and at an ever-increasing rate, the greater the future impacts of climate change and the more quickly those impacts will begin to be felt by communities throughout the world. Though many predictors state that the full scope of the potential drastic impacts of climate change will occur by the end of the 21st century, many

[2] This consensus is clearly demonstrated in the reports of the Intergovernmental Panel on Climate Change, which have most recently stated that "most of the observed warming over the last 50 years is likely to have been due to the increase in greenhouse gas concentrations". J. J. MCCARTHY ET AL., eds., *Climate Change 2001: Impacts, Adaptation, and Vulnerability* (Cambridge Univ. Press, Cambridge, 2001). *See* NAOMI ORESKES, *Beyond the Ivory Tower: The Scientific Consensus on Climate Change*, 306 SCIENCE 5702 p. 1686. Available at http://www.sciencemag.org/cgi/reprint/306/5702/1686.pdf (providing overview of the scientific and public consensus on climate change).

[3] IPCC 2007: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* 96-97 (Solomon, S. et al. eds., Cambridge University Press 2007). Available at http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-chapter1.pdf.

communities are experiencing impacts from the changing global climate today. Glaciers from Montana to Greenland are melting at an unprecedented rate; ice sheets hundreds of miles wide are breaking off from the Arctic and Antarctic ice shelves, resulting in the rise of sea levels; the disappearance/melting of permafrost and rising sea levels are displacing Arctic communities such as the village of Shishmaref in North Alaska and low-lying island communities from Papua New Guinea to Tuvalu.[4]

Climate change is already having significant impacts on economic viability and public health. In 2005, the World Health Organization estimated that climate change results in 150,000 deaths each year and predicted that this total would double within twenty years.[5] Other organizations have predicted that climate change has already created more than 25 million "climate refugees" and that this number could increase to 200 million by 2050.[6]

The demographics both of the deaths being attributed to climate change and the climate refugees being displaced by climate impacts demonstrate the environmental justice implications of climate change. Low-income communities and communities of color will experience the first impacts from climate change and will be the hardest hit by these impacts.[7] The burdens these communities will incur from climate change result from the existing environmental, health and economic burdens that community members already face. These communities are also the least equipped to adapt to the impacts of a changing climate.[8]

The immediacy of the impacts environmental justice communities will experience as a result of climate change, and their limited adaptability necessitate that climate change mitigation measures include provisions that address the impacts of climate change on environmental justice communities. New measures must provide protections for these communities from the public health and economic impacts both of climate change and programs designed to reduce greenhouse gas emissions.

---

[4] *See* GAO-04-142 *Flooding and Erosion in Alaska Native Villages* p. 4 (December 2003) (finding that four native Alaska villages, including Shishmaref, are in "imminent danger from flooding and erosion and are planning to relocate"). Available at http://gao.gov/new.items/d04142.pdf; Andrew Simms, *Farewell Tuvalu*, The Guardian, Oct. 29, 2001. Available at http://www.guardian.co.uk/comment/story/0,3604,582445,00.html; Integrated Regional Information Networks, *Papua New Guinea: The World's First Climate Change 'Refugees'*, Worldpress.org, June 11, 2008. Available at http://www.worldpress.org/Asia/3171.cfm.

[5] WORLD HEALTH ORGANIZATION, *Climate and Health Fact Sheet*, July 2005. Available at http://www.who.int/globalchange/news/fsclimandhealth/en/index.html.

[6] TEARFUND, *Feeling the Heat: Why Governments Must Act to Tackle the Impact of Climate Change on Global Water Supplies and Avert Mass Movements of Climate Change Refugees* 6 (2006). Available at http://www.tearfund.org/webdocs/Website/News/Feeling%20the%20Heat%20Tearfund%20report.pdf.

[7] *See* JAMES KANTER & ANDREW C. REVKIN, *Scientists Detail Climate Changes, Poles to Tropics*, N.Y. Times, Apr. 7, 2007 (quoting IPCC Chairman Rajendra K. Pachauri as stating that "It's the poorest of the poor in the world, and this includes poor people even in the most prosperous societies, who are going to be the worst hit."). *See also* CENTER FOR INTEGRATIVE ENVIRONMENTAL RESEARCH, *The US Economic Impacts of Climate Change and the Costs of Inaction* 5 (University of Maryland October 2007). Available at http://www.cier.umd.edu/climateadaptation; ROBERT D. BULLARD, *Climate Justice and People of Color*. Available at http://www.ejrc.cau.edu/climatechgpoc.html.

[8] *Id. See also* JAMES KANTER & ANDREW C. REVKIN, *Emissions Already Affecting Climate, Report Says*, N.Y. Times, April 6, 2007 (quoting IPCC Chairman Rajendra K. Pachauri).

The impacts of climate change are real and are upon us as we move forward into the 21st century. Action to reduce greenhouse gas emissions and to shift our world economy away from a fossil fuel base is imperative. In enacting the Regional Greenhouse Gas Initiative, the states of the Northeast have stepped into the void created by federal inaction and attempted to create a comprehensive program that achieves reductions in regional carbon emissions. The reach of this program and the potential magnitude of its impact on the regional economy necessitate that the program be the most efficient, effective and equitable possible. Ensuring that environmental justice communities are protected and promoted through the program will create a program that benefits all communities throughout the region.

Comments

I. THE FRAMEWORK AND STRUCTURE OF THE RGGI PROGRAM WILL NOT ACHIEVE SUBSTANTIVE REDUCTIONS IN EMISSIONS AND FAILS TO ENSURE THAT LOW-INCOME COMMUNITIES AND COMMUNITIES OF COLOR ARE NOT DISPROPORTIONATELY BURDENED BY THE PROGRAM

A. MARKET MECHANISM STRATEGIES FOR CARBON REDUCTION FAIL TO PROTECT VULNERABLE COMMUNITIES AND CONTINUE TO PERPETUATE HISTORICAL PATTERNS OF ENVIRONMENTAL INJUSTICE

A cap-and-trade carbon reduction strategy uses limited governmental regulation and the unfettered force of the market to create economic incentives for electric facilities to reduce carbon emissions. By setting a price on each ton of carbon emitted by facilities and requiring facilities to purchase permits to cover carbon emissions, a cap-and-trade system forces facilities to internalize the cost of their pollution. The program can ensure that reductions in emissions are achieved by setting a cap on the level of permissible emissions. Further reductions in emissions below this cap at individual facilities happen to the extent that the market encourages.

Cap-and-trade systems were established by the federal Clean Air Act reauthorization in 1990 and have been put in place to reduce other pollutants, with varying levels of success. In each program, though, the impact on environmental justice communities correlated to the extent to which the programs took environmental justice concerns into account and provided measures to ensure that vulnerable communities were not disproportionately harmed by the program.

Market mechanisms consistently fail low-income communities and communities of color because the unregulated market fails to take into account historical social and economic inequities. By assuming that everyone included in the market has equal opportunity and power to engage in and influence the market, free markets often serve to perpetuate historical injustices and entrench economic inequities.

The structural framework of a market-based cap-and-trade system serves to perpetuate social and environmental inequities. Provisions included within the RGGI cap-and-trade system also exacerbate these inequities by failing to require that facilities avoid perpetuating or increasing disproportionate environmental and economic burdens on vulnerable communities. Emitting facilities already impose inequitable environmental and public health impacts on nearby communities. The failure of RGGI to recognize the public health impacts of these facilities and to require the reduction of co-pollutants such as mercury, lead, nitrogen oxide, sulfur dioxide and particulate matter perpetuate environmental and public health injustices in local communities. Furthermore, RGGI fails to protect environmental justice communities from the economic impacts of a cap-and-trade system by allowing unregulated trading, offset opportunities, the free allocation of emissions permits and a

number of safety valves to protect facilities from high permit costs. Each of these aspects of the program is commented on below.

B. THE RGGI PROGRAM HAS LIMITED EFFECTIVENESS IN MITIGATING CLIMATE CHANGE BECAUSE IT FAILS TO ACHIEVE IMMEDIATE, SIGNIFICANT REDUCTIONS IN CARBON EMISSIONS

The scope of the impact of climate change is directly related to how quickly and extensively greenhouse gas emissions are reduced. Scientists and international intergovernmental agencies have called for drastic reductions in these emissions within the next few years.[9] Even the most conservative estimates call for significant reductions by 2050 to ensure that the full catastrophic scope of climate change impacts is avoided.

For carbon, the International Panel on Climate Change (IPCC) has recommended that countries reduce their emissions by at least 50% below 1990 levels by 2050.[10] This recommended level of reduction assumes that, first, the historic pattern of increasing emissions levels seen throughout the world can be halted and, second, that nations can quickly shift from maintaining their current emissions levels to creating drastic reductions through the implementation of efficiency measures and shifting to clean energy sources. The feasibility of such action is demonstrated by the drastic cuts in emissions made by many countries in the European Union after the advent of the Kyoto Protocol.[11]

The New York RGGI program is an insufficient and weak carbon reduction strategy. The program is insufficiently stringent in a number of areas.

1) RGGI fails to achieve immediate and significant reductions in carbon emissions.

During its ten years of implementation, the program will not come close to the levels of reduction recommended by the IPCC and achieved by other countries throughout the world. The regional program is intended to create a ten percent (10%) reduction

[9] The IPCC has stated that "an immediate reduction of 50 – 70 percent of carbon dioxide emissions is necessary to stabilize the concentrations in the atmosphere" and that "eventually CO_2 emissions would need to decline to a very small fraction of current emissions". HEIDI BACHRAM, *Climate Fraud and Carbon Colonialism: The New Trade in Greenhouse Gases*, 15 CAPITALISM NATURE SOCIALISM 4, 2 (December 2004) (citing to IPCC Second Assessment – Climate Change 1995. A report of the Intergovernmental Panel on Climate Change. IPCC Second Assessment Synthesis of Scientific-Technical Information Relevant to Interpreting Article 2 of the UNFCCC) [Hereinafter, "Climate Fraud"].

[10] IPCC 2007: *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (B. Metz et al., eds., Cambridge Univ. Press, Cambridge 2007).

[11] AMY VANDERZANDEN, *The Race to Carbon Neutral*, Global Envision, Jan. 24, 2008 (detailing announcements by Norway, Iceland, Costa Rica, New Zealand and Monaco to go "carbon neutral" by 2030). Available at http://www.globalenvision.org/2008/01/24/race-carbon-neutral.

in emissions levels below 2009 levels by 2019.[12] This is too a small step in the right direction.

Mandates for reductions must begin earlier in the program. Because facilities will not be subject to any reductions until 2014, emitting facilities will only be required to maintain 2009 levels for the first five years of the program.[13] Structuring the program so reductions are only achieved during the second half of the program period fails to achieve the immediate reductions necessary to mitigate climate change.

In the Revised Regulatory Impact Statement for the CO_2 Budget Trading Program, DEC acknowledges that the "global community must reduce its [greenhouse gas] emissions well below 1990 levels within a few decades if we are to stabilize atmospheric concentrations of CO_2 at acceptable levels."[14] The agency goes so far as to say that emissions must be reduced significantly by 2020 to avoid the worst impacts of climate change.[15] Reducing emissions 10% from 2009 levels by 2019 does not achieve the agency-stated needs and fails to protect the public and the environment.

2) The scope of the cap-and-trade program is too limited and does not cover enough polluting facilities.

RGGI only regulates the electricity field and only covers large electric facilities that contribute a certain percentage of electrical output to the grid.[16] This programmatic limitation restricts RGGI's application to a limited number of polluting facilities in the region. This restriction, combined with the paltry level of reductions that will be achieved through the program ensure that RGGI will serve more as a model for regional cap-and-trade programs rather than a substantive system that achieves significant reductions in greenhouse gas emissions.

Though New York contains 0.3 percent of the world's population, it is responsible for 0.9 percent of the world's carbon emissions.[17] One quarter of the state's carbon emissions come from fossil fuel-based power plants, which emitted 61 million tons of CO_2 in 2005.[18] It is necessary for any substantive emissions reduction program to cover all facilities emitting significant amounts of carbon. RGGI should be revised so

[12] New York State Department of Environmental Conservation. Supplemental Draft Generic Environmental Impact Statement for Promulgation of 6 NYCRR Part 242: CO_2 Budget Trading Program As Supported by the Promulgation of 21 NYCRR Part 507: CO_2 Allowance Auction Program, 7 (Apr. 24, 2008). [Hereinafter "DEC DGEIS"].
[13] DEC DGEIS 2.5.3; New York State Department of Environmental Conservation. Summary of Express Terms – 6 NYCRR Parts 200 and 242 at p. 2. [Hereinafter "DEC Summary of Express Terms"].
[14] New York State Department of Environmental Conservation. 6 NYCRR Part 242, CO_2 Budget Trading Program Revised Regulatory Impact Statement at p. 15 [Hereinafter "6 NYCRR §242"].
[15] *Id* at p. 23.
[16] DEC DGEIS §2.5.1 at pp. 37-38.
[17] DEC DGEIS §2.6.1 at p. 52.
[18] *Id*.

that it covers not just electric facilities but any facility powered by fossil fuels and emitting a certain amount of carbon per year. Expanding the scope of included facilities would benefit both global climate change and would increase the regional economy's shift toward clean, renewable energy sources and away from fossil fuels.

3) RGGI includes too many "safety valve" provisions for facilities

A number of measures included in the program serve as "safety valves" or "off-ramps" for emitting facilities to avoid the economic burden of fully internalizing the cost of their carbon emissions. These safety valves both serve to distort the market, limiting the effectiveness of the cap-and-trade system, and increase the opportunity for gaming and fraud by facilities seeking to profit from the program. Each of these safety valves is examined in full below. They include:

- Permitting facilities to bank unused emissions
- Establishing an initial reserve price for emissions units, creating a market distortion and potentially artificially low price gauge
- Providing offset provisions that become more accessible and lenient as the price of emissions units increases
- Including an exemption for facilities demonstrating financial hardship under the program.

By failing to achieve immediate, significant reductions in carbon emissions, RGGI wastes resources and time. Moreover, it fails to take advantage of the opportunity to create a substantive carbon reduction strategy that achieves climate justice while combating climate change.

RGGI emissions targets should be increased so that the program creates more significant reductions in emissions at a faster pace. The program should be extended to cover broader sectors of facilities that contribute to greenhouse gas emissions or, at least, exemptions should be deleted that allow facilities falling under the regulation to opt out of all reporting, permitting and allowance compliance requirements. Finally, safety valves should be drastically reduced to avoid market distortions, which enable industry gaming of the system and inflate consumer prices.

II. THE RGGI PROGRAM MUST BE STRUCTURED TO INCORPORATE ENVIRONMENTAL JUSTICE CONCERNS AND PROVIDE PROTECTION FOR VULNERABLE COMMUNITIES

Over the past decade, the DEC has made some strides in acknowledging the existence of environmental injustices throughout the state and in incorporating environmental justice concerns into several of its programs and regulations. The agency must continue these efforts and ensure that the program is structured to protect and provide benefits for environmental justice communities. Specifically, RGGI must include language that addresses the unique impacts climate change and a cap-and-trade system will have on environmental justice

communities and provisions within the bill providing special protections for and assistance to environmental justice communities.

A. RGGI MUST RECOGNIZE AND ADDRESS THE UNIQUE IMPACTS CLIMATE CHANGE HAS AND WILL HAVE ON LOW-INCOME COMMUNITIES AND COMMUNITIES OF COLOR.

The regulatory impact statement should be revised to include a section discussing the impact of climate change on environmental justice communities. The impact statement addresses the impacts of climate change on water, forests and other natural resources in the state.[19] It also acknowledges that the agency has authority to address climate change because of its duty to protect the environmental resources of the state as well as the safety, health and welfare of the public.[20]

In carrying out this duty, the agency cannot limit its assessment of climate change impacts to natural resources but must also address the likely impacts on the safety, health and welfare of the public. The agency's failure to address the human impacts of climate change does a disservice to the public generally and low-income communities and communities of color in particular.

1) RGGI regulations must include language recognizing the disproportionate impact of climate change on environmental justice communities

Historical inequities have left environmental justice communities with significant environmental, public health and economic burdens.[21] These burdens make these communities especially vulnerable to the potential impacts that could arise from a cap-and-trade system. The overburdening of these communities with environmental harms creates neighborhoods with poor environmental quality, leading to lessened quality of life for residents and lowered environmental health standards. The public health impacts arising from environmental injustices are further exacerbated by the communities' economic burdens.[22] These burdens often arise from a lack of quality jobs and economic opportunities that impact public health through restricted access to healthy food and quality health care.

The poor environmental quality, health of residents and reduced economic viability of environmental justice areas creates communities that are especially vulnerable to increased health burdens and have restricted means to adapt to economic impacts. The historical inequities that have resulted in these conditions have also created

[19] 6 NYCRR §242 at pp. 20-22.
[20] *Id*. at p. 2.
[21] *See generally* LUKE COLE & SHEILA R. FOSTER, FROM THE GROUND UP: ENVIRONMENTAL RACISM AND THE RISE OF THE ENVIRONMENTAL JUSTICE MOVEMENT (New York University Press: New York and London 2001).
[22] For a generally discussion of the confluence of environmental racism and economic racism and their perpetuation through the maintenance of normative standards of governance (including free market systems), see ROBERT MELCHIOR FIGUEROA, *Bivalent Environmental Justice and the Culture of Poverty*, 1 RUTGERS UNIV. J. OF LAW AND URBAN POL'Y 1, 33-34 (date unknown).

communities that are highly suspicious of the intentions and actions of regulatory agencies and private industries.

RGGI provides an opportunity to address the history of environmental injustice in the Northeast.[23] At the least, it should serve as a step away from this history and toward greater environmental and economic equity. The first threshold to taking this step though is the basic acknowledgement in the regulatory language of the program of the existence of environmental justice and the need to provide special attention to and protections for environmental justice communities.

WE ACT calls on the NYSDEC to revise the language of the regulatory impact statement to include an analysis of the impacts of climate change on public health and safety and to include within that analysis a section discussing environmental justice impacts.

2) RGGI should acknowledge the localized public health impacts that result from greenhouse gas emissions

The regulations should expand the included discussion on the public health impacts of non-carbon emissions from electric facilities[24] to include a section acknowledging that the brunt of these public health impacts typically fall on low-income communities and communities of color.[25]

B. THE DEC CAP PROGRAM AND THE NYSERDA AUCTION ALLOCATION PROGRAM MUST INCLUDE PROVISIONS TO PROMOTE TRANSPARENCY, ACCOUNTABILITY AND PUBLIC PARTICIPATION

In promulgating the RGGI program, DEC and NYSERDA have complied with regulatory requirements for notice and public participation.[26] These procedures are essential for traditionally disenfranchised communities seeking to retain control and influence over the governmental decision-making that impacts their lives. WE ACT in particular commends DEC for convening an environmental justice working group on climate change to discuss these regulations in addition to other topics. In convening this group, DEC recognizes the unique perspective and concerns that environmental justice organizations and communities contribute to the decision-making process.

Procedural requirements to provide the public with information and opportunity to participate in the decision-making process must be included in the RGGI program. Information and

[23] For a discussion of the opportunity climate change policy creates to "address long-standing societal problems, like distributional inequities" *See* ALICE KASWAN, *Environmental Justice and Domestic Climate Change Policy*, 38 ENVIRONMENTAL LAW REPORTER 10287, 10288 (2008).
[24] *See* 6 NYCRR §242 at 16-23.
[25] *See infra* § IV(B) at pp. 22-25 for further discussion on and recommendations for measures that address the public health impacts of non-carbon emissions.
[26] 6 NYCRR §617.9(a)(3).

participation are critical components of any regulatory or quasi-regulatory program. The importance of these components cannot be over-emphasized. In furtherance of these goals, WE ACT recommends the following revisions to 21 NYCRR §507 and 6 NYCRR §242:

1) The RGGI program must provide measures ensuring extensive transparency

The benefit of public transparency for industries and government agencies is well documented. Requiring industries and agencies to make their actions and, to some extent, decision-making transparent increases public trust and goodwill. Perhaps more importantly, it can serve to restrict fraud, illegal actions and inequitable or discriminatory measures.

Transparency must be included in all aspects of the RGGI program. Transparency is created by requiring extensive reporting by and monitoring of facilities, and by providing extensive public access to this information. Monitoring and reporting requirements should begin before the auction even begins and must continue throughout the auctioning process and follow facilities once emissions permits have been purchased. The need to expand both the monitoring and reporting requirements under RGGI is explored in full below.

For environmental justice communities, adequate transparency must go beyond merely recording information for the public but must also ensure that the information is available to the public in an accessible and comprehensible manner. Providing online access to information is insufficient for many members of the public – particularly members of low-income communities that do not have access to computers or high-speed internet. A comprehensive database of information, emissions and auction reporting, and agency monitoring of facilities should be available in a hard-copy format. The document could be held by DEC so long as the agency can ensure free public access to the information (i.e. the public can come review the document without restriction). A better option would be storing the document in a public library resource room and providing information on accessing the document at this space to communities through informational outreach efforts.

2) Regulations must include provisions that will ensure both industry and agency accountability

As stated above, agency and industry accountability is increased by transparency requirements. An important mechanism to increase accountability is providing the public with private enforcement mechanisms that are separate from and in addition to agency enforcement procedures.

Much of the historical success of environmental laws has stemmed from citizen suits provisions included within these laws.[27] By providing citizens with a private right of action, these laws circumvent the potential of being toothless procedural hurdles that private entities must comply with without fear of being subject to penalty for substantive violations.

Though RGGI is a free market mechanism, it does include a regulatory structure that provides some opportunity for private enforcement of requirements included within the program. The regulation should include a provision that provides for a private right of action to enforce emissions standards. This action would enable the public to bring private suits against facilities that emit carbon in excess of their purchased permits. In addition, the regulations should include a provision creating a private right of action to challenge offset projects. Both these recommendations are discussed more fully below.

3) Public participation mechanisms must be included throughout the process by both agencies

In addition to measures to increase transparency and accountability, RGGI should include traditional mechanisms of public participation in the form of notice and commenting processes. Providing public access to information on a continuous basis is the first step to ensuring that regulated entities comply with their legal requirements. Notice also serves to empower communities by providing them with information on actions that could affect their local community, environment and health.[28]

- ***Public notice must be provided for multiple aspects of the RGGI program***

RGGI regulations should be revised to require that notice be provided for at least the following five categories:

1) Historic and current emissions levels;
2) Market prices for carbon permits;
3) Violations (including failure to comply with permit requirements, failure to comply with reporting requirements and failure to honestly report emissions levels);
4) Trading;
5) Offsetting projects (proposed and undertaken).

As stated above, information (here, notice) should be provided to communities in a number of forms, not merely limited to Internet postings. For environmental justice communities, time and resources to keep track of agency notices is often limited. To

[27] For an in-depth analysis of the role of citizen suits in the enforcement of environmental regulations, *see* JONATHAN H. ADLER, *Stand or Deliver: Citizen Suits, Standing, and Environmental Protection* 12 DUKE ENV. LAW & POL'Y FORUM 39 (Fall 2001).

[28] *See generally* R. GREGORY ROBERTS, *Environmental Justice and Community Empowerment: Learning from the Civil Rights Movement* 48 AMERICAN UNIV. L.R. 1, 230-269 (October 1998).

improve access to information for these communities and promote/increase their ability to participate in the commenting process, notice should be provided to a list of community stakeholder groups (including environmental justice organizations) that can disseminate the information directly to community members.

- ***RGGI must provide opportunity for extensive, regular public commenting***

NYSERDA and DEC should provide a public comment period following each notice. Opportunities for public comment would be provided on a semi-regular basis prior to each auction and following the annual reporting mandated in the regulations.

Including a regular calendar of public commenting in the RGGI process would serve to increase industry compliance with program requirements and would provide public assurance that the facilities subject to the regulation are consistently being held accountable to the public. The commenting process envisioned here would be a truncated version of commenting procedures including in the state and federal environmental review statutes. Comments would be received by NYSERDA (in the case of auctions) and DEC (for all other actions). Opportunity for oral comments through public hearings could be restricted or only provided for certain actions.

The critical opportunity created by public commenting is the legal right that public participation processes provide for private citizens to challenge agency action (here, oversight of private industries) in court. As such, the public notice and commenting process that should be included in RGGI regulations must also provide opportunity for legal challenges to procedural deficiencies with the process. Each of these provisions could be included through language stating the RGGI is subject to the participation requirements of the National Environmental Policy Act (NEPA) and the New York State Environmental Quality Review Act (SEQRA).

- ***RGGI should mandate the formation of Citizen Advisory Groups to oversee certain aspects of the program***

RGGI should be revised to include the convening of Citizen Advisory Groups to oversee certain aspects of the program. Citizen Advisory Groups would serve to fill the current void in the RGGI regulations for measures that provide substantive leverage for impacted communities to oversee and respond to the program. To ensure that communities are protected and that the perpetuation of environmental injustices by polluting facilities are monitored and reduced, the public must have access to participation procedures and must also have substantive leverage to impact agency decision-making. Citizen Advisory Groups could serve as a source of this leverage and could overcome the traditional disempowerment mechanisms impacting communities that have less time, less information and less specialized knowledge about the legal, technical and economic issues involved.

These advisory groups could be modeled on a number of existing forms. The easiest model to implement is probably the working group structure used by DEC to address environmental justice concerns. The groups could also be modeled after the

Advisory Committee structure included in a local law in Passaic County, New Jersey.[29] Under this law, residents living near industrial facilities have the power to petition the county health officer to form Neighborhood Hazard Prevention Advisory Committees. Made up of community members, facility employees, a facility manager and a municipal representative, these committees serve to bring together stakeholders and populations impacted by facilities in a single room to ensure accountability and environmental justice.[30]

4) Regulations should include triggers for more substantive assessment and public participation processes in some circumstances

Public participation provisions should be included at multiple points in the budgeting and auctioning process. In certain cases though, more substantive impact assessments will be necessary to ensure that the program achieves its goals while promoting environmental justice and protecting local communities. These impact assessments, modeled after the environmental impact assessment and environmental assessment requirements of NEPA and SEQRA, would only be triggered in cases where the potential for fraud, market gaming and environmental injustice are particularly high. These substantive assessments should be provided, at least, for:

- ***Permit purchasing by facilities that result in an increase in emissions levels over historic levels***

Under RGGI, polluting facilities can purchase a certain amount of emissions permits during the regulated auction process.[31] Once the auction process is complete, an unregulated private trading process begins, enabling facilities to buy and sell auction-purchased permits amongst themselves. One purpose of this trading mechanism is to provide facilities with flexibility in reducing their emissions rate, thereby achieving lowered emissions in the most economic manner possible. For some facilities, this could mean an increase in historic emissions rates where it is economically beneficial to purchase additional permits from other facilities.

Environmental justice communities have extensive concerns about the potential impacts of this trading program on the already overburdened communities that house the vast majority of electric facilities.[32] Communities and environmental justice organizations are concerned that the permit trading program enables the creation of pollution "hotspots" or areas where emissions are especially concentrated because

[29] *See* BERNARD A. WEINTRAUB, *Access to Information*, THE LAW OF ENVIRONMENTAL JUSTICE: THEORIES AND PROCEDURES TO ADDRESS DISPROPORTIONATE RISKS 251 (Michael B. Gerrard, ed., American Bar Association 1999) (citing to *Local Law Will Allow Facility Inspections by Neighborhood Residents, Groups Say*, BNA DAILY ENV'T REP., 29, Sept. 18, 1998, at 1007.)
[30] *Id*.
[31] 21 NYCRR §507.6(d).
[32] *See* DEC DGEIS Figure 2 indicating that the vast majority of electric facilities are located in EJ communities. See also NYSDEC DGEIS § 7.3 at p. 113 stating such.

facilities have purchased additional emissions on top of those received or purchased at the regulated auction.[33]

The common response to this concern is that CO_2 is a non-localized pollutant and increased emissions in one area are not detrimental so long as the general emissions rate worldwide is decreasing.[34] By focusing singularly on CO_2 emissions, this argument ignores the full extent of emissions released by electric facilities. No facility emits only CO_2. Through their operation, facilities emit CO_2 and a number of additional co-pollutants, as DEC acknowledges in the RGGI regulations.[35] Any expansion of facility operations that results in an increase in CO_2 emissions is likely to be accompanied by an attendant increase in co-pollutant emissions. Many of these co-pollutants do have localized effects and contribute directly to adverse public health impacts in local communities.[36]

As such, an increase in facility emissions of CO_2 could be accompanied by increased adverse health and environmental impacts resulting from co-pollutants. Adequate protection of the public health and environment of communities housing polluting facilities necessitates that any emissions increase of these facilities beyond historic levels must be accompanied by a full environmental and health impact assessment. This assessment will serve to both document and provide measures to mitigate any adverse local impacts. It will also ensure that facilities only expand emissions levels in cases where the economic benefits of such expansion are not outweighed by its public health and environmental impacts.

- ***Offset projects***

The RGGI offset program is also based on the premise that the benefits of carbon reductions are not dependent on the locality of the reduction. Yet, for environmental justice communities, the concerns raised by offsetting projects go beyond those raised by the private trading system.

An offset program fails to address the impact that polluting facilities have on local communities through the emission of co-pollutants. In addition, though, offset programs are problematic because they increase the opportunity for fraud and disenfranchisement of traditionally disadvantaged communities that can be targeted for quasi-beneficial offsetting projects.[37] This experience has been extensively

[33] *See* BACHRAM, *supra* fn. 9 at 13 for a discussion of the environmental justice implications of carbon trading and the potential for hotspots.
[34] *See* HEIDI BACHRAM ET AL., *The Sky is Not the Limit: The Emerging Market in Greenhouse Gases*, 2003 Transnational Institute Briefing Series 1, 4 (2003). Available at http://www.xs4all.nl/~tni/reports/ctw/sky.pdf.
[35] DEC DGEIS §2.6.1 at p. 53
[36] *See infra* pp. XX for a full discussion of co-pollutants.
[37] *See* KEVIN SMITH, *The Carbon Neutral Myth: Offset Indulgences for your Climate Sins* (Carbon Trade Watch, Transnational Institute, February 2007). Available at http://www.tni.org/reports/ctw/carbon_neutral_myth.pdf.

documented in the European Union where there has been extensive implementation of illusory or environmentally detrimental offset projects.[38]

To ensure that these experiences are not repeated in the Northeast, RGGI must include provisions mandating that substantive impact assessments are triggered for all offset projects. These assessments will ensure that offsets are real, environmentally beneficial and result in documented reductions in carbon emissions. Impact assessments could occur on a case-by-case basis. Conversely, assessments could be programmatic so that projects falling in one of the approved offset categories must complete an assessment form created specifically for that category and receive agency approval after a of public review and comment. Finally, assessments could be structured to require the affirmative action by citizen groups or individuals to trigger the assessment requirement. In this case, facilities would have to provide public notice of their proposed project and provide a period of review during which the public could put forward a request that the project undertake an impact assessment. Though this would put the onus on the community to ensure that impact assessments occur, it could be a more feasible structure for assessments as it does not impose potentially burdensome requirements on industries to undergo assessments in all cases.

III. THE RGGI PROGRAM MUST BE STRUCTURED IN A WAY THAT ENSURES THAT ENVIRONMENTAL JUSTICE COMMUNITIES ARE NOT SUBJECT TO INCREASED PUBLIC HEALTH AND ECONOMIC IMPACTS

As stated in the RGGI DGEIS, there is general agreement that climate change will have an impact on the public's health and economic viability.[39] As more greenhouse gases are emitted, and the Earth warms, the degree of these impacts will increase. The implementation of carbon reduction strategies serves to protect the public from the full onslaught of these impacts and to mitigate some of the impacts that are already occurring.

Though the DEC recognizes this purpose, it fails to fully acknowledge and address the unique public health and economic impacts that climate change will have on environmental justice communities. It also, importantly, fails to address the public health and economic impacts that a carbon reduction strategy will have on these communities. Since 1999, DEC has worked to "promote environmental justice and incorporate measures for achieving environmental justice into its programs, policies, regulations, legislative proposals and activities."[40]

[38] *Id*.
[39] DEC DGEIS §2.3.1 at p. 19. *See also* Stephen J. Decanio, *The Economics of Climate Change*, Redefining Progress (0ct. 1997) pp. 2-11; NICHOLAS STERN, THE ECONOMICS OF CLIMATE CHANGE: THE STERN REVIEW (Cambridge University Press: Cambridge, 2006); MICHAEL A., CAMPBELL-LENDRUM D., ET AL., *Global Climate Change*, COMPARATIVE QUANTIFICATION OF HEALTH RISKS: ENVIRONMENTAL AND OCCUPATIONAL RISK FACTORS VOL. 2 (WHO) p. 1544.
[40] DEC Commissioner's Policy 29 (Mar. 19, 2003), p.2.

In promulgating the regulations for RGGI, DEC must further its environmental justice policy through substantive consideration of environmental justice impacts of a carbon budgeting, auctioning and trading system. It must also assess the public health and economic impacts of such a system on environmental justice communities (which house the majority of regulated emitting facilities) and work to mitigate these impacts to the greatest extent possible. Providing a two-page summary of potential environmental justice impacts at the end of the DGEIS is an insufficient assessment of the full scope of potential impacts of RGGI on environmental justice communities.

To fully protect the most vulnerable communities in the state, RGGI regulations must be revised in the following manner:

A. PROVISIONS OF THE REGULATIONS MUST BE CLARIFIED TO ENSURE THAT ENVIRONMENTAL JUSTICE IS PROTECTED AND PROMOTED

For communities to empower themselves through acquiring information and participating in the regulatory process, provisions of the regulation must be sufficiently clear to allow substantive public response. Multiple portions of the RGGI regulations are unclear and need to be clarified.

1) Regulated Facilities

Communities must have access to information on what facilities will be subject to the CO_2 Budget Trading program. The DEC DGEIS provides a map of electric generating units that are potentially subject to regulation under the program.[41] This map, in addition to the map of potential environmental justice areas near electric facilities throughout the state,[42] provides a helpful starting point for environmental justice communities seeking to engage in the regulatory process.

Yet, there is still room for clarity in terms of the percentage of polluting facilities that are subject to the regulations. The regulations are clear that facilities that generate at least 25 MW of power are subject to RGGI emissions budgeting.[43] DEC notes that it originally considered regulating plants that were generating 15 MW or more of power per year.[44] Providing statistics on the percentage of state facilities that fall within each category would increase the transparency of the agency's decision-making and provide communities with critical information on whether their local plants are subject to the program.

2) Exemption triggers must be clearly defined in the regulations

Under the set-aside provisions of the program, exemptions are provided for some facilities that have an existing long-term contract. This exemption applies to facilities

[41] DEC DGEIS Figure 1.
[42] DEC DGEIS Figure 2.
[43] DEC Summary of Express Terms at p.1; DEC DGEIS §2.5.1 at p. 37.
[44] 6 NYCRR §242 at p. 61.

with a contract initiated before March 2006, that have a primary fuel source of natural gas or an emission rate that is no higher than 1000 lbs/MWhr. In addition, to qualify for the exemption, these facilities must demonstrate that purchasing allowances in the auction or secondary trading market will subject them to "substantial financial hardship". [45]

DEC representatives stated that it intends this exemption to be very limited and it does appear to be. Of the 61 million tons of emissions permits provided through RGGI, only two and a half percent (1.5 million tons) will be set aside for these long-term contracts.[46] Nevertheless, for full transparency, the regulations should be revised to include in the Summary of Express Terms a definition of "substantial financial hardship." Specifically, the regulations should mandate that financial hardship must be experienced by the company as a whole and not by the individual facility. Defining the requirement this way limits the opportunity for industries to segment facilities from the company's broader financial operations in an effort to avoid regulatory requirements.

3) The mechanism to verify offset programs must be clearly defined

As discussed elsewhere, offset programs provide flexibility for industries to comply with carbon reduction requirements,[47] but also create extensive opportunity for fraud by industries seeking to avoid compliance requirements. To ensure that this fraud is limited and, equally important, to guarantee that offsets have a positive local and global impact on the environment, mechanisms must be implemented to monitor the selection and implementation of offset projects.

In an effort to achieve these goals, DEC has limited eligible offsets to five specific categories.[48] This is a step in the right direction, but there must also be a mechanism in place to facilitate projects that qualify broadly under the current regulations. This monitoring process would ensure that projects do not have broad adverse impacts on public health, the economy or the environment. In addition, monitoring would enable periodic review of offset projects throughout the RGGI program to evaluate the effectiveness of this portion of the program in achieving carbon reductions while promoting economic efficiency.

DEC should revise the DGEIS and the Regulatory Impact Statement to provide specific provisions to establish an independent offset monitor. It is not enough to merely state that such a monitor will be used (as NYSERDA does at §507.12). The agency must explicitly state where the monitor will come from, when monitoring will begin, the scope of the monitor's review and the power the monitor will have to

[45] 6 NYCRR §242 at p. 44.
[46] 6 NYCRR §242 at p. 45 (stating that 1.5 million tons will be set aside for long-term contracts and finding that this number is based on reported emissions levels from long-term contract holders.)
[47] 6 NYCRR §242 at p. 31.
[48] *Id*. at pp. 33-38.

enforce regulatory requirements, impose penalties for violations and stop detrimental, inefficient or unjust offset projects.

B. RGGI MUST ADDRESS THE PUBLIC HEALTH IMPACTS OF CO-POLLUTANTS

Fossil fuel-burning power plants emit a range of polluting gases, including carbon, mercury, nitrous oxide (No_x), sulfur dioxide (SO_2), lead and particulate matters.[49] Though not all of these pollutants contribute directly to climate change by increasing the greenhouse gas effect, each pollutant has an impact on human health whether through climate change or more localized public health impacts. The RGGI carbon reduction program joins a range of other state and federal programs aimed at reducing the emissions from power plant facilities to improve the environment and public health.[50]

Together these laws serve, in theory, to reduce power plant emissions that have a detrimental effect on public health. RGGI is unique among these laws, as the pollutant it regulates does not have demonstrable local health impacts. Carbon is to some degree an equitable polluter as its impacts affect communities throughout the world and not merely in the area near the plant releasing the carbon emissions. Because of the non-localized impacts of carbon, RGGI regulations largely fail to address the localized impacts of pollutants emitted by electric facilities.

This oversight may arise from the idea that the local impacts of non-carbon emissions from power plants is outside the scope of RGGI. RGGI regulations are limited to carbon emissions and do not require the reduction of co-pollutants nor include any regulatory or market mechanism to ensure or even monitor the decrease of co-pollutant emissions. Though the program does not regulate co-pollutants, these pollutants are addressed in the regulation to the extent that the agency suggests that carbon emissions reductions will lead to reductions in other co-pollutant emissions. [51]

It is disingenuous for the agency to tout the potential benefits the program will have on co-pollutants without acknowledging the potential the program creates to increase co-pollutant emissions in some communities. Multiple aspects of the cap-and-trade program could result in an increase or, at least, a failure to reduce co-pollutant emissions in certain localities. The trading program enables facilities to buy and sell emissions permits in a private, entirely unregulated market. In this market, a facility could purchase emissions allowances through the NYSERDA auction up to its historical emissions limit. It could then enter the private market and

[49] DEC DGEIS §2.6.1 at p. 53.
[50] *See* Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule), Final Rule, 70 Fed. Reg. 25162-405 (May 12, 2005); Clean Air Mercury Rule, 72 Fed. Reg. 77100-246 (Dec. 22, 2006); Clean Air Act Title V, 42 U.S.C.§ 7661 (requiring a permit operating program for emitting facilities); Clean Air Act Title IV, 42 U.S.C. §7651 (requiring reductions in sulfur dioxide emissions to combat acid rain).
[51] 6 NYCRR §242, Revised Regulatory Impact Statement at p. 26 (finding that RGGI enables New York and the Northeast to "capture environmental co-benefits" of emissions reductions. Carbon emission reductions under RGGI are anticipated by the agency to result in corresponding reductions in emissions of co-pollutants generated by fossi fuel-based electric generation).

purchase *additional* permits from another facility, thereby increasing its total facility emissions and creating a pollution "hotspot."[52] Considering only carbon, these hotspots are an acceptable market outcome, reflecting economic efficiency. Yet, this increase in permitted carbon emissions is likely to be accompanied with an attendant increase in other pollutants as the facility expands or increases activity to reflect its increased emissions level.

DEC states that federal emissions cap on No_x and SO_2 will prohibit those pollutants from increasing even if facilities buy excess permits under RGGI.[53] Even if each emitted co-pollutant is regulated by a federal or state program, these programs fail to subject facilities to a comprehensive cross-media monitoring and enforcement program that ensures that facilities comply with the emissions cap of each program and that provides local communities with access to a comprehensive database on the pollution that is accumulating in localities.

Moreover, by permitting facilities to expand their emissions in response to market pressures without imposing safeguards that require the reduction of co-pollutants, RGGI misses a critical opportunity to protect human health and to save thousands of lives in individual communities. Power plants are the biggest industrial sources of co-pollutants in the United States.[54] These co-pollutants are the direct cause of health problems such as asthma, heart attacks, cancer, sudden infant death syndrome and neurological injuries.[55] The chemical nature of these pollutants result in their health impacts being primarily limited to a certain geographic range near the emitting facility. For the low-income communities and communities of color that disproportionately house electric generating facilities,[56] this translates into the burden of receiving the brunt of the negative health impacts created by polluting facilities.[57] For communities in pollution hotspots

---

[52] *See* BACHRAM, *supra* fn. 33.
[53] 6 NYCRR §242 at p. 28.
[54] Power plants account for 67 percent of SO_2 emissions, 23 percent of NO_x emissions, 34 percent of mercury emissions and more than half the particulate matter in the Eastern U.S. MARTHA KEATING & FELICIA DAVIS, CLEAN AIR TASKFORCE, AIR OF INJUSTICE: AFRICAN AMERICANS AND POWER PLANT POLLUTION (2002) (citing U.S. EPA, NATIONAL AIR QUALITY AND EMISSIONS TRENDS REPORT 1999, EPA/454/R01-004 (2001), http://www.epa.gov/airtrends/; U.S. EPA, MERCURY STUDY REPORT TO CONGRESS, Vol. 2 (1997)). Available at: http://www.catf.us/publications/reports/Air_of_Injustice.pdf.
[55] SO_2 and NO_x contribute to the formation of ozone and particulate matter, and SO_2 is a direct respiratory irritant. Ground-level ozone has been linked to acute asthma attacks, children's asthma, and sudden infant death syndrome. *See* DAVID PEDEN, *Pollutants and Asthma: Role of Air Toxics*, 110 ENVTL. HEALTH PERSP. 565-68 (2002); JONATHAN PATZ & R. SARI KOVATS, *Hotspots in Climate Change and Human Health*, 325 BRITISH MED. J. 7372, 1094-98 (2002). MARIE O'NEILL ET AL., *Health, Wealth and Air Pollution: Advancing Theory and Methods*, 111 ENVTL. HEALTH PERSP. 16, 1861-70 (2003); TRACY J. WOODRUFF ET AL., *Air Pollution and Postneonatal Infant Mortality in the United States, 1999-2002*, 116 ENVTL. HEALTH PERSP. 1, 110-15 (2008). Particulate matter pollution aggravates asthma symptoms and leads to increased hospitalization. KENNETH DONALDSON ET AL., *Asthma and PM10*, 1RESPIRATORY RESEARCH 1, 12-15 (2000). Long-term exposure to particulate matter and sulfur dioxide are connected with lung cancer mortality and cardiopulmonary disease. C. ARDEN POPE ET AL., *Lung Cancer, Cardiopulmonary Mortality, and Long-Term Exposure to Fine Particulate Air Pollution*, 287 J. OF THE AM. MED. ASS'N 1132-41 (2002).
[56] As of 2002, 68 percent of African-Americans lived within a 30-mile radius of a power plant run on coal, versus 56 percent of white Americans. KEATING & DAVIS, *supra* fn. 54, at p. 6.
[57] For example, African-Americans are three times as likely to be hospitalized because of an asthma attack than white Americans, and they are twice as likely to die from the disease. *Id*. at pp. 9-10. New York City residents of color are twice as likely to be hospitalized during days when ozone is high. *Id*. at p.

such as Cancer Alley, Louisiana and Camden, New Jersey, the reduction of co-pollutants is a critical matter of public health that impacts residents daily and results in thousands of deaths each year.[58]

Though regulating and reducing co-pollutant emissions may be outside the scope of the CO_2 Budget Trading and Auction programs, the programs should at least be amended to create an information database mechanism that encourages collaboration amongst regulators implementing the different programs addressing the range of pollutants emitted by electric facilities. Instead of focusing on the media pollutants, this database would be structured on the facility, providing cross-media information on all pollutants emitted, the levels of emissions, the laws regulating these emissions, the monitoring authorities and a history of penalties and violations each facility has been subject to. The model for such a database has already been created by the EPA in promulgating the Emergency Planning & Community Right-to-Know Act and creating the Toxic Release Inventory database.[59]

C. THE STRUCTURE OF RGGI MUST ENSURE THAT DISPROPORTIONATE HEALTH AND ECONOMIC IMPACTS ARE NOT PLACED ON ENVIRONMENTAL JUSTICE COMMUNITIES

1) Distribution of permits under the program should ensure that economic burdens created by permitting do not disproportionately impact low- and middle-income consumers

Requiring facilities to begin paying for their carbon pollution will positively impact the environment and global public health by forcing companies to financially internalize the environmental impact of their production. These benefits will be accompanied by an increased price for the electricity generated by these plants. A price increase will have the most immediate and substantial impact on low-income consumers. Yet, the rapidly rising cost of oil demonstrates that the economic impacts of resource restriction on energy sources will impact middle-income consumers as well.

The RGGI regulations note that electricity consumers will experience economic impacts from a carbon trading system regardless of whether the carbon permits are sold or allocated to utilities.[60] In light of this economic reality, the only way to

---

10 (citing R. CHARON GWYNN & GEORGE D. THURSTON, *The Burden of Air Pollution: Impacts among Racial Minorities*, 109 ENVTL. HEALTH PERSP. SUP. 4, 501-06 (2001)).

[58] *See* COLE & FOSTER, *supra* fn. 21 at p. 78 for a review of the disproportionate environmental burdens in Cancer Alley, Louisiana. *See also* RON NIXON, *Toxic Gumbo*, SOUTHERN EXPOSURE (Summer/Fall 2008). For a review of the toxic burdens of Camden, New Jersey, *See* OLGA POMAR, *Toxic Racism on a New Jersey Waterfront, in* THE QUEST FOR ENVIRONMENTAL JUSTICE: HUMAN RIGHTS AND THE POLITICS OF POLLUTION 126 (Robert D. Bullard ed., 2005); OLGA D. POMAR & LUKE W. COLE, *Camden, New Jersey, and the Struggle for Environmental Justice*, 36 CLEARINGHOUSE REV. 94, 94-95 (2002); LUKE W. COLE & CAROLINE FARRELL, *Structural Racism, Structural Pollution and the Need for a New Paradigm*, 20 WASHINGTON UNIV. JOURNAL OF LAW & POLICY 265 (2006).

[59] *See supra* fn. 29 at pp. 243-250.

[60] 6 NYCRR §242 at p. 43.

ensure that a rise in consumer prices accurately reflects the price of permits is to conduct a 100% auction, prohibiting entirely the free allocation of permits. A 100% auction would also limit the opportunity for utilities to receive large windfall profits from the carbon trading system at the expense of consumers.

The need to restrict windfall industry profits is a major concern for environmental justice communities. The energy industry has spent the past 150 years profiting from environmental pillaging and destruction – largely at the expense of vulnerable low-income communities and communities of color. By forcing polluters to begin paying for the cost of their emissions, RGGI takes a step in the right direction. To discourage the expansion of environmental injustices and social inequities in the energy sector, RGGI must be structured to ensure that utilities are not increasing profits at the expense of the most vulnerable communities.

To achieve these goals, RGGI must severely restrict any free allocation (or give-aways) of auction permits. DEC and NYSERDA deserve commendation for creating a regulatory program that nearly achieves 100% auction. The agencies can go further though. The provision creating permit set asides for utilities holding long-term contracts and demonstrating financial hardship must be eliminated.[61] Facilities that cannot afford to fully internalize the cost of emissions are not market-competitive and should not receive government subsidies to avoid dissolution. If we are committed to reducing our regional carbon output and shifting our economy away from a fossil fuel basis, taxpayers should no longer be subsidizing fossil fuel-based energies.

WE ACT calls on the DEC to eliminate the 1.5 million ton set aside for long-term contracts entirely. If the agency is unwilling to go this far, it should at least impose affirmative requirements on facilities receiving the set asides and restrict the timeline for each set aside. Set asides that are accompanied by strict time limitations would give utilities greater flexibility in adjusting to the new carbon market while requiring immediate action to shift their energy consumption and production policies to ensure that they can begin competing in the market once their set asides sunset. In addition, the free allocation of set aside permits to facilities should hinge on compliance with affirmative requirements by the facilities. These affirmative requirements should include the mandate that facilities shift a portion of their energy consumption to clean, renewable sources within a set period of time. Requirements could also be imposed that restrict the emission of co-pollutants. If the public is going to be paying doubly for the carbon emission permits for these facilities,[62] it should at least receive some benefiting immediate action from the facility.

DEC RGGI regulations should also mandate the creation of a Consumer Financial Assessment Monitor to track the economic impacts of RGGI on state consumers and

[61] *See supra* fns. 45-46.

[62] Once in providing free emissions permits and a second time through price increases that will occur even though the facility has not paid for the permits.

direct DEC in responding to the potential financial strain that RGGI places on low- and middle-income consumers.

In addition to these programmatic changes, the RGGI impact statement should address the potential and expected economic impacts a carbon trading system will have on consumers and implement provisions to mitigate these impacts. As we move into a resource-constrained future, the cost of traditional, fossil fuel-based energy sources will rise. RGGI presents an opportunity to prepare for and mitigate these impacts. Mitigation measures should include encouraging energy efficiency, rewarding the development of clean, renewable, non-nuclear energy sources, and providing economic assistance to low-income and middle-income consumers. RGGI provides some of these measures but could and should go further in pushing a regional transition toward clean, renewable energy.

2) Auction revenues must go toward mitigating the public health and economic impacts that facilities have on local communities

DEC predicts that the carbon trading system will result in monthly consumer costs increases of one percent ($1.13/month) by 2021.[63] For many low-income consumers, financial flexibility to pay for increased energy prices is extremely limited. RGGI can assist constrained consumers by dedicating the use of some revenues raised through the permitting auction to ease this financial burden.

As the regulations are currently written, no money raised through the auction goes to assisting consumers. Auction revenues are collected by NYSERDA under the Energy Efficiency and Clean Energy Technology (EE&CET) Account and the agency retains authority to use those revenues as it sees fit.[64] 21 NYCRR §507.4(d) states that auction revenues will go toward four categories:

- Funding programs that promote energy efficiency;
- Funding renewable or non carbon-emitting technologies;
- Promoting innovative carbon-emissions abatement technologies that have significant carbon reduction potential;
- Paying for the administrative costs of the auction program.

Each category serves to encourage the shift in energy technologies that is necessary to wean the U.S. economy off of its fossil fuel-dependence.[65] None of the categories, though, address the public health and economic impacts of carbon emissions. Market watchers have predicted that revenues from RGGI could surpass one billion dollars.[66] At least some portion of this money should go toward redressing the strain

[63] 6 NYCRR §242 at p. 51.
[64] 21 NYCRR §§507.3(c), 507.4
[65] 6 NYCRR §242 at p. 10.
[66] *First RGGI Trades Point to Billion-Plus Regional Carbon Market*, ENVIRONMENTAL LEADER (Apr. 8, 2008). Available at http://www.environmentalleader.com/2008/04/08/first-rggi-trades-point-to-billion-plus-regional-carbon-market/. The potential size of the RGGI market can also be predicted based on the

that climate change and rising energy prices will have on low-income communities and communities of color. NYSERDA and DEC should ensure that revenue from auction sales go toward funding the following areas, in addition to the three already included in the regulation.

- ***Funds should be set aside to address public health impacts***

RGGI regulations recognize the public health impacts that emissions from electric utilities have had on local and global communities. It goes so far as to justify the program as a benefit to global public health and a likely benefit to local health through the anticipated reduction of co-pollutants that will occur through restricting carbon emissions.[67]

As noted above, the structure of RGGI provides the opportunity for the creation of pollution hotspots when facilities purchase additional emissions credits on the private, post-auction market.[68] Though some facilities will reduce emissions either to reduce auction purchasing costs or to bank emissions for a later date, other facilities may expand emissions because purchasing additional allowances is more economically efficient than reducing production, increasing efficiency or switching to cleaner fuel. Under RGGI regulations, so long as the regional emissions rate does not exceed the total cap, these local increases and decreases in emissions levels are permissible.

DEC and NYSERDA consistently fail to recognize the potential local impacts that this structure could have on communities, particularly communities that have been burdened for generations with excessive pollution levels and other environmental health burdens. Creating a system where there is the potential that these communities could experience increased emissions levels necessitates that the agencies provide regulatory provisions responding to these impacts. These provisions could take a variety of forms.

A percentage of auction revenues could be set aside in an escrow account. These funds would be held while monitoring of individual facilities occurs, tracking specifically emissions increases.[69] Any community housing a facility that increases its emissions levels under RGGI (or emits beyond its auction-sanctioned limit) would be eligible for escrow account funds to dedicate to programs that respond to the public health impacts of power plant emissions. The determination of how to use these funds could be directed by the Revenue Disbursement Working Group, discussed below.

---

current size of the global carbon market. In 2005, this market exceeded $10 billion. KARAN CAPOOR, *State and Trends of the Carbon Market 2006*, THE WORLD BANK (Washington, DC, May 2006) at p. i. Available at http://carbonfinance.org/docs/StateoftheCarbonMarket2006.pdf.

[67] 6 NYCRR §242 at pp. 1, 24.

[68] *See* BACHRAM, *supra* fn. 33.

[69] *See infra* § IV(D) pp. 37-40 for further discussion on monitoring requirements.

Another option for the use of revenues would be to set aside a percentage of revenues to fund a small grants program similar to the DEC EJ Small Grants Program. This program would provide grants to community-based organizations in impacted locations to respond to the public health impacts of local power plants.

- ***Funds should be set aside for community programs***

In addition to the set aside to mitigate potential public health impacts, a percentage of auction funds should go toward funding programs in local areas. This portion of funds differs from the above set aside. These funds would come from the revenue generated by each facility (or each locality, consolidating the revenue from multiple neighboring facilities). A percentage of this revenue would be set aside to go directly back into the community where the facilities are cited. Again, a Working Group or an individual monitor would be necessary to determine the use for the revenues, and to oversee the tracking from the auction process.

Ensuring that auction revenue goes directly back into the neighborhood where facilities are located provides some assurance for communities that they will no longer be shouldering the entirety of the burden from power plants without having access to any of the profits generated by the polluting activity. It also serves to recognize that plants have a local impact regardless of the global nature of carbon and climate change.

- ***Funds should be set aside to assist communities in independent monitoring***

A critical component of the RGGI program will be the monitoring mechanisms put in place to track the program and provide data for enforcement. Monitoring will be necessary to ensure that emissions reductions occur, facilities accurately report their historic and current emissions levels, fraud and gaming activities are restricted, impacts arising from the program are spread evenly across the region, and a range of other things.[70]

RGGI regulations provide for monitoring provisions for the auction and carbon budgeting processes.[71] In addition to these monitors, the program must provide a mechanism to enable independent community monitoring. The first step to enabling community-based monitoring is to provide a revenue source for communities to access to pay for an independent monitor or to fund community groups that will implement monitoring programs.

A portion of RGGI revenue must be set aside to go toward an independent community monitoring fund. It is not enough for the program itself to provide an independent monitor. The opportunity carbon trading creates for fraud, market manipulation and disparate local impacts through hotspots and the increase of co-pollutant emissions necessitates that communities be empowered to serve as their

[70] *See Id.* for a full critique of RGGI monitoring.
[71] 21 NYCRR §507.12; DEC DGEIS §2.5.5 at p. 50.

own watchdogs, and that they have access to some of the revenue being generated through the polluting activity occurring in their neighborhood for funding.

There are at least two potential ways a community monitoring fund could be created, overseen and distributed. The RGGI regulations could mandate that a percentage of auction revenues are set aside for community monitoring program and authorize DEC's Environmental Justice Program to oversee and distribute the funds. Putting the authority in the Environmental Justice Program would streamline monitoring activity and ensure fast implementation of community monitoring programs. On the other hand, this might put additional pressure on an already over-stretched agency program, leading to inefficiencies and a backlog of work (in terms of compiling monitoring data, disseminating information to communities, encouraging and overseeing the creation of community monitors and distributing funds to pay for such monitors).

The other option would be the creation of a statewide Community Monitoring Implementation Taskforce to oversee the creation of community watchdog groups. The Implementation Taskforce would oversee a statewide database that tracks individual auction activity and emissions level by facility. Based on information compiled from this database – tracking closely permit purchasing and emissions level activity in traditional environmental justice communities – the Taskforce would either implement independent monitors in potentially vulnerable communities, or could serve merely as an information clearinghouse and grant-making body that would provide communities with small grants to fund independent monitors.

The experience of communities in the European Union and in U.S. emissions trading program such as RECLAIM has made many environmental justice communities wary of the potential impact of a carbon trading system. These historical examples have made many communities highly skeptical of the sufficiency of agency-based monitoring, particularly when the monitoring mechanisms are as unclear and unstructured as those currently provided for under RGGI. Providing communities with *access* to revenue to implement their own independent monitors is a critical component to ensuring agency and industry accountability and continued community empowerment and safety.

- ***Funds should be set aside to assist low- and moderate-income consumers***

As stated above, the implementation of any carbon budgeting and trading system will result in economic impacts on utility purchasers. The severity of this impact will directly correlate to the financial security of consumers and the financial flexibility they have to absorb price increases for electricity. For low-income, and even moderate-income consumers, this flexibility is increasingly limited as energy costs

across all sectors rise and as inflation continues to increase at a pace far greater than average income levels.[72]

It is imperative that there be regulatory provisions to ensure that consumers overburdened by these price increases have access to government assistance. Energy sources such as electricity constitute a non-fungible cost for consumers who do not have the choice between paying for food and paying for electricity. Both constitute critical components of survival.

The carbon auction process creates an opportunity to absorb these economic impacts and provide assistance to struggling consumers. Economists have predicted that the regional carbon trading system could create a multi-billion dollar industry.[73] Setting aside even a small percentage of this revenue to ease price shocks for low- and moderate-income consumers would provide extraordinary benefits throughout the region and would still allow for funding of multiple other programs, including those provided for in the regulations and recommended in these comments.

It is generally recognized both by industries, economists and agencies that a sustainable shift to a carbon-reduced economy will require the implementation of measures that ease the economic burdens of increased energy costs for income-restrained consumers. The mechanism through which agencies provide assistance to these consumers is as yet undetermined but could take the form of other governmental assistance programs such as Food Stamps or WIC. Regardless of the program structure, though, the agencies must first ensure that revenue are set aside to fund the program. Setting aside a pre-determined percentage of auction revenue for consumer economic assistance would provide the base to establish and implement such a program.

- ***RGGI should mandate the creation of a community-based Revenue Disbursement Working Groups to direct revenue expenditures***

Any program to fund community-based programs or to provide economic assistance to vulnerable communities heavily impacted by the carbon budgeting process must ensure direct participation by impacted communities in the distribution of revenues process. DEC and NYSERDA could easily engage communities through creating a set of community-based Revenue Disbursement Working Groups across the state.

---

[72] For an overview of the impact of inflation on low-income consumers, *See* JOEL F. EISENBERG, *Short and Long-Term Perspectives: The Impact on Low-Income Consumers of Forecasted Energy Price Increases in 2008 and a Cap-and-Trade Carbon Policy in 2030*, Prepared for U.S. Department of Energy Office of Weatherization and Intergovernmental Program (Oak Ridge National Laboratory: Oak Ridge, Tennessee, Dec. 2007). Available at http://weatherization.ornl.gov/pdf/CON503-FINAL.pdf. *See also* ASSOCIATED PRESS, *Inflation Hits Home for Lower-Income Groups*, June 14, 2006 (MSNBC.com). Available at http://www.msnbc.msn.com/id/13300931/.

[73] *See supra* fn. 66.

Revenue Disbursement Working Groups would be made up of community stakeholders representing regional interests.[74] The groups would provide a centralized structure to implement each of the revenue disbursement programs described above, and to monitor the industry-based revenue disbursement programs currently included in the regulations. For communities to be effective in protecting and empowering themselves they must have access to information and money. Revenue Disbursement Working Groups would create a systemized mechanism to ensure that all communities, including traditional environmental justice communities, have access to these two critical components.

Working group participants must include community representatives, including community board members and relevant local officials. Communities could be further represented through advocacy groups, including environmental justice community group representatives and other local advocacy groups. One agency representative should be on each working group, as well as a representative from each regulated facility in the relevant region. Finally, there should be the opportunity for direct involvement by interested community members who have the time and inclination to participate actively in the group.

Working groups could be based out of the DEC Environmental Justice Program and would require almost no funding beyond the administrative costs of structuring and implementing the groups. Participants would work on a volunteer basis, though community groups could seek funding (through government programs, private funders or one of the grant-making programs suggested in these comments) to compensate for their involvement.

3) Offsetting programs must be structured to ensure protection of vulnerable communities

Under current RGGI regulations, regulated facilities can offset up to 3.3 percent of their permitted CO_2 emissions.[75] If allowance auction prices increase to $7/ton (termed a "stage one event"), offset allowances increase to 5 percent of total emissions.[76] If auction prices increase to $10/ton (termed a "stage two event"), offset allowances increase to 10 percent of total emissions.[77] This means that if the market price of carbon emissions increases to $10/ton, emitting facilities can exempt 10 percent of their entire carbon emissions from the auction permitting process and effectively "pay" for those emissions through carbon offset projects.

[74] Working groups would represent New York regions to consolidate interests and limit bureaucracy and agency costs. The regional boundaries could follow those already established by DEC (including Western New York, downstate/New York City, etc).
[75] 6 NYCRR §242 at p. 31.
[76] 6 NYCRR §242 at pp. 31-32.
[77] *Id*.

Environmental justice communities have a number of concerns about the RGGI offset provisions. Before the program regulations are implemented, substantial changes must be made to the offset provisions to ensure communities are not disproportionately burdened by the impacts of the offsets and to restrict industry fraud.

- ***Increases to offset allowances should not be based on market price increases***

Hinging the percentage of offset allowances on the market price of carbon emissions undermines the stated purpose of the RGGI program and creates market instability.

The purpose of RGGI is to reduce carbon emissions of power plants. By creating a market-based system of carbon regulation, the program assumes that the market will set a price on emissions that reflects the environmental, public health and other previously externalized costs of pollutants. In this free market, permit costs will rise as a reflect of decreased supply and increased demand. If prices exceed their optimal economic level, demand for permits will decrease as facilities put resources into increasing efficiency, decreasing production, or decreasing emissions through the implementation of best available technology. Each of these outcomes is to the benefit of people and the environment.[78]

The market must have the flexibility to enable and absorb price fluctuations in order to adequately function and fully encourage the transition toward clean, renewable energy sources. Setting an artificial ceiling on the price of emissions permits limits the ability of the market to encourage this transition and ensures that carbon-based energy production will continue with little abatement. In particular, setting a high price for permits at $10/ton blithely ignores indications of potential permit prices provided by the EU carbon trading system and recommendations by economists on the necessary market price to create sufficient emissions reductions.[79] The market price for carbon permits in this system currently exceeds £25/ton, or almost $40/ton.[80] This price is effectively inconceivable under current RGGI regulations, yet accurately reflects the market price for carbon.

Offsets are an important factor in market price setting because they serve as additional market indicators. That is, the permissible extent of CO_2 offsets impacts market price emissions by effectively giving free carbon allowances to facilities. Basing the number of these allowances on the market price of emissions indicates the permissible level of market prices, setting a false ceiling on prices that distorts the market.

[78] Including decreasing production, assuming that the decrease in production of energy from fossil fuel-based entities is matched by an increase in production from entities using clean, renewable energy.
[79] KEVIN SMITH, *Carbon Trading: The Limits of Free Market Logic*, CHINA DIALOGUE, Sept. 19, 2007 (stating that "[e]conomists estimate that carbon permits should be priced at around 30 to 50 euros per tonne (sic) in order to create sufficient incentives for low-carbon technologies." In U.S. dollars, this translate to 46 to 78 dollars per ton). Available at http://www.tni.org/detail_page.phtml?act_id=17350.
[80] *See* http://www.pointcarbon.com/ for real-time market prices of carbon emissions

Using the EU carbon market as a predictor of potential permit prices, the likelihood of a "stage two event" occurring before the sunset of the RGGI program in 2019 seems reasonably high. If and when market prices increase to $10/ton, the myriad of problems that the EU has seen with offset projects become a much more significant concern and likely burden for RGGI-impacted communities.

- ***Geographic limitations should be set on offset projects***

Under a "stage two event", 6.1 million tons of carbon emissions will be permissibly emitted so long as facilities undertake offset projects that equal that emission tonnage.[81] Because carbon is not thought to have local environmental or health impacts, the offsetting of local emissions with non-local carbon sequestration or reduction projects is supposed to have total benefits for the environment.

As stated earlier, any consideration of emissions from fossil fuel-based facilities must include carbon and co-pollutants. Assuming that emissions are offset by a project that only serves to positively impact global carbon emissions ignores the full impact of power plant emissions.

RGGI could address this problematic aspect of offsets by setting geographic limitations on offset projects and also expanding the category of acceptable offsets to include projects that mitigate the impact of co-pollutants. Geographic limitations are a critical requirement to limit the burden RGGI will place on environmental justice communities. Limitations would link the offset project directly to the locality that houses the facility that benefits from the offset provisions.

Geographic limitations could also create economic benefits for impacted communities. Just as carbon trading is anticipated to create a multimillion dollar market, offsets are anticipated to generate millions.[82] Funneling this market into communities that house polluting facilities – the very communities that consistently face high unemployment rates and extremely limited advancement opportunities – would serve as a critical component of advancing general environmental and economic justice.

- ***Extensive monitoring must be carried out to limit fraud in offsetting***

In the EU, offset projects have been plagued by two independent but related problems. First, there have been widespread instances of offsetting that is entirely fraudulent, effectively giving polluters a free pass on the portion of emissions that is

[81] *See supra* fn. 76.

[82] The carbon offset market arising from the Kyoto Protocol has already generated hundreds of millions of dollars. *Carbon Offsets – the Facts*, THE NEW INTERNATIONALIST, Issue 391 (July 2006). Available at http://www.newint.org/features/2006/07/01/carbon-offsets-facts/. *See also* ZX Xhang, *Estimating the size of the potential market for the Kyoto flexibility mechanisms*, 136 REVIEW OF WORLD ECONOMICS 3 (September 2000).

purportedly covered by their offsets.[83] In addition, an alarming number of offsets have resulted in local damage, displacement or economic and long-term environmental destruction.[84] The long-term negative impact of these projects far outweighs the limited benefits they have on carbon emissions. In addition, the geographic disbursement of these projects (with emissions occurring in developed European countries and most offsets occurring in underdeveloped countries in the global South) has led to objections that offsets serve to perpetuate traditional patterns of colonialism and disenfranchisement.[85]

These problems generally arise from the difficulty in verifying offsets. Some researchers have argued that offsets are in fact impossible to verify as they depend on the monitoring of two separate variable that are currently difficult, if not impossible, to track. First, the amount of CO_2 that would be emitted with and without the offset project must be determined. Second, the amount of carbon that the offset project sequesters or reduces must be determined.

Determining the amount of theoretical carbon emitted without the project depends broadly on self-reporting by the industry which has an economic incentive to distort its numbers. Even if the industry accurately reports emissions, there is no way to verify the theoretical non-offset emissions. Moreover, verification of the actual emissions occurring with the offset projects necessitates monitoring of facility emissions to ensure both accurate reporting and to ensure that emissions stay within a permissible level. As discussed below, the feasibility of this level of monitoring is questionable under the current regulations.

Verifying the amount of carbon offset by a project is even more difficult. There is insufficient scientific understanding of the Earth's carbon cycle to calculate with assurance the amount of carbon any project removes from the atmosphere, particularly in relation to how much carbon would have been generated by the land if used for other purposes.[86] Moreover, there has been insufficient analysis of the long-term effects and impacts of the projects that qualify as carbon offsetters. Creating a multimillion-dollar market for these projects that encourages their adoption on a widespread basis throughout the world could have a myriad of unforeseen impacts. The destructive planting of monolithic eucalyptus forests in Uganda and Brazil demonstrates clearly the environmental injustices that can arise from offset projects and the extensive negative impacts they can have on cultures and communities.[87]

---

[83] *See* SMITH, *supra* fn. 37.
[84] *See* Durban Declaration on Carbon Trading. Available at http://www.carbontradewatch.org/durban/durbandec.html.
[85] BACHRAM, *supra* fn. 9 at 6 (citing to a newsletter published by The Center for Science and the Environment, India).
[86] SMITH, *supra* fn. 37.
[87] *Id*. at pp. 32 – 39.

In light of these profound concerns with offsetting, WE ACT recommends that the offset provisions be eliminated entirely from the RGGI program. If offsets must be included though, they must be severely limited and subject to a systematic monitoring process that evaluates the effectiveness and long-term impacts of each project. The monitoring process must also include a mechanism to stop projects that are determined to be ultimately detrimental to local communities.

- ***The permissible categories of offset projects should be revised to promote environmental justice and encourage the transitioning of our energy economy***

Offset projects should be expanded to offset both the global impacts of CO_2 emissions and the local impacts of co-pollutants. The regulations currently permit offsets that fall under five categories:

- reduction of methane from landfills;
- reduction of emissions from electricity transmission;
- afforestation;
- reduction of agricultural methane emissions;
- natural gas and oil end-use efficiency.

Each of these categories generally have a positive impact on the environment, and the end-use efficiency category serves to encourage the transition of energy economy. The categorical limitation fails to recognize the local impacts of power plant emissions though, and misses the opportunity to mitigate these impacts and encourage cleaner energy production. RGGI could address the local health impacts of co-pollutants by including an offset category that connects to ambient air quality standards under the Clean Air Act, or other federal or state programs that address non-carbon emissions from power plants. Encouraging these type of programs would recognize the holistic impacts of our energy production and could result in the real benefit of saving lives in local communities almost immediately.[88]

Moreover, there must be more detailed requirements provided for the afforestation offset category.[89] Other carbon trading systems have shown that afforestation is an ineffective and inefficient way to reduce atmospheric CO_2. It has served to increase market uncertainty in the EU system, as estimates how much carbon trees absorb – and for how long – vary tremendously.[90] The scientific certainty with which carbon emissions can be linked with afforestation offsets is fairly low.[91] The extent of carbon sequestration created by forest planting depends both on the type of trees planted and the lifespan of the forest. There is strong evidence that planting new forests is less beneficial for carbon levels that maintain existing forests and

[88] *See* JOCELYN KAISER, *Evidence Mounts That Tiny Particles Can Kill*, 289 SCIENCE 5476, pp. 22-23 (July 7, 2000). *See also supra* fn. 55.
[89] 6 NYCRR §242 at pp. 35-36.
[90] KEVIN SMITH ET AL., HOODWINKED IN THE HOTHOUSE: THE G8, CLIMATE CHANGE AND FREE-MARKET ENVIRONMENTALISM 4 (Carbon Trade Watch 2005). Available at http://www.carbontradewatch.org/pubs/hothousecolour/pdf.
[91] SMITH, *supra* fn. 37 at 20.

encourage the preservation of old growth forests, which stores much more carbon than young trees.[92]

More disturbingly, there is extensive documentation of afforestation offset projects that end up causing greater environmental damage and carbon releases than carbon reduction.[93] RGGI seeks to avoid some of these problems by limiting applicable projects to "marginal agricultural land". This attempts to ensure that planters will not cut down existing forest in order to plant new trees to receive offset credits. There is still concern though about the planting of monolithic forest cultures or non-native forests that could cause long-term environmental harm.[94] In addition, the conversion of agricultural land to forest could have negative impacts of food prices if the market encourages widespread conversion of productive land into fallow forests. The current food shortage crisis and unexpected consequences of the biofuel industry necessitate that mitigation measures for these potential impacts be implemented before the program begins.

In addition, the corporate nature of offset projects serves to potentially disempower the local communities that host offset projects. Afforestation projects in developing countries – which would be allowed under RGGI should carbon be priced at $10/ton or above – have been catalogued as having a negative impact on local biodiversity and soil nutrients.[95] While in theory such projects have the potential to create secure employment opportunities, in practice the negative impacts on soil fertility and water supplies, as well as poor project oversight, have further impoverished host communities. These impacts, as mentioned above, have led to the accusation that offsets result in "carbon colonialism" by enabling industrialized nations to continue emitting vast quantities of greenhouse gases while exploiting the environment and economy of developing countries.[96]

Placing geographic limitations on offset projects would serve to address some of the problems with afforestation. Yet, the total impacts of forestation offset projects go beyond mere colonial imposition. These other negative impacts must be addressed in the regulations and provisions must be included to deter their occurrence and mitigate the extent of their impact should they occur.

---

[92] *See generally* GREEN PRESS INITIATIVE, *Accounting for Forest Carbon Loss* (June 2008)
[93] BACHRAM, *supra* fn. 9 at pp. 7-8.
[94] For example, monoculture plantations located on peat bogs emit more carbon than they capture and inappropriate tree species have created "green deserts" in some areas because of the amount of water they absorb. *See* SMITH, *supra* fn. 90.
[95] SMITH, *supra* fn. 37 at p. 25 (citing a 2005 study including 600 observations of tree plantations. ROBERT B. JACKSON ET AL., *Trading Water for Carbon with Biological Carbon Sequestration*, 310 Science 5756, 1944-47 (2005)); *Id*. at p. 29 (describing the failure of a mango tress offset program funded by the Carbon Neutral Company and its negative impact on an Indian community. Distribution of saplings was limited, 40 percent of the mango trees that were planted died, and villagers were deprived of promised employment security).
[96] BACHAM, *supra* fn. 9.

D. MONITORING MUST BE STRINGENT AND EXTENSIVE

1) Monitoring is necessary to create an effective carbon reduction program and to protection communities

To ensure that a carbon trading system works effectively, efficiently and in an environmentally just way, extensive monitoring must occur at all stages of the process. Implementing a budgeting and trading program without requiring extensive and consistent monitoring will encourage industry polluters to reap as much financial benefits as possible from the program while reducing carbon emissions little. Industries are likely to try to game the system through paying the minimum possible for permits and displacing the entire cost of the regulatory program onto consumers. Facilities will be encouraged to engage in these activities while still gaining the public relations benefits of being perceived as "green" and "energy forward".

Monitoring will have immediate benefits for consumers, communities and agencies both through discouraging this behavior and consistently improving the budget and trading program. Monitoring will provide the information and mechanism to evaluate the effectiveness of the system and enable agencies to respond to problems that arise in these evaluations in a timely manner.

2) A comprehensive public database must be maintained by DEC

Monitoring should occur at all stages of the carbon trading process. Monitoring information should be published periodically and publicly available. For certain aspects of RGGI, information collected through the monitoring process should be made directly available to communities through publication of a facilities tracking database. This database should serve as a comprehensive collection of monitoring data and evaluations and should be publicly available on the internet and in hard copy form.

The internet monitoring database should provide real-time monitoring and GIS mapping so that emissions levels can automatically be uploaded into the database. This may require the purchase of more sophisticated mapping technologies, but this cost will be easily surpassed by the staff time and resources that are saved through an automatic mapping system.

The GIS mapping should provide informational overlays of facilities, potential environmental justice communities, historic pollution levels (of carbon and other pollutants) and current emission levels. The internet-based map should include GIS links that provide users with real-time information on emissions levels, offset projects, set-asides, auction participation and outcomes, and emissions violations.

Providing this level of detail is important for agency monitoring of facility operations. A mapping monitor system also empowers communities to an extent that

surpasses traditional access to industry information and reporting. By having access to real-time trading and emissions repots, and having this information recorded in an accessible map format, communities can access and understand the carbon auctioning and trading information. Communities that can access industry information, and *understand it*, can utilize this very information to hold facilities and regulating agencies accountable. Only by holding these actors accountable for their actions and impacts can communities ensure protection of their health, environment and economy.

3) Monitoring should track especially auctioning, emission levels, trading and violations

Agency monitoring of the RGGI process should pay particular attention to the following areas:

- **The carbon permit auction**

Monitoring should occur at all stages of the auction process. As with many other aspects of the RGGI monitoring program, monitoring during the auction will serve both to record information on who is participating in the auction, the price levels of permits and the ultimate purchase amounts for each facility, and will also serve to encourage industry honesty and compliance with requirements of the program.

- **Emissions Levels**

A critical component of the success of a carbon cap-and-trade process is the tracking of emissions levels of regulated facilities. Though some self-reporting will have to occur because of limitations on agency resources, extensive resources must be dedicated to monitoring emissions levels at least at the start of the program to ensure compliance and create a system where accurate and honest self-reporting is encouraged. Conversely, extensive initial monitoring of self-reporting levels will serve to severely discourage false reporting, thereby increasing the efficiency and effectiveness of the program.[97]

Monitoring should begin before the auction process even begins. At the least, agencies should be monitoring the self-reporting of facility emissions at least six month before the first auction. For New York, this would require DEC or NYSERDA to have begun their monitoring programs by March 2008. This pre-monitoring is essential to ensure that the budgeting process uses accurate and honest reporting and to guarantee that inflated emissions levels are not being used to establish the initial cap for each facility. Even though the ideal time has passed for the agencies to begin this pre-process monitoring, spot-check monitoring can still occur before the first auction in September. If this type of limited monitoring was accompanied with heavy financial penalties for false reporting, a reasonable

[97] Assuming that monitoring is accompanied by enforcement. *See infra* § IV(E) p.41 for further discussion.

approximation of a comprehensive monitoring program could be achieved between now and September.

Monitoring of emissions levels should also be standardized and occur on a consistent, rolling basis throughout the auction process. This monitoring would serve to ensure that facilities are complying with mandatory emissions reporting requirements and to verify that actual emissions are identical to reported levels.

- **The permit trading process**

Under RGGI, the carbon trading system is entirely unregulated. Creating a private market of this size without any substantive government oversight or regulation could have extensive unforeseen impacts on local communities and the region as a whole. DEC should include within its RGGI regulations provisions to retain authority over the auction trading process so that it can mitigate negative impacts recorded in the monitoring process. In addition, retaining some authority over the trading process will ensure that the market forces encouraged by the trading process do not create disproportionate impacts on low-income communities and communities of color that are already burdened by social inequities and environmental injustices.

Information from the permit trading process should be included within the monitoring database to ensure that these goals are achievable. The monitoring database must include tracking information on permit trading in the unregulated market. RGGI currently requires DEC to record allowance trading.[98] The recording of this trading in the database must track purchaser, seller, permit price, number of permits sold, number of permits held by purchaser and seller prior to the trade, and provide information on each entity's purchases in, at least, the most recent auction.

The trading information recorded in the monitoring database must be overlaid on a community composition map that records potential environmental justice communities throughout New York State. DEC has already compiled the information for such a map and created a broad map of potential New York environmental justice communities.[99] The agency must improve the geographic detail of this map – or release the more detailed mapping if it has been completed – to provide more minute information on environmental justice communities and communities that house electric facilities that participate in the RGGI process.

- **Enforcement mechanisms by agencies**

A monitoring database must include information on facility violations and enforcement actions taken by agencies or penalties imposed on facilities. This information is essential for communities seeking to track the local impacts of the carbon trading system and to hold their local facilities accountable.

[98] 6 NYCRR §242 at p. 59.
[99] *See* DEC DGEIS Figure 2.

E. ENFORCEMENT MECHANISMS MUST ACHIEVE COMPLIANCE AND PENALIZE FRAUD

Extensive, systematic and comprehensive monitoring is only effective at achieving regulatory compliance if it is accompanied by a stringent enforcement and penalty procedure that holds facilities accountable for their misconduct. In light of DEC resources, the most effective enforcement procedure might be one modeled after EPA's Clean Water Act (CWA) enforcement provisions. Though the law has been criticized as giving a slap on the wrist to point sources that discharge in excess of permitted amounts, it has been successful in achieving honest reporting by polluters. This level of honesty has primarily been achieved through the harsh fines that are imposed on any source the inaccurately or falsely reports discharge levels. For facilities subject to the CWA, it is more economically beneficial to report illegal polluting honestly than to falsify discharge levels and be subject to a false reporting fine.

The broader agency goal should be to create a system where facilities emit only within permitted limits and honestly report these emissions. In reality though, environmental laws have traditionally been more successful at achieving reporting than in restricting polluters to legal levels. Having access to accurate reporting is critical for achieving community protections. Yet, substantive community protection hinges on dual tools: access to accurate information about local emissions levels *and* the legal right to enforce required environmental standards.

RGGI *must* be revised to create a private right of action for community members to enforce the provisions of the regulation. It is well documented that the overwhelming success of most environmental laws has hinged on their "citizens suit" provisions which provide local communities with the right to sue 1) private entities for failing to comply with environmental laws or 2) agencies for failing to enforce environmental laws. A citizens suit provisions under RGGI would provide private citizens with the right to enforce the emissions permit level placed on each facility. It would also provide citizens with the power to challenge DEC or NYSERDA if either agency fails to fully comply with the requirements of the regulation in carrying out the budgeting or auction process.