

Cap and Trade Hurts Environmental Justice

Evidence From the Regional Greenhouse Gas Initiative (RGGI)

Food & Water Watch examined the environmental justice impacts of the Regional Greenhouse Gas Initiative (RGGI), a market-based cap and trade program encompassing nine Northeastern and Mid-Atlantic states that purports to reduce carbon dioxide (CO₂) emissions from power plants. Under RGGI, each state places an industry-wide “cap” on CO₂ emissions from power plants and then auctions off a set number of “allowances” to polluters based on this steadily reducing cap. Power plants must hold one allowance for each ton of generated CO₂ emissions in order to be considered in compliance with the program, or they can choose to bank excess allowances for future use or sell them to other polluters.¹

An analysis by Food & Water Watch confirms that pollution trading schemes like RGGI compound the toxic burdens on disadvantaged communities. Lower-income communities and communities of color, already overburdened by the disproportionate number of polluting facilities located in their neighborhoods, often lack the political influence to combat these inherently unfair market-based schemes. Under cap and trade, polluters are allowed to continue — or even increase — emissions that are hazardous to human health and the environment.

Food & Water Watch analyzed the communities that experienced either aggregate increases or decreases in CO₂ and toxic fine particulate matter (PM_{2.5}) emissions from RGGI power plant facilities by comparing the average change in emissions from 2011-2013 to 2014-2016, before and after a reduction in the RGGI cap.

The results of the analysis found that:

RGGI operates in areas with extreme underlying environmental justice disparities. Areas with RGGI power plants had disproportionately more people of color, more poverty, lower incomes and lower rates of educational attainment than areas without RGGI power plants.

Neighborhoods that experienced CO₂ emission increases over the study period had disproportionately more people of color, more poverty and lower median household incomes compared to neighborhoods that experienced decreases in CO₂ emissions.

Neighborhoods that experienced increases in both CO₂ and PM_{2.5} emissions over the study period displayed even wider disparities — with higher proportions of people of color and lower median household incomes — compared to neighborhoods that experienced decreases in both of these pollutants.



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Cap and Trade Compounds Pollution Burdens in Disadvantaged Communities

These results provide concrete evidence that cap and trade programs like RGGI disproportionately harm people of color and low-income communities, exacerbating underlying disparities such as the concentration of polluting facilities in vulnerable neighborhoods.

Cap and trade schemes harm environmental justice and are not sufficient replacements for regulation. But, as the effects of climate change worsen, states like New Jersey and Pennsylvania have increasingly viewed schemes like RGGI as a way to combat greenhouse gas emissions.²

The environmental injustice of RGGI is not a fluke, but rather an inherent symptom of market-based programs that value profits over people and the environment. Moreover, RGGI's flawed and harmful approach has not been proven to reduce greenhouse gas emissions despite claims to the contrary, and has likely encouraged the shift to natural gas-fired power plants, promoting dependence on gas from the hydraulic fracturing (or fracking) of shale formations rich in the potent greenhouse gas methane.³ Other program elements, such as the "banking" of allowances, and the continued diversion of RGGI funds away from clean energy initiatives further emphasize the program's inability to significantly reduce carbon emissions and address climate change.

Conclusion

The only real way to protect environmental justice communities and combat intensifying climate change is through bold, systemic change. Continued investments sunk into fossil fuel infrastructure harm vulnerable populations and lock us into a dirty energy future in defiance of climate science. The way out must be an immediate end to the use of fossil fuels and a rapid shift to zero-emission, genuine renewable power, accompanied by widespread deployment of energy efficiency measures and battery storage. The goal of 100 percent clean, renewable energy by 2030 is achievable. We must demand strong government policies that reject market-based schemes and commit to aggressive action now.

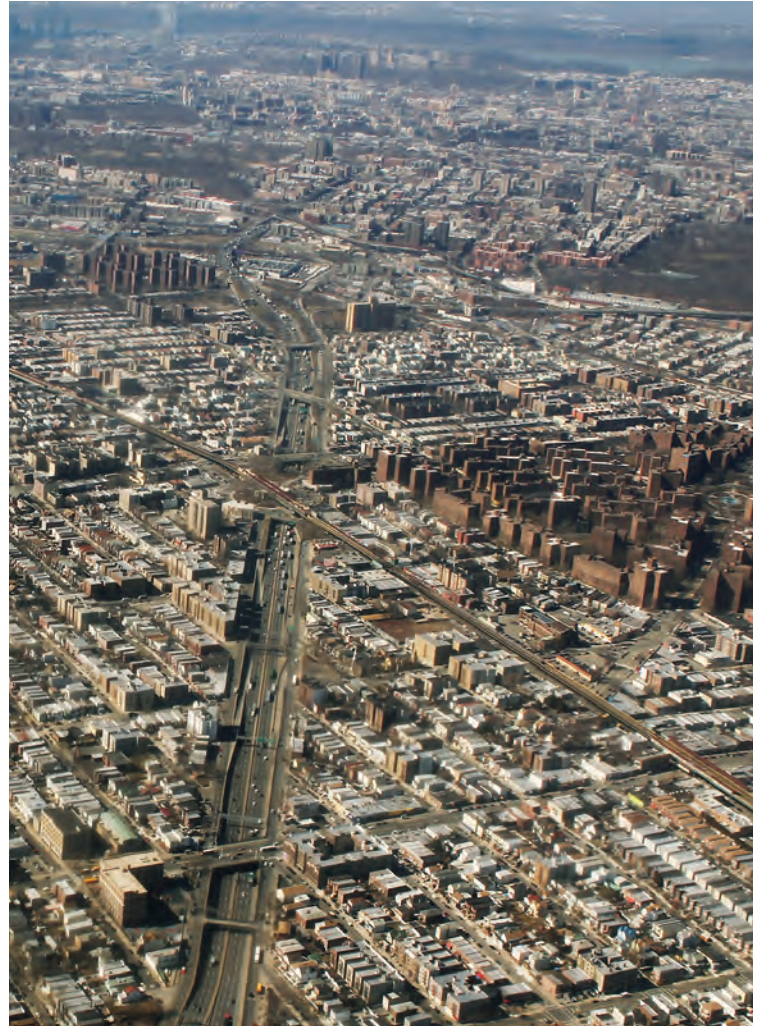


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Endnotes

- 1 Ramseur, Jonathan L. Congressional Research Service. "The Regional Greenhouse Gas Initiative: Background, Impacts, and Selected Issues." R41836. Updated July 16, 2019 at 2, 4 and 8; Regional Greenhouse Gas Initiative (RGGI). "Program overview and design: Elements of RGGI." Available at <https://www.rggi.org/program-overview-and-design/elements>. Accessed September 2019 and on file with Food & Water Watch; Potomac Economics. Prepared for RGGI, Inc. "Report on the Secondary Market for RGGI CO2 Allowances: Second Quarter 2019." August 2019 at 7.
- 2 Office of Governor Phil Murphy. [Press release]. "Governor Murphy announces adoption of rules returning New Jersey to Regional Greenhouse Gas Initiative." June 17, 2019; Office of Governor Tom Wolf. [Press release]. "Governor Wolf takes executive action to combat climate change, carbon emissions." October 3, 2019.
- 3 RGGI, Inc. [Press release]. "RGGI states welcome New Jersey as its CO2 regulation is finalized." June 17, 2019; Ramseur, Jonathan L. Congressional Research Service. "The Regional Greenhouse Gas Initiative: Background, Impacts, and Selected Issues." R41836. Updated July 16, 2019 at 14 to 15; Howarth, Robert W. "Ideas and perspectives: Is shale gas a major driver of recent increase in global atmospheric methane?" *Biogeosciences*. Vol. 16. 2019 at 3041; Lavoie, Tegan N. et al. "Assessing the methane emissions from natural gas-fired power plants and oil refineries." *Environmental Science & Technology*. Vol. 51. February 2017 at 3373.