Adding Protections to a Cap-Trade-and-Invest Program in New York Could Make Disadvantaged Communities Better Off

What's the story?

In 2019, New York State passed the Climate Leadership and Community Protection Act (CLCPA), which requires the state to reduce its emissions and the disproportionate air pollution burden in disadvantaged communities.

The state is relying heavily on a cap-trade-and-invest system to reach the goals of the CLCPA and generate new funding for climate and environmental action. A cap-trade-and-invest program would require large industrial facilities, power-generation facilities, and fuel suppliers to buy permits to emit carbon dioxide. However, a cap-trade-and-invest program with no guardrails or protections does not ensure emissions reductions are equitably distributed; individual emitters can still purchase large numbers of permits, possibly leading to increased emissions (called "hotspots") in some disadvantaged communities.

New work led by researchers from Resources for the Future (RFF) and the New York City Environmental Justice Alliance (NYC-EJA) investigates how certain guardrails in the cap-trade and-invest program can distribute emissions reductions for the benefit of disadvantaged communities. In a new report, they find that a cap-trade-and-invest policy that includes emissions caps for the residential, transportation, and electric power sectors, as well as specific caps for each power plant, can reduce emissions near disadvantaged communities without increasing program costs.

"Climate policies and regulations will not magically benefit environmental justice communities. Policymakers need to intentionally and meaningfully examine and alter the systems and policies that result in disproportionate burdens, disparities, and injustice in these communities. While the CLCPA is a major step forward, environmental justice stakeholders are concerned that a cap-trade-and-invest program with little to no protections will reinforce existing patterns of pollution and sickness in communities of color and low-income communities. We can't take any more chances on the quality of life and health of New Yorkers. Guardrails for cap-trade-and-invest are essential to ensuring all communities see the benefits of reduced emissions and pollution and do not come at the expense of some."

- **Eunice Ko, NYC-EJA Deputy Director**

How do the policy designs compare?

The research team analyzed the distribution of emissions reductions and some key costs associated with two versions of a cap-trade-and-invest program, both of which meet the CLCPA's statewide greenhouse gas emissions reductions targets and include generous subsidies.

The researchers modeled a "traditional" program, which allows for the free trading of carbon emission allowances. While the traditional program does reduce emissions in all modeled sectors, the reductions vary greatly across sectors. The team also finds that while most power-generating facilities decrease emissions under the program, some power plants increase their emissions relative to their 2016 baseline.

In comparison, the restricted-trading case was shaped with guidance from environmental justice stakeholders at NYC EJA and elsewhere. This option places guardrails on sectors and facilities, which must reduce carbon dioxide emissions (and by extension, co-pollutant emissions, such as sulfur dioxide, nitrous oxide, and direct PM2.5) by a certain percentage. Entities cannot trade to emit beyond their specific caps.

The new modeling shows that putting specific carbon dioxide emissions limits on power-generating facilities spreads out emissions reductions and their related co-pollutants more equally across facilities. Additionally, setting sector specific targets allows policymakers to manage the prices of key household energy sources like gasoline and electricity while still getting the same emissions results.

The impact of these policy decisions on air quality in overburdened communities will be the subject of an upcoming report by RFF and NYC-EJA. In that analysis, the team will leverage a model that considers how direct emissions covered in this report combine, migrate, and settle to affect community concentrations of harmful pollutants.

"As New York agencies decide how to design the state's cap-trade-and-invest policy, the CLCPA provisions require them to consider the impact of the policy on disadvantaged communities. Guardrails advocated for by environmental justice stakeholders are often perceived as potentially costly interventions, but our work offers evidence that facility-specific caps in the power sector could set a minimum emissions reduction rate at all facilities without meaningfully impacting the cost of the program."

- **Molly Robertson, RFF Senior Research Associate**

Where can I learn more?

For more, read the report, *Prioritizing Justice in New York State Cap-Trade-and-Invest*, by Alan Krupnick, Molly Robertson, and Wesley Look from RFF and Eddie Bautista and Eunice Ko from NYC-EJA.

For similar work, read the preceding report on air quality improvements under different versions of the CLCPA, which was released in September 2023.

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