

Environmental

Advocates

NY



**Position Paper: Funding Mechanisms for Implementing the  
Transportation-Related Recommendations of New York State's  
Climate Law**

**Environmental Advocates NY**

**October 2021**

**Acknowledgements**

Environmental Advocates NY thanks The Ida and Robert Gordon Family Foundation, New York Community Trust, the Merck Family Foundation, The Morton K. and Jane Blaustein Foundation, and the Tortuga Foundation.

**Authors:** Rachel Patterson, Amanda Sachs

**About Environmental Advocates**

Environmental Advocates NY fights for policies that will restore and protect New York's environment, support healthy, vibrant communities, and secure benefits and outcomes for all within and beyond the state through education, partnerships and advocacy.

## **Executive Summary**

In 2019, New York State positioned itself as a leader in the fight for climate justice through its passage of the Climate Leadership and Community Protection Act (CLCPA). The CLCPA places aggressive limits on greenhouse gas (GHG) emissions, requires the reduction of co-pollutants that disproportionately harm disadvantaged communities, and requires that disadvantaged communities receive at least 35% of climate-related investments.

The 22-appointed members of the Climate Action Council are making progress on the implementation of the climate law by developing a scoping plan that will provide a pathway for achieving the law's ambitious goals. Throughout the implementation process, the Climate Action Council has been advised by working groups and advisory panels with expertise in the sectors relevant to New York's emissions profile. The scoping plan is to be presented to the public by the end of 2021 and should be ready for implementation by January 2023. This paper relates to the issue of funding the transportation-related recommendations presented to the Climate Action Council by the Transportation Advisory Panel.

The first section outlines different sources of funding: federal, consumer, private, and polluters pay. The second section examines more specific approaches to funding the transition to a low or zero-emission transportation future and electrified and climate-ready transportation infrastructure: a feebate, utility subsidies, reorganization of State Department of Transportation funds, taxing vehicle miles traveled, and developing low or no-emissions zones at ports.

## **Introduction**

The transportation sector is the greatest source of greenhouse gas emissions in New York State.<sup>1</sup> In addition to emitting greenhouse gases that contribute to the global climate crisis, transportation emissions associated with internal combustion engines also produce co-pollution such as particulate matter 2.5, nitrogen oxides, and carbon monoxide which harm public health. These co-pollutants contribute to local negative health outcomes such as increased rates of asthma, heart conditions, diabetes, and birth defects that disproportionately impact low-income communities and communities of color.<sup>2</sup> Urgently and adequately addressing emissions from the

---

<sup>1</sup> "36% of New York's greenhouse gas emissions can be attributed to the transportation sector."

New York State Department of Environmental Conservation, "Reducing Greenhouse Gas Emissions: Limiting Future Impacts of Climate Change." Accessed October 7, 2021.  
<https://www.dec.ny.gov/energy/99223.html>

<sup>2</sup> Union of Concerned Scientists, "Fact Sheet: Inequitable Exposure to Air Pollution from Vehicles in New York State," 1-2.

<https://www.ucsusa.org/sites/default/files/attach/2019/06/Inequitable-Exposure-to-Vehicle-Pollution-NY.pdf>

transportation sector will allow the State to meet the GHG reduction, co-pollution reduction, and equity goals mandated by the climate law.

Considering the CLCPA requirement to account for emissions using a 20-year global warming potential, and the limitations that other sectors may have in reaching the emissions reduction goals, it is critical that sectors with zero-emissions technologies available for mass-use deploy those strategies as quickly as possible. The path to zero-emissions transportation is clear and achievable and New York State must incentivize the transition to all electric vehicles expeditiously to uphold the CLCPA's commitment to GHG emissions reductions and equitable outcomes for historically overburdened communities.

### **Funding the climate law**

While the Climate Action Council has yet to directly address how to fund the transition away from fossil fuels, this is a critical detail that will determine whether the State can implement programs and policies that reach the goals of the CLCPA. The State must also prioritize the need to reduce co-pollution in addition to GHGs as specified by the CLCPA.

The funding tools identified must also allow for the transition away from fossil fuels to occur in a manner that is geographically and economically fair and uniform across the state, meaning that emissions reductions and job opportunities associated with the transition should not occur disproportionately in any one or two regions of the state. The access to funding must also be equitable, such that communities with fewer resources aren't required to compete for program funds with bigger cities that have access to more resources. Competitive funding models often result in funding being provided to more resourced communities first, and more often. Funding must be also geographically considerate of the fact that disadvantaged communities exist across the state, not just in major cities.

Due to these complexities in funding the CLCPA, and the potential for funding to be disbursed in an inequitable fashion, it will be critical for the Climate Action Council to weigh in on funding opportunities sooner rather than later. The Climate Action Council should identify specific programs that should receive priority for funding in each sector. Without specificity, there is a blatant opportunity for failure.

There are four funding models to be considered, which are detailed below. Three of these four opportunities provide long-term funding, and the strategies can be used jointly to accelerate the transition to zero-emission transportation.

#### **A) Federal funding**

New York could strategically use federal funds to implement the CLCPA. Both the federal infrastructure bill (\$1 trillion) and the federal reconciliation bill (\$3.5 trillion)

are expected to provide states with funding to combat transportation emissions, including funding for electric vehicles, charging stations, and public transit systems. Funding will likely be provided to states in the form of block grants, and agencies should begin to prepare for the best and most equitable use of these funds. Projects should be identified and geographically mapped to ensure that the entire state benefits from federal investments and that disadvantaged communities feel the benefits of investment. Agencies should be creative in maximizing these funds by spending them on projects that reduce emissions and create workforce opportunities and support frontline communities, rather than simply bolstering existing programs. A downside of this option is that it is not reliable or consistent. While these funds are sorely needed across the country there is no promise of future funding, and this money alone should not be relied upon as a single solution, but rather considered as a down payment for the transition to an emission-free economy.

### **B) Consumer-funded programs**

New York could expand its current model of consumer-funded programs through ratepayer funding, congestion pricing, and other means of collecting small revenues from New Yorkers. Electric and gas utilities have existing programs that charge customers a small fee that is used by NYSERDA to support emissions reduction programs such as energy efficiency in housing. While this model has proven to be somewhat successful in practice, the benefits are not always felt equally across income brackets. This is because, despite all ratepayers paying into the fund, low-income ratepayers have a greater energy burden, meaning they spend a larger portion of their income on energy bills. Moreover, ratepayer funding models currently in use are not raising enough funds quickly enough to result in the scale of emissions reductions required by the CLCPA. Transitioning away from fossil fuels is estimated to cost billions of dollars and raising billions by charging consumers would put low-income residents at a disadvantage – the opposite of the intent of the CLCPA.

### **C) Private sector funding**

Private sector funding has been considered by the Transportation Advisory Panel. Using the private/business sector as a source of funding can be done in several ways. It typically involves charging upstream producers and manufacturers that purchase and sell either fuels that combust and produce greenhouse gases, or internal combustion engine vehicles themselves.

The taxation of fuels has been exemplified through programs like the low carbon fuel standard, which is used in California. Through this program, fuel suppliers are charged a fee based on the carbon intensity of the fuel they produce, and those funds are intended to support the expansion of electric vehicles throughout the

state. In practice however, this program has created a situation where “low carbon” fuels – which still combust GHGs and produce co-pollution – are incentivized over gasoline. While carbon emissions have decreased, other GHGs and co-pollutant emissions are not addressed through this program, despite being in place for over a decade.<sup>3</sup>

Private sector funds can also be gathered through “feebate” programs which charge manufacturers and dealers of internal combustion engine vehicles an additional fee when being sold in the state (discussed further in the next section). The proceeds gained can be spent on the expansion of rebate programs to allow for more residents to afford EVs. Funds from these programs should be implemented thoughtfully such that benefits can be maximized for individuals that need the most support to transition away from fossil fuel vehicles. Policies should also be put in place to limit the ability of dealers and manufacturers to offset the fee by up charging customers.

#### **D) “Polluter pays” model**

New York could directly charge large-scale polluters for their emissions, an example of this is the “polluter pays” model that is detailed in the Climate and Community Investment Act (CCIA) bill sponsored by Senator Parker and Assemblymember Cahill. This solution requires identifying the upstream source of emissions so that average consumers who currently rely on fossil fuel resources are not the sole funding source as described above.

This model has proven to be successful in the electricity sector as demonstrated through New York’s participation in the Regional Greenhouse Gas Initiative (RGGI). Through the RGGI program, various energy generators have been identified as major polluters and are required to pay for emissions produced. Funds from the RGGI program have paid for numerous programs operated by NYSERDA, generating more than \$1.5 billion dollars since the program began in 2008.<sup>4</sup>

The polluter pays model could apply economy-wide or apply to specific highly polluting sectors like transportation. However, these polluting industries are expected to pass costs onto consumers. Therefore, the CCIA includes a provision that requires the Public Service Commission to identify and mitigate any increase in utility prices within six months of the bill’s passage, with an emphasis on avoiding price increases for the lowest earning 60% of New Yorkers. Their oversight powers

---

<sup>3</sup> *Environmental Advocates NY does not support the low carbon fuel standard model and strongly cautions against any schemes that do not directly focus on electrification and/or allow the continued combustion of any greenhouse gas.*

<sup>4</sup> NYSERDA, “Regional Greenhouse Gas Initiative,” Accessed October 7, 2021.

<https://www.nyserdera.ny.gov/researchers-and-policymakers/regional-greenhouse-gas-initiative>

include approving or denying requests from utility companies to increase the rates we pay for gas and electricity. The CCIA also outlines a rebate program that states thirty percent of the funds raised through the CCIA (around \$3 - \$5 billion each year over the first ten years) would be invested in a low-and moderate-income and small business rebate program.<sup>5</sup> Modelling from the University of Massachusetts Political Economy Research Institute shows that the lowest earning 60% of New York households will receive a rebate payment equal to or greater than the increased costs they will bear.<sup>6</sup>

### **EANY Roundtable on Transportation Solutions**

In September, Environmental Advocates NY gathered transportation advocates and experts to discuss strategies for electrification of the transportation sector that center on the need to prioritize benefits and emissions reductions for disadvantaged communities. The roundtable also focused on methods of funding the transition to zero-emissions transportation in New York in addition to those listed above. It was agreed upon that the Transportation Advisory Panel recommendations that were presented to CAC did not go far enough and consistently cited the lack of funding options as a reason for not being able to present bigger, and bolder ideas. At the same time, the integration analysis and new baseline indicate that the transportation sector needs to dig even deeper to realize emissions reductions.

As far as strategies to fund transportation electrification, the Transportation Advisory Panel advanced recommendations for the low carbon fuel standard (LCFS) and the transportation climate initiative (TCI). We collectively agreed that adopting a low carbon fuel standard program for New York State would perpetuate the state's fossil fuel reliance and allow for the continued combustion of fossil fuels in the transportation sector. The low carbon fuel standard in its current iteration falls well below the standards of the CLCPA, and not only does it lack language directing funds and benefits towards disadvantaged communities, but there is also no consideration of co-pollution. At the same time, the Transportation and Climate Initiative as a cap-and-trade system could worsen environmental burdens on already disadvantaged communities. For example, the cap-and-trade system implemented in California resulted in the concentration of power plant emissions in low-income communities and communities of color – the opposite of the CLCPA's

---

<sup>5</sup> NY Renew, "Ensuring the CCIA is Progressive: Mechanism to prevent cost increase on New Yorkers," Accessed October 7, 2021.

[https://drive.google.com/file/d/18mSsl8i\\_PRWzUe\\_jPzte7UsH8ufijVYr/view](https://drive.google.com/file/d/18mSsl8i_PRWzUe_jPzte7UsH8ufijVYr/view)

<sup>6</sup> Robert Pollin, Heidi Garrett-Peltier, Jeanette Wicks-Lim, "Clean Energy Investments for New York State: An Economic Framework for Promoting Climate Stabilization and Expanding Good Job Opportunities", Political Economy Research Institute, University of Massachusetts at Amherst, November 2017.

intent.<sup>7</sup> Environmental justice communities have also not been included in the planning process of TCI, and equity considerations that are being added to TCI are being done largely without direct engagement from environmental justice or climate justice organizations.

Realizing the existing flaws in some of the funding mechanisms within the Transportation Advisory Panel's recommendations, we've compiled some alternative ideas to fund the electrification of transportation in New York State equitably and while reducing pollution in existing emissions 'hotspots.'

### **1) Feebate**

A feebate places a fee on the purchase of vehicles that emit more GHGs and are less energy efficient. Funds generated by these fees would correspond with a rebate awarded to purchasers of electric vehicles. This model is self-funded and would provide greater incentives to transition to EVs. Metrics of new vehicle emissions and fuel economy can include the MPG rating, CO<sub>2</sub> emissions in grams per mile, or a GHG emissions indicator on a relative 1 to 10 scale.

Feebates have been considered in the past by Vermont and other states but have yet to be implemented in the U.S. Experience with feebate programs elsewhere suggests that feebate programs provide a modest net benefit to lower-income consumers, who tend to purchase less costly, more fuel-efficient vehicles, while other EV-focused incentives have tended to benefit high-income consumers.<sup>8</sup>

### **2) Distribution of NYSDOT funds to align with CLCPA goals**

The majority of federal funds for transportation are spent on highways and roads (80%) while the remainder is spent on public transportation (20% or less). The CAC recommendations could encourage the New York State Department of Transportation (NYSDOT) to spend more of the federal block grant on transportation systems. Increasing the amount dedicated to public transportation can help reach the goals of the climate law through building better transit systems, expanding current public transit, and fully electrifying these systems. Additionally, there is the need to align current agency funds, capital plans and long-term

---

<sup>7</sup> Manuel Pastor, Rachel Morello-Frosch, and James Sadd, "Risky Business: Cap-and-Trade, Public Health, and Environmental Justice," *Urbanization and Sustainability Human-Environment Interactions*, 3 (2013). [https://doi.org/10.1007/978-94-007-5666-3\\_6](https://doi.org/10.1007/978-94-007-5666-3_6)

<sup>8</sup> Vermont Agency of Transportation Policy, Planning, and Intermodal Development Division, Vehicle Feebate and Vehicle Incentive Programs Funding Report, *REPORT TO THE LEGISLATURE PURSUANT TO ACT 57 OF 2019 SECTION 46, ES-6*. <https://legislature.vermont.gov/assets/Legislative-Reports/Feebate-Study-Report-10-15-2019-Final.pdf>

spending plans with the CLCPA goals. This has not yet been done with the DOT capital plan and this could free up money to be spent on electrification.

With this model, and others that include directing funds to improving public transportation, milestones and goals for agencies to meet are essential. By not setting timelines in their recommendations, the Transportation Advisory Panel has run the risk of failing to meet statewide goals. Public transit agencies' goals can be set by utilizing vehicle age or service area sizes to set fleet electrification milestones. The CAC's final transportation recommendations should holistically increase coordination between the existing state incentives like the NY Truck Voucher Incentive Program, NYC Clean Trucks Program, and any utility efforts for maximum efficacy. Utility programs should be complementing new and existing funding sources to present to potential vehicle purchasers a plethora of incentives to choose electric vehicles over fossil-fueled vehicles.

### **3) Utilities as greater partners in subsidizing EVSE infrastructure**

The electrification of our transportation systems could create an estimated \$3-\$10 billion of new value for the average electric utility. Electric vehicles are also expected to provide utilities with greater flexibility in their synchronizing power demand with supply at a lower cost than traditional energy storage.<sup>9</sup> As entities positioned to gain from the transition to electric vehicles, utilities should be playing a larger role in investing upfront in EVSE in New York State and given the guidance to do so.

Unfortunately, the Transportation Advisory Panel recommendations currently being considered by the Climate Action Council lack the details needed to guide utility investment in EVSE infrastructure. The CAC should include precise measures related to infrastructure, not just as an "enabling initiative" but as a high-priority mitigation measure.

New York utilities could follow in the footsteps of the California Public Utilities Commission (CPUC) which plays an integral role in achieving California's electrification targets. Through its authority to regulate the six electric investor-owned utilities (IOUs) it is directing strategic investments for providing incentives for electric vehicle charging infrastructure and upgrading the electric grid; designing electricity rates that impact the cost of fueling and ensure charging benefits the grid; Adopting vehicle-grid integration (VGI) policy and pilots; and Conducting

---

<sup>9</sup> Thomas Baker, Simone Aibino, Emanuele Belsito, and Anshuman Sahoo, "Electric Vehicles Are a Multibillion-Dollar Opportunity for Utilities," Boston Consulting Group, April 23, 2019. <https://www.bcg.com/publications/2019/electric-vehicles-multibillion-dollar-opportunity-utilities>

program evaluation and interagency coordination to ensure electric IOU investments to support ZEVs are strategically coordinated.

#### **4) Taxing Vehicle Miles Traveled (VMT)**

To reach our climate goals, we don't just need more electric vehicles replacing internal combustion vehicles, we need fewer cars on the road. Taxing vehicle miles traveled would ensure a stable funding stream for public transportation recommendations outlined by the Transportation Advisory Panel.

VMT fees that don't account for income levels can be regressive, but a *Transport Policy* study showed that income-based VMT fees present a model that generates additional revenue and protects lower-income households.<sup>10</sup>

#### **5) Low-emission zones at ports**

Environmental justice communities have long faced problems with freight and goods movement concentrated in their communities. Trucks are drawn to certain facilities like warehouses, and the surrounding areas have often ended up as pollution hotspots. For example, The Hunts Point neighborhood in the South Bronx is home to one of the largest wholesale distribution centers in the world, the Hunts Point Food Distribution Center, which generates over 15,000 truck trips each day. More than 98% of the residents are people of color, and studies have linked the neighborhood's "alarmingly high" asthma rates to vehicle pollution.<sup>11</sup>

The Indirect Source Rule under the Clean Air Act allows cars and trucks, indirect sources of pollution, to be included in state implementation plans (SIPS). New York could adopt rules around truck electrification and incentivize trucks that frequent those facilities and those routes to electrify their fleets. This would work by requiring the facility itself to install the charging infrastructure.

Promoting "low" or "zero emission zones" at all ports in New York State would require the electrification of trucks, equipment and warehouses at the port and in nearby communities where goods movement operations are concentrated. These zones could potentially generate funds by taxing trucks with internal combustion engines that enter the port, although it would likely generate less revenue than the other sources presented,

---

<sup>10</sup> DiYang, Eirini Kastrouni, Lei Zhang, "Equitable and progressive distance-based user charges design and evaluation of income-based mileage fees in Maryland," *Transport Policy* 47 (2016): 169-177. <https://www.sciencedirect.com/science/article/abs/pii/S0967070X16300415>

<sup>11</sup> N.Y.C. Econ. Dev. Corp., "Hunts Point Peninsula," Accessed October 7, 2021. <https://edc.nyc/project/hunts-point-peninsula>

Much of the emissions generated by port activities are created by associated trucking that transports goods from the port to their destination. Thus, mandating that charging stations are provided for heavy-medium duty vehicles at ports should be effective at tackling a sizable amount of greenhouse gas emissions from ports.

### **Conclusion**

The scoping plan will guide the future of transportation in New York and across the nation. Only a carefully crafted network of policies can achieve the difficult task of transforming the most polluting sector in the state into a fully electrified, resilient system. There are numerous options for funding the implementation of our climate law. It's essential that the funding mechanisms selected are aligned with the intention of the law to decarbonize equitably above all.