Mayor's Office of Sustainability

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Director

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Dear Climate Action Council Transportation Advisory Panel:

We respectfully submit these comments on behalf of the New York City Mayor's Office of Sustainability, in collaboration with agency partners at the Department of Citywide Administrative Services ("DCAS"), the Department of Environmental Protection ("DEP"), the Department of Health and Mental Hygiene ("DOHMH") and the New York City Department of Transportation ("NYCDOT") to the Climate Action Council ("CAC") Transportation Advisory Panel formed under the Climate Leadership and Community Protection Act ("CLCPA"). We appreciate the panel's consideration of the items outlined below.

New York City is a global leader in local governments fighting climate change and environmental injustice. In April 2019, based on the most recent scientific consensus on the dramatic action needed to mitigate the worse impacts of climate change, New York City committed to carbon neutrality by 2050. Throughout the City's response to the COVID-19 pandemic and the resulting strains it has caused to our public health, economic and transportation infrastructure, the City has maintained its sustainability targets recognizing that combatting climate change is core to our recovery from the pandemic.

Local governments across the state should be brought to the table to discuss the challenges and opportunities they have identified for their communities. Throughout this past year, our colleagues at DOHMH have used air quality monitors to track the changes in pollution caused by stay-at-home orders. DCAS installed over 52 fast chargers to serve the nation's largest electric municipal fleet's fueling needs throughout our response to the pandemic. NYCDOT mobilized the largest open streets program in the country, including utilizing street space for cooling during heat advisory events by opening fire hydrants with the support of DEP. These are only some of the ways our agencies have mobilized to respond to the pandemic that also furthers our goal of reducing carbon emissions and criteria air pollutants from the transportation sector to clean our air and mitigate the impacts of a changing climate.

New York City supports the advisory panel's decision to divide the difficult task of decarbonizing transportation into four subgroups: Electrification and Fuels; Market-Based Policies, Financing and Funding; Public Transportation; and Smart Growth/System Optimization. Following this format our comments below speak to areas we believe suggested policies can further the goals of the City and State to rapidly transition away from a fossil fuel based transportation system.

Electrification and Fuels

New York has adopted aggressive zero emission vehicle ("ZEV") targets statewide. New York State's leadership in vehicle electrification is reflected in the commitment to California's more stringent emission standards, light-duty electric vehicle adoption goals as well as recently signing onto a multi-state memorandum committing to all new medium and heavy duty vehicle sales will be zero emission by 2050. New York City supports these ambitious goals and hopes that the State will consider adopting California's recent announcement that all new passenger vehicle sales will be zero emission by 2035.

Despite these bold nation leading goals, it would be remiss to not mention that New York City still lags behind in the electric vehicle charging infrastructure needed to bolster mass adoption. Although the City has invested $10 million dollars in publicly accessible fast charging infrastructure and will be developing at least seven sites with four fast chargers each, this early investment will not move the needle without significant support from state, federal and private sector infrastructure investments.

There are only around 1,550 publicly accessible electric vehicle charging ports in New York City, with a little over a hundred of those ports being fast chargers. Most of this infrastructure is still concentrated in Manhattan, the City's densest borough with high levels of access to mass transit.[1] To reach the State's light duty ZEV goals, more than 16,000 publicly accessible charging plugs will be necessary as well as an ecosystem of workplace and private garage charging in New York City.[2]

New York City is encouraged by the many ZEV initiatives the State has put forward this year, including a Make-Ready program that will provide up to $601 million statewide in infrastructure costs and award up to $85 million in prize to innovators providing electrification options that serve fleets and environmental justice priorities.

As the Transportation Advisory Panel conducts analyses of electrification needs, the City strongly supports a statewide approach to infrastructure that favors the different needs of urban, suburban and rural communities. Infrastructure developed upstate and downstate are mutually beneficial to New Yorkers who want to travel with the confidence that they can always access a charger. Addressing range anxiety differs in high density areas where the cost of both real estate and infrastructure present challenges. These barriers are significant for fleets that cannot readily move their depots to accommodate low costs. We strongly support strategies that will buildout electric vehicle charging in New York City outside of the Manhattan core.

[1] Data taken from NYSERDA's EValuateNY tool: https://atlaspolicy.com/rand/evaluateny/
[2] Data taken from NREL's EVI-Pro Lite Tool: https://afdc.energy.gov/evi-pro-lite

New York City is a leader in the state and the nation in setting standards for new parking facilities to provide the electrical capacity and conduit to install electric vehicle charging. Local Law 130 of 2013 mandates that 20% of parking spots in most new facilities have the appropriate make-ready infrastructure to install electric vehicle charging. We recommend that the Transportation Advisory Panel consider whether such building code requirements could be enacted statewide to make sure that all new parking facilities are built for the mass electric vehicle adoption.

Further, New York City supports the inclusion of a Low Carbon Fuel Standard ("LCFS") as a key policy recommendation. A LCFS could help create a market for biofuels in New York State. Although the City supports vehicle electrification as the cleanest available fuel, there is a lack of electric model availability for medium and heavy duty vehicles as well as off-road tractors and construction equipment. An LCFS could support vehicle electrification as well as the adoption of liquid biofuels like renewable diesel. The City strongly supports an LCFS that considers all land-use implications, including needing to potentially build new processing facilities and biorefineries to meet the requirements. The City supports renewable diesel in particular as it can be processed in the same refineries used for fossil fuel based diesel.

NYC Fleet at DCAS has already successfully implemented 1 million gallons of renewable diesel. The fuel is completely compatible with all existing fleet units and with other infrastructure that uses diesel such as generators. Renewable diesel offers the potential to eliminate the use of fossil fuel based diesel in fleets, and also potentially heating oil and aspects of ferry service. Renewable diesel would not require major changes to existing infrastructure and could play a critical role in reducing greenhouse gas emissions until zero tailpipe emission options like electric and solar are more fully rolled out. The main barriers are price and availability, both of which an LCFS would address.

The City also encourages the Transportation Advisory Panel to avoid treating electric vehicles as a catchall solution to reduce transportation emissions. Studies have shown that although electric vehicles are an important tool to reach decarbonization goals, they cannot be the only strategy used. The mitigation gap to reach the Paris Climate agreement targets by focusing solely on electric vehicles is up to 19 gigatonnes of carbon emissions in the United States.[3] Right-sizing the number of vehicles and the size of the vehicles on our roads to appropriately match the trip being taken are important considerations to reduce transportation emissions. Expanding state incentives like the

[3] From "Electrification of light-duty vehicle fleet alone will not meet mitigation targets": by Alexandre Milovanoff, I. Daniel Posen and Healther L. MacLean. Available here: https://www.nature.com/articles/s41558-020-00921-7.epdf?sharing_token=2xraFoUenY1jWzmj59pBsNRgN0jAjWel9jnR3ZoTv0MwZgD9OhVz9I1pdqn5uP1kguAxyR9PnRlU8t2S8CDMeXUs5zNLNGlYGu5m2XxH4pNTgmdM0HuVi5tmo0LPdfA2WApFmazvgPjpbCJHELEbgvb42uVUo_Ac9taW5VEshaE%3D

Clean Vehicle Rebate to neighborhood electric vehicles, electric mopeds and electric micromobility options would help incentivize the adoption of these lower emitting and efficient options.

Market-Based Policies, Financing and Funding

As the largest city in the country, New York City benefits from its high density, mass transit access and growing bicycle infrastructure to discourage private vehicle use. However, despite these advantages there are still around 1.9 million passenger vehicles registered in New York City.[4] Investments in sustainable transportation must continue to build on the City's inherent advantages to discourage vehicle use.

Further, the commercial logistics needed to support New York City creates air pollution from trucks and buses which emit the majority of asthma causing particulates within the transportation sector.[5] Rates of respiratory illnesses are higher among residents of low income neighborhoods in New York who are exposed to 50% more traffic related particulates than wealthier neighborhoods.[6] Although passenger vehicles contribute to over eighty percent of transportation emissions in New York City, the smaller share of truck and bus emissions have disproportionately high impacts on respiratory illnesses and premature deaths.[7] Particularly given the COVID-19 pandemic's high morbidity rates among residents in areas with higher concentrations of air pollution, working to reduce emissions from medium and heavy duty vehicles is a question of life or death for many marginalized New Yorkers.[8]

New York City has previously submitted comments regarding the proposed Transportation Climate Initiative ("TCI"). As stated in these previous comments, New York City believes that local governments should have a role in the analysis and any programmatic design. We believe a New York City specific analysis of the impacts of TCI is crucial. Further, such an analysis should prioritize eliminating tailpipe emissions from trips that provide the greatest efficiency in the movement of people and goods as well as trips that are the most polluting and cannot be readily taken using active modes. This should be accompanied by seeking to maximize voluntary use of active modes and slow-speed electric mobility modes. Putting public health at the center of eliminating emissions from buses and trucks is crucial to increasing the livability of our

[4] From New York State DMV Statistical Summaries: https://dmv.ny.gov/about-dmv/statistical-summaries
[5] From NYC Department of Health, "The Public Health Impacts of PM2.5 from Traffic Air Pollution", http://a816-dohbesp.nyc.gov/IndicatorPublic/traffic/index.html
[6] Ibid.
[7] Ibid.
[8] From "Regional and global contributions of air pollution to risk of death from COVID-19": by Andrea Pozzer et al. Available here: https://academic.oup.com/cardiovascres/advance-article/doi/10.1093/cvr/cvaa288/5940460

communities, reducing the disparate adverse health impacts of transportation related air pollution on residents with low income and residents of color, and recovering from the pandemic.

Expanded use of active modes and slow-speed electric mobility modes reduces the total amount of transport sector energy use that needs to be decarbonized to meet greenhouse gas emissions mitigation targets. Incentives should align with the right-sizing of vehicles for each mobility service market segment (e.g., discouraging the trend towards larger, heavier, faster, and more quickly accelerating sport utility vehicles in the light-duty vehicle market). Incentives should encourage smaller, lighter, slower, and more slowly accelerating light-duty vehicles that are usually associated with improved traffic safety in communities, lower overall energy use, and greater range and efficiency of operation for a given weight of vehicle batteries.

Financing and funding programs should include components directly encouraging the rapid uptake of low-speed pedal-assist bicycles and cargo vehicles through both private ownership and vehicle sharing, as well as provision for storage and charging stations for such vehicles. These offer the greatest potential in urban and denser suburban centers of New York City and State.

Financing and funding programs should also include enhanced incentives to replace, retrofit or scrap heavy polluting diesel trucks. A successful model for incentives is the recently relaunched New York City Clean Trucks Program. The program builds upon the Hunts Point Clean Trucks program originally launched in 2012, which replaced older diesel trucks with newer lower polluting models. For over seven years the program has improved air quality by replacing nearly 600 diesel trucks operating in environmental justice communities in the South Bronx, where asthma rates have been historically higher than citywide and national levels.[9] Working with the New York State Department of Environmental Conservation (DEC), and using VW settlement funds, NYCDOT has expanded the incentive program.

The Clean Trucks program is now operating in various environmental justice communities adjacent to Industrial Business Zones throughout the City's outer boroughs, and includes opportunities for adoption of electric trucks and related infrastructure. Sustained funding for this initiative should be provided beyond the seed funds offered by the VW Settlement. More specifically, as we are seeing more localized delivery activity, incentives need to support smaller electric truck sizes, and not just heavier duty vehicles.

Notably, scrappage as a prerequisite for program participation limits the usefulness of VW funding for NYC Fleet due to auction requirements. Further, the City has procured

[9] See more on the NYC Clean Trucks Program here: https://www.nycctp.com/

new vehicle models without a diesel equivalent to scrap (e.g. the City recently procured its first electric school bus, which is also the first school bus the City has owned with no diesel equivalent to scrap). Greater flexibility in allocating funds and scrappage requirements should be considered as new entirely models are adopted by fleets.

There should also be incentives for the upgrade and replacement of Truck Refrigeration Units (TRUs) to low or zero emission units. Emissions from TRUs are particularly high in the Hunts Point area and electric alternatives would be highly effective for reducing pollution and improving neighborhood quality of life.

Public Transportation

New York City supports the need of other regions to have safe, sustainable and reliable public transit access. Based on the most recent data collected by the NYCDOT, mass transit is the most commonly used mode of travel in the City.[10] Maintaining high levels of transit ridership, while investing in electric vehicles as well as bike and pedestrian infrastructure, is critical to meeting New York City and State's climate targets. We encourage our the Transportation Advisory Panel to build on the successes of mass transit in New York City and continue to consider policies that would continue to support transit ridership in the five boroughs.

Smart Growth/System Optimization

New York City is in favor of smart development practices that reduce emissions by increasing density near key transit hubs as well as identifying untapped efficiencies on our transportation network. NYCDOT is addressing an efficient zero emission last mile for deliveries through an electric cargo bike pilot program. To date over 200 electric cargo bicycles are enrolled in the program operated by commercial partners. Leadership from New York State to legalize electric bicycles unlocks more opportunities to scale micromobility in the City. However, a new size restrictions enacted through the State law limits the width of cargo bicycles to 36 inches, limiting the inclusion of models of electric cargo bikes operating in Europe and Asia where the common width goes up to 55 inches. We hope to work with our State counterparts to reverse this limitation that has impacted cargo bicycles previously operating in the pilot program as well as continuing to unlock new opportunities to scale micromobility.

Low emission zones are a potential area for further City and State collaboration. In New York, vehicle tolling is designated state authority with potential federal preemption of a low emission specific cordon under the Clean Air Act, Energy Policy & Conservation Act,

[10] From NYCDOT's Mobility Report (2019): https://www1.nyc.gov/html/dot/html/about/mobilityreport.shtml

and Federal Aviation Administration Authorization Act.[11] Exploring avenues to pilot a low emission zone in communities burdened by air quality health impacts in New York City could significantly reduce pollution from idling vehicles and reduce health disparities.[12] We encourage the Transportation Advisory Panel to consider this policy recommendation that would complement and potentially run in parallel to existing efforts to enact a tolling program on the Manhattan Central Business District.

Emergency resiliency is also a critical complement to smart growth and will take on increasing importance as the City's exposure to damaging weather events continues. NYC Fleet has implemented the nation's largest portable solar carport project with 87 locations. On a daily basis, these carports provide zero emissions solar power for electric fleet vehicles. In storm and emergency events, they can be a source of emergency and backup power for general needs as well as vehicles. We would encourage funding and other support for the expansion of these types of dual purposes systems.

Conclusion

New York City's transportation network has great potential to be a model for rapid decarbonization. The City supports the efforts of the CAC Transportation Advisory Panel to explore low emission fuels, financing, public transit expansion and efficient smart growth to craft the policies that will get New York to its climate targets. The City respectfully submits these comments for consideration and hopes to continue to work with the advisory panel and other relevant stakeholders to achieve our ambitious climate targets and create a better future.

Sincerely,

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[11] From "Legal Tools for Achieving Low Traffic Zones (LTZs): LEZ, ULEZ & Congestion Pricing in the U.S. Law Context" By Amy E. Turner found at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3534181

[12] See "Cleaner Air in New York City" by Sarah Johnson available here: https://www.nytimes.com/2020/07/20/opinion/letters/trump-coronavirus.html