Need for electrification of transportation

Transportation accounts for about 28% of New York's GHG emissions and is the second biggest source of emissions, after buildings. It is widely accepted that phasing out the use of fossil fuels such as gasoline and diesel and shifting to electricity as the sole energy source for vehicles, while simultaneously expanding public transportation and making it more efficient, reliable, and affordable, and investing in Transit Oriented Development are the key means of decarbonizing the transportation sector. Once electrified, the GHG emissions associated with transportation will decline as more distributed and centralized carbon-free sources of electricity are added to the grid.

Encouraging EV adoption

I strongly support the plan to reduce emissions through strong investment in EV charging infrastructure, by incentivizing EV adoption, and by electrifying the State vehicle fleet, as well as reducing total vehicle miles driven through expansion in public transit and promoting smart growth along public transit lines. In addition to areas in and around NYC, usable public transportation must be developed in all urban locales in the State. Intercity public transit should be included in the plan.

I am particularly alarmed at the complete lack of funding and efforts for building out an EV charging infrastructure in New York to support the rate of vehicle electrification that is required to meet the CLCPA emissions targets and to support other New York State mandates, such as a ban on the sale of new gasoline-powered vehicles starting 2035. I would encourage the state to develop Vehicle-to-Grid (V2G) charging capabilities for personal vehicles for micro-grid stabilization. Finally, EV adoption must be supported through adjustment of utility rates to encourage EV use and off-peak charging.

Finally, I strongly support easier direct-to consumer sales of ZEVs and the elimination of sales tax on all ZEVs.

EV charging capabilities codes and mandates

An accelerated State-supported fast-charger infrastructure build-out must accompany the accelerated adoption of EV's. Further build-out can be realized by incentivizing employers, retail and grocery stores, and other places where cars are parked for extended periods to install charging stations. Particular attention must be paid to residents of apartment complexes, renters, and street-parking vehicle owners.

In order to support the electrification of private transportation, all new residential and commercial construction must be fully electric vehicle charging capable and must have a reasonable fraction of electric vehicle charging ready parking spaces.

Specifically, a one- or two-family home with off-street parking such as a driveway or a garage must have at least one EV charging capable space. One hundred percent of the parking spaces in multi-unit residential buildings or condominium complexes must be EV charging capable, and at least a quarter of them must be EV charging ready. Similarly, any commercial building with a parking facility must have one hundred percent of the parking spaces that are EV charging capable, at least a quarter of which are EV charging ready.

The role of housing policy in transportation emissions and energy use

Study after study shows that allowing for walkable, mixed-use, and multifamily housing close to public transit greatly assists us in reducing our carbon footprint and revitalizing our local downtown areas. This will also help us with our housing shortage. Mixed use development tends to create more vibrant areas and better supports walkable communities. Multifamily housing reduces emissions related to the building sector also by reducing heating and cooling energy usage due to smaller exposed surface area per dwelling.

Transit-oriented development (TOD) doesn't only mean mid- or high-rises. It can be townhouses, duplexes, quadplexes, accessory dwelling units, or other context-specific multifamily housing located within half a mile of public transportation.

TOD boosts our local economy and is a potential game-changer for young people and families who might have trouble finding housing in their price range. It leads to less dependence on cars, more use of public transit, more walkable and revitalized downtown centers, more educational opportunities for children, and provides a reliable source of funding and ridership for public transportation.

Conclusion

New York State must move full steam ahead, without delay, towards making electricity the principal energy source for powering its public and private small- and medium-duty vehicles while rapidly advancing heavy-duty transportation towards a net-zero future through a mix of electrification and renewable fuels. The state must expand public transportation options, particularly those outside the NYC metro area, including inter-city transportation. Finally, New York state must educate and incentivize communities to embrace transit oriented medium- and high-density development, which has benefits that go far beyond emissions reduction.