#### Intro

My name is Arnav Sharma and I am from Delmar, New York. I am in 7th grade at Bethlehem Central Middle School. I am part of the Hotshot Hotwires, a non-partisan science-based climate advocacy group that has students from 15 different school districts.

### Why I am Writing this Testimony

I have always advocated against climate change, but I have never done much action to stop it. Every time we meet for our meetings I always think of how much my generation could do to stop climate change. Stopping climate change is not only about my generation's future, but the generations ahead of us. The past generations were naive of what was going to come, but we are more knowledgeable than ever. Our generation can only make change when the government cooperates with us. Transportation is a big part of hurting our climate. The fossil fuels released in the air from all types of transportation gradually hurt our atmosphere more everyday. If we change our habits of using transportation requiring gas our world would have higher chances of surviving in the future.

### Sector-wise emissions, milestones, and enforcement mechanisms

The Final Scoping Plan must ensure that the CLCPA targets are met. The Draft Scoping Plan: (1) at times does not clearly specify greenhouse gas (GHG) emissions reduction targets for certain sectors; (2) adopts targets that are inadequate in relation to the overall CLCPA targets (i.e., an 85% reduction in GHG emissions by 2050); and (3) includes too many proposals that depend on voluntary action by industry and residents rather than legally enforceable mandates.

The Final Scoping Plan must specify the level of mandated reductions in greenhouse gas emissions and co-pollutants that each industry sector must achieve by the years specified in the CLCPA, as well as a timeline for achieving such reductions. The Final Plan should also specify the state agency or agencies responsible for enforcing the CLCPA targets for each sector. Taken together, the mandated industry sector reductions shall achieve the CLCPA targets.

In addition to targets by industry sector, the Scoping Plan must specify in detail the regulatory mechanisms by industry sector that are necessary to ensure that each sector can achieve its goals, and the regulatory steps, including legislation, necessary to achieve these goals.

The Council must review the state's regulatory structure by industry sector to determine what legislative and regulatory changes are necessary to ensure that structures are put in place to mandate that all businesses in New York comply with the clear GHG and co-pollutant reduction targets by a schedule the conforms with the CLCPA, and put recommendations for such changes in the Final Scoping Plan. When appropriate, GHG reduction targets should be set for individual large businesses, like utility companies.

## **Combating disinformation**

Just like in the building sector, disinformation campaigns on transportation electrification from fossil-fuel interests are centered around casting doubts about the solutions. Public education efforts must be undertaken to help New Yorkers realize that (1) Electric Vehicles reduce pollution and emissions even with the current fuel-mix of New York's electricity supply because they use much less energy compared to vehicles with internal combustion engines for traveling the same distance. (2) While there are concerns around the extraction of certain materials used in EV batteries and motors, the environmental and human toll of extracting, transporting, and refining petroleum is far greater because petroleum is a fuel that a vehicle continuously consumes while the battery materials are used only once per vehicle and there are viable recycling options that will scale up as the supply of used batteries ramps up.

### Public education campaigns

First and foremost, I would urge the Council to immediately fund and start a sustained statewide education and awareness campaign on the benefits of electric public and private transportation systems free of tailpipe emissions and pollution. This education campaign is necessary to counter the relentless and massive disinformation crusades by fossil-fuel interests and status-quo forces who've spent decades perfecting their chicanery, first to deny climate science, and now to cast doubt on the solutions. Given their long track record of weaponizing disinformation to sustain the extraction and burning fossil fuels, the absence of a public information component in the scoping plan is a surprising, but grave oversight. I encourage the Council to add a chapter on community-specific outreach, awareness, and education in the Final Scoping Plan with recommendations for assuaging New Yorkers disinformation-induced fears about the CLCPA and informing them how the law will be implemented and what are its climate, health, environmental, and economic benefits.

## The critical 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.

#### **Need for electrification**

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.

## How do we get there?

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.

## Mandates for EV charging capabilities in private parking spaces

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.

# Summary

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.

The Climate Action Council put forth three scenarios for our climate future. I am advocating for Scenario #3, which includes low-to-no bioenergy and hydrogen and the simultaneous acceleration of electrification of both buildings and transportation to ensure clean air and a healthy environment.

## Thank you,

Climate Council for passing all the climate legislation you can and don't let the fossil fuel companies advise you in the wrong direction.