
CHARGEVC | NJ

BETTER TRAVEL, STRONGER GRID.

Morris County Environmental &
Sustainability Forum Meeting
May 27, 2021
Pam Frank, CEO
pam@charevc.org

Who we are

- DIVERSE GROUP OF ALIGNED INTERESTS.

What we will do

- Accelerate and expand EV adoption in NJ.
- Develop and promote **programs and policies**

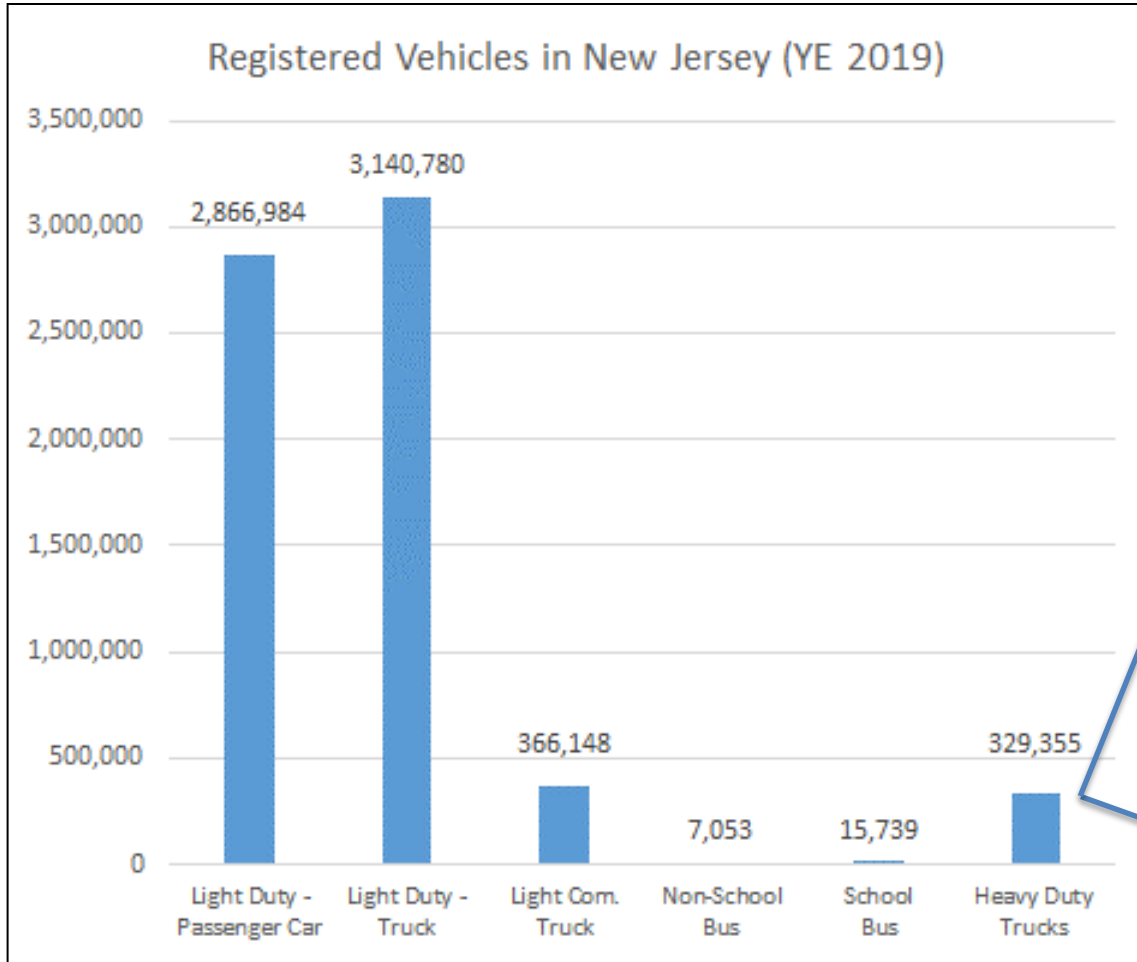
How we do it

- **RESEARCH** necessary to inform programs and policies.
- Diverse coalition with unified voice for **ADVOCACY.**

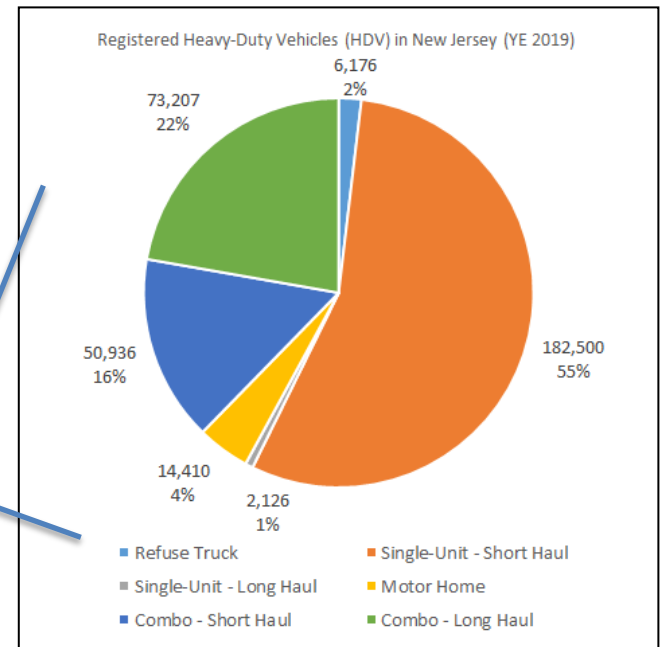
State based approach

- Local market participants, for local action, based on local conditions.





2019 snapshot

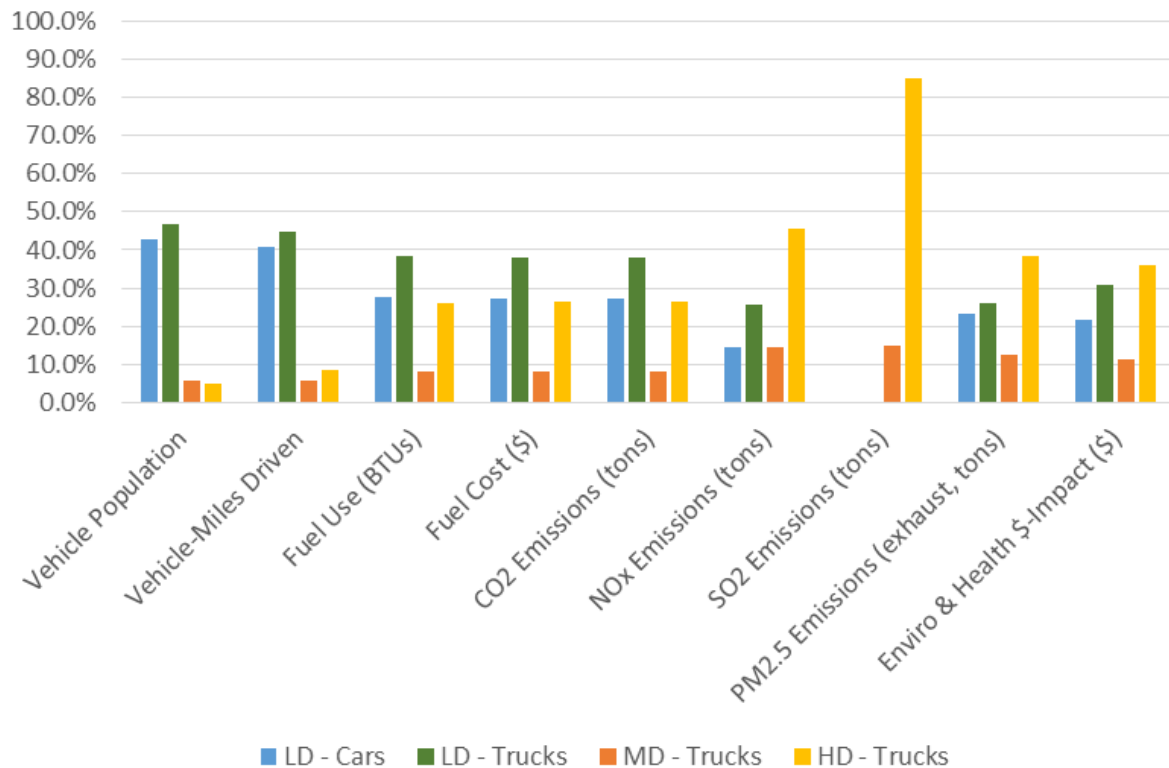


Note: of the ~7K non-school buses, ~2,500 are NJ Transit.;

Based on vehicle registration data from DEP as of YE19, mapped to source type based on prior distributions.

2019 snapshot Summary

2019 On-Road Vehicle Landscape



Light-Duty Vehicles
 Represent The Majority Of:

- Vehicle Count
- Miles Driven
- Fuel Use & Costs
- CO2 Emissions

M/H-Duty Vehicles
 Represent The Majority Of:

- NOx, SO2 and PM2.5 Emissions
- Enviro-\$-Impact

LDVs Are Motivated By CO2 & Fuel Cost Savings;
 M/H-duty Vehicles Best Prioritized For Public Health Impacts.

- While LDV account for majority of vehicles, miles and fuel use, buses and other MHDV have a disproportionately large impact on emission (especially NOx (59%), and PM2.5 (51%)) and public health.
- Impacts are strong near MHDV travel concentrations.
- LDV electrification best prioritized for fuel/operational savings and CO2 reductions; Diesel displacement is best prioritized as a public health initiative.
- Diesel segments are extremely diverse, differ regarding electrification readiness, potential transition schedule, infrastructure requirements, relative impact. Electrification readiness and feasibility much higher in some segments than others.
- Analysis, prioritization, and goal-setting must be done at the segment level.
- Charging infrastructure requirements and potential grid impacts may be critical factors (on readiness, feasibility, and costs) in some segments.
- LDVs impacts grid through large numbers of small loads; MHDV impacts grid through a relatively small number of large loads at relatively few locations.
- Opportunities for MHD charge optimization: storage, smart scheduling, in-route charging. These strategies are a change from business as usual.
- There are multiple possible paths for electrifying key segments.

- RGGI Investment Plan
- EDA's NJ ZIP program
- DEP's rebates for trucks, buses and EVSE
- Adoption by reference of California's Advanced Clean Truck Rules
- BPU's approved PSE&G and ACE EV program filings; with Rockland and JCP&L under review
- BPU's proposed Clean Energy budget includes:
 - Plug In EV Incentive Fund (early July start date)
 - ChargeUp NJ providing rebates for home chargers
 - Incentives for state and municipal fleets
 - EV Grid Assessment targeting MHD fleets
- Establishment of an Office and Council on the Green Energy Economy

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Website: www.chargevc.org

Email: info@chargevc.org

Phone: 732-296-0770