

# Medium Heavy Duty EV Ecosystem Straw Proposal

## 2021 Stakeholder Meeting Medium and Heavy Duty Impact on Overburdened Communities

Wednesday, August 26, 2021

1:00 p.m. – 5:00 p.m.

Via webinar



[www.nj.gov/bpu](http://www.nj.gov/bpu)



# Question and Answer

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- During the Q & A period, the moderator will use those questions as the basis of discussion with the panel.
- Please keep questions specific to the presentations and the topics discussed by the specific panel.
- A separate meeting will be held on September 24<sup>th</sup> for public comment.



# Comment Deadline

- All comments are due by October 5<sup>th</sup>.
- Comments on specific stakeholder presentations and topics should be submitted two weeks after the panel is held via the directions listed in the Public Notice.



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# Comments

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- Please submit comments directly to **Docket No. QO21060946** using the “Post Comments” button on the Board’s Public Document Search tool.
- Written comments may be submitted electronically to **board.secretary@bpu.nj.gov** in PDF or Word format. Please include the subject line “MHD EV Infrastructure.” All comments must be received on or before the comment deadline of **5:00 p.m. ET on October 5, 2021.**



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# Medium and Heavy-Duty Impact on Overburdened Communities

Promoting Medium and Heavy-Duty Electric Vehicle DC  
Charging Infrastructure.



Presented by: Moises Luque, CEO Supreme Green Team &  
Member of the Statewide Hispanic Chamber of Commerce





# AGENDA



- 
-  Greenhouse Gasses and Transportation
  -  Accessibility of DC Charging Stations for Medium and Heavy-Duty Electric Vehicles
  -  Importance of Funding for Medium/Heavy Duty DC Charging stations
  -  Who is Supreme Green Team and Their Commitment to Overburdened Communities



# Greenhouse Gasses and Transportation

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-  The transportation sector is responsible for at least 29 percent of the greenhouse gas emissions in U.S.
-  Over 40 percent in the state of N.J.
-  The Greater Newark area 10-mile radius.
-  Effects on public health in overburdened communities due to the transportation sector.



# Accessibility of DC Charging Stations for Medium/Heavy Duty Electric Vehicles



- 
- 🌱 Current level three charging stations.
  - 🌱 Land and voltage.
  - 🌱 Cost of DC charging stations.



# Funding and Incentives



- 
- 🌱 Continue Tax Credits and incentives for all things related to EV Charging infrastructure.
  - 🌱 Off Peak charging credit (time of use), Demand Charge rebates from utilities to customers.
  - 🌱 Solar incentive and storage incentives
  - 🌱 Funding for programs like NJ EDA ZIP



# Who is Supreme Green Team?



- 
-  Is a transportation company.
  -  Commitment to overburdened communities.
  -  We want to be a part of the environmental justice movement and help build a sustainable, cooperative and equitable future for members of our communities.



# Thank you!



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[www.shccnj.org](http://www.shccnj.org)



# References



- 
-  [Discover Lion's all-electric commercial truck fleet | Lion Electric \(thelionelectric.com\)](#)
  -  ['It's killing children and no one is talking about it': Asthma is taking a steep toll on Newark - Chalkbeat Newark](#)
  -  [NJDEP | Environmental Justice | Environmental Justice Overburdened Communities \(OBC\)](#)
  -  [NJ ZIP - NJEDA](#)
  -  [Sources of Greenhouse Gas Emissions | US EPA](#)

# Medium & Heavy Duty Electric Vehicles BPU Stakeholder Panel - Overburdened Communities

Maura Caroselli, Esq.  
NJ Division of Rate Counsel

# Who is Rate Counsel?

- Rate Counsel is a NJ State Agency that advocates before the Board of Public Utilities (BPU) for fair utility rates for all New Jersey public utility ratepayers.

# Equity = Affordability

- In 2019 37% of Americans could not afford a \$400 unexpected expense in their monthly budget (U.S. Federal Reserve)
- In 2017 46% of New Jersey residents could not afford a \$400 unexpected expense in their monthly budget (United Way's 2019 ALICE report)
- These numbers are pre-COVID

# 30% of New Jersey Residents Live in True Poverty\*

- A July 2021 report from Legal Services of New Jersey (LSNJ), an organization serving low-income clients on a daily basis, documents true poverty levels in NJ and found that 30% of NJ Residents live in True Poverty.
- The Federal Poverty Level does not accurately measure poverty in New Jersey since it does not take into account regional differences and additional necessary expenses.

\* “True Poverty, What it Takes to Avoid Poverty and Deprivation in the Garden State, A ‘Real Cost of Living’ Report Series,” July 2021 by Legal Services of New Jersey Poverty Research Institute, report found at <https://poverty.lsnj.org//Pages/TruePoverty2021.pdf>

# Housing, Utilities & Childcare Costs Comprise 50% of Monthly Income\*

- LSNJ calculated the True Poverty Level in New Jersey by measuring the cost of 7 basic need areas: housing (which includes utilities), child care, food, transportation, health, taxes & misc. essentials.
- LSNJ found housing costs, which includes utilities along with childcare costs in New Jersey, comprise 50% of monthly income for working families living in True Poverty

# True Poverty Level in NJ Does Not Match Utility Assistance Programs\*

	Single Adult	Two Adults	Two Adults 2 children
True Poverty Level	\$31,000	\$44,761	\$78,364
Federal Poverty Level	\$13,300	\$17,120	\$25,926
True Poverty Level as a % of the FPL	241%	261%	302%

Utility Assistance Program	Maximum Federal Poverty Level Income to Qualify
Comfort Partners	250%
LIHEAP	200%
Lifeline (telephone assistance)	135%
Universal Service Fund	185%

# Charging Ratepayers for MHD EV's through Rate is Most Regressive

- People living in true poverty, low and moderate income residents, are paying a greater portion of their income toward utility bills.
  - In order to qualify for USF, a family of 4 has to make under \$53,000 per year and must pay at least 3% of their income or more than approximately \$130 per month for a gas or electric bill.
- Therefore, charging low and moderate income people living in Overburdened Communities for MHD Electric Vehicles through utility rates will impact them more significantly than middle and upper income ratepayers.

# Overburdened Communities Require Creative Solutions to Ease the Burden on Ratepayers

- Proposed Solutions:
  - Focusing on minimizing ratepayer investment and maximizing federal funding and private investment.
  - Federal Funding through the American Rescue Plan should be prioritized toward electrifying MHD vehicles in overburdened communities instead of solely relying on ratepayer money
  - Collaboration and Incentives to the private companies who drive the bulk of the medium and heavy duty delivery trucks through overburdened communities on a daily basis.
  - Equity = Affordability

# MHD Impact on Overburdened Communities

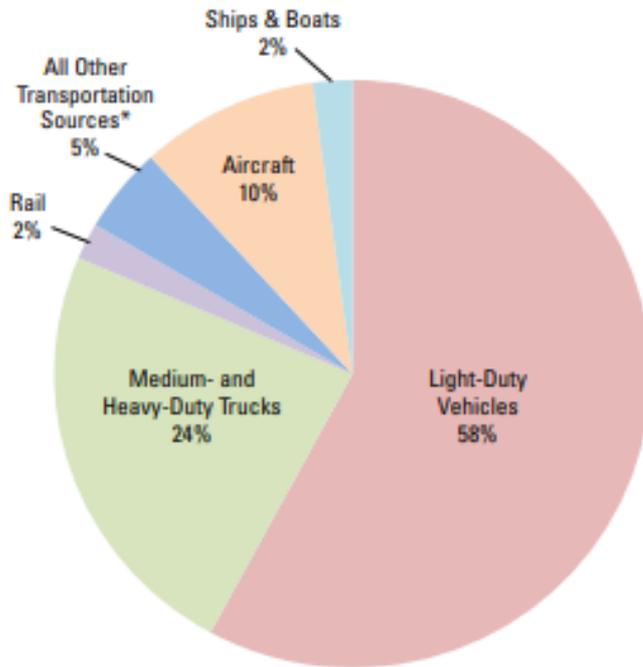
Richard T. Thigpen  
Senior Vice President  
Corporate Citizenship  
August 26, 2021



**PSEG**

*We make things work for you.*

# GHG Emissions



Share of U.S. Transportation Sector GHG Emissions by Source, 2019<sup>4,5</sup>

Note: Totals may not add to 100% due to rounding.

- Transportation is the largest (>40%) contributor to GHG emissions in NJ
- MHD Vehicles are responsible for 24% of those emissions
- Emissions disproportionately impact communities in which at least 50% of households qualify as low income

*Applicable footnotes from original source material*

<sup>4</sup> “Transportation” emissions in these pie charts include CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, and HFCs

from transportation sources like highway vehicles, aircraft, ships and boats, rail,

pipelines and lubricants. They do not include emissions from non-transportation

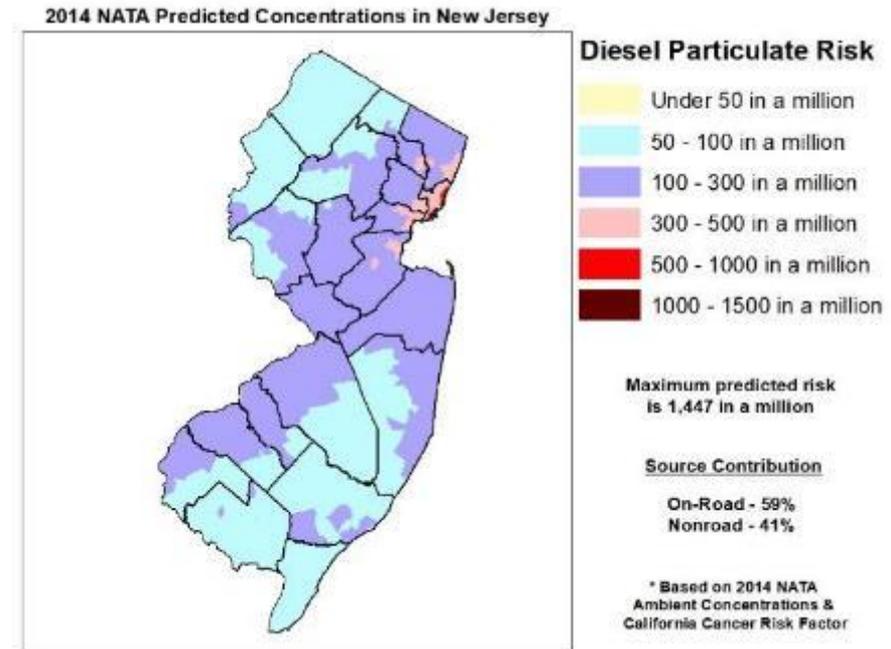
mobile sources such as agriculture and construction equipment.

<sup>5</sup> “Other” sources include buses, motorcycles, pipelines, and lubricants

Source: U.S. EPA Fast Facts, U.S. Transportation Sector Greenhouse Gas Emissions, 1990-2019 available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P10127TU.pdf>

# Environmental Justice Communities

- Air quality is directly impacted by travel from vehicles driving through EJ communities
  - EJ residents are impacted regardless of their vehicle ownership status
- MHDVs disproportionately impact EJ communities
  - MHDVs travel extensively through EJ
  - MHDVs emit some of the most harmful pollutants
  - Fossil-fueled public transit use is more prevalent in EJ communities



Source: NJ Department of Environmental Protection Air Toxics in New Jersey available at <https://www.nj.gov/dep/airtoxics/Diesel05.htm>

# Utility Role Ensuring Equity

- Utility involvement is appropriate because of the societal benefits of electrification
  - Environmental and health benefits are well recognized
  - Job opportunities and training programs to install and manage charging stations
  - Ensure equitable opportunities to electrify to disadvantaged businesses and communities
- Utilities are in a unique position to contain infrastructure costs, including grid reinforcement
  - This will help control costs for all utility customers

# Benefit to Overburdened Communities

- Utility support can help electrify transportation as broadly, and as quickly, as possible
  - School buses, ports, airports, sanitation trucks
  - Our programs can help channel funds to those who would otherwise be unable to make the private investment
  - We can accelerate the charging infrastructure to target heavily traveled routes
- Just as EJ have suffered disproportionately from vehicle emissions, they will see the greatest benefit from electrification



# EV Stakeholder Meeting

## Medium and Heavy Duty Impact on Overburdened Communities

Rodney L. Williams, SFP, CEFM  
Director of Energy & Sustainability  
NEWARK BOARD OF EDUCATION

# Newark District's Fleet

Facilities: 25 Trucks and Vans

Pupil Transportation: 25 District owned Buses

Security: 9 Cars and SUV's

As we are all aware the more vehicles on the road, the more carbon is introduced into the environment. Although the District has a no vehicle idling policy for the district, these vehicles still releases carbon in the atmosphere while moving about in the city



# Partnership with PSEG

In 2010, We joined forces with PSEG to install solar in our schools; Barringer High, Park Elementary, Central High and Camden Elementary and Middle. We generated **2.6 megawatts** of electricity.

For Example: Park Elementary, consist of **1,704 panels** with a total of **519 kilowatts** and the energy generated from the Park Elementary system's is **equivalent to recycling over 10 million cans of soda and taking 65 cars off the road every year reducing carbon emmissions and is enough energy to light about 200 homes.**

**The Question is can we do more?**



Barringer High School

# Energy Saving Improvement Program

- In 2021, the District engaged in an Energy Saving Improvement Program (ESIP) in which this program will provide the installation of energy saving upgrades throughout our district.
- This program includes **Solar installation for 54 schools** along with boilers, mechanical and LED lighting upgrades.
- We are estimated to generate 24 mega watts of Solar power.
- will be 40 schools with roof mounted solar and 14 schools with carports



# Pushing the limits for Sustainability

We can use our 24 Mega Watt of Solar to create a Electrical Charging Stations at each of our site.

These EV Station will be powered by the Sun

EV Stations powered from Car Port and roof arrays will generate enough power with to charge Electric cars city wide.

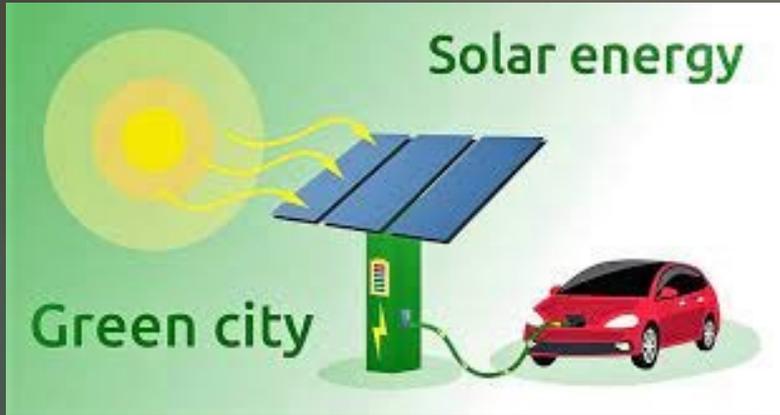


# IMPACT

- The School District can migrate its existing 59 gas powered fleet to an electric powered fleet- (Currently we have 3 electric cars)
- Environmental impact: to reduce and control air pollution in the city in line with the clean air act
- Use the EV Charging station as a revenue stream for the School district that will offset cost for the equipment
- An educational proof of concept for students. (Learning How the sun can be a great source of renewable energy and the practical things it can do)

# Objective

We are on working towards a Green City!



# Thank You





# Trenton E- Mobility Pilot

KATHARINA MIGUEL, CLEAN ENERGY ADVOCATE, ISLES

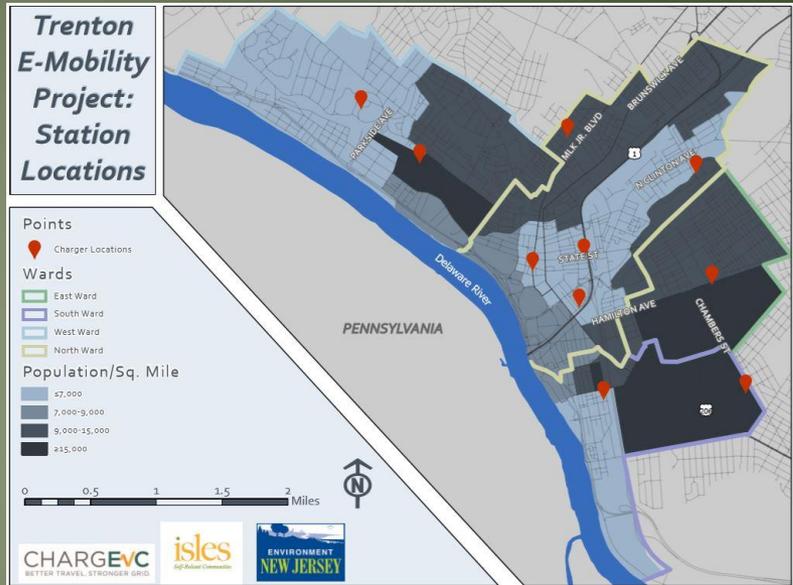
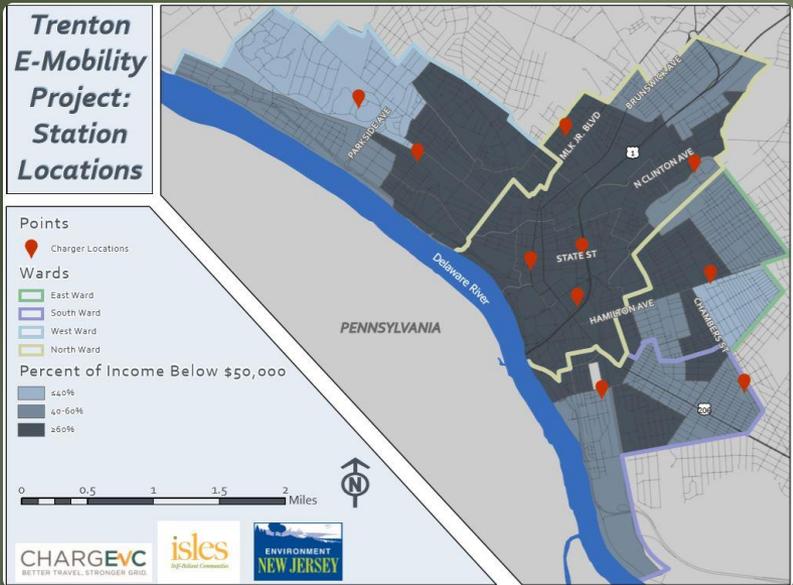


# Trenton, New Jersey

- ▶ 27% poverty rate
- ▶ 30% car-free households
- ▶ 21% carpool rate

# Trenton E-Mobility Program

- ▶ An electric mobility solution in Trenton that will improve access to essential services and opportunities while reducing air pollution and addressing health disparities in the city
- ▶ Three Services
  - ▶ Carsharing Program
  - ▶ Ridesharing Program
  - ▶ Shuttle Service
- ▶ Collaborative effort between Isles, City of Trenton, DEP, Charge EVC, Environment New Jersey, and New Jersey Clean Cities Coalition



# Site Locations

# Community Outreach



COMMUNITY  
PARTNERSHIP  
AGREEMENTS



COMMUNITY  
LISTENING  
SESSIONS



SURVEYS



AMBASSADOR  
RECRUITMENT



STAKEHOLDER  
ADVISORY  
COMMITTEE



INFRASTRUCTUR  
E  
DEMONSTRATI  
ONS AND  
COMMUNITY  
RIDE AND  
DRIVES

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