Recharge America: Zero Emissions Trucks and the Low Carbon Future

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Medium and heavy duty trucks and buses have both global climate and local health impacts

FACT: Delivery trucks and tractor trailers...

- 4% vehicles on road
- 7% of all GHG emissions in the U.S.
- Release nearly half of the NOx emissions and nearly 60% of the fine particulates
- Impacts disproportionately distributed into areas with industrial operations and freeways

Oakland, CA (2016)
Medium and heavy duty truck and bus issues not isolated to U.S. – and neither can be the solutions


IPCC: Limiting warming to 1.5°C requires global net human-caused CO2 to fall by about 45 percent from 2010 levels by 2030, and be ‘net zero’ by 2050.

FACT: Diesel pollution

• Responsible for 385,000 deaths globally in 2015
• Diesel use projected to increase in the US and globally due to increase in shipping
To stabilize the climate and improve air quality, 30% of trucks and buses sold in 2030 must produce zero emissions.

Regional Haul: 25%
Work Trucks: 40%
School Buses: 50%
Transit Buses: 80%

Increasing the percentage of electric vehicles sold across these categories can get us there.
Example of Annual Zero Emissions Truck and Bus Sales Growth to Meet 100% ZEV goal by 2040
Drivers of Transformational ZEV Deployment

Intersection of public policy and corporate action results in ZEVs on the road

Public policies and programs
- State and federal emissions standards
- ZEV Procurement and production mandates
- Purchase subsidies and financing mechanisms
- Local emissions and congestion laws / zones
- Beneficial electric rate structures, charging system installation, optimization and operability programs

Corporate investment and commitments
- Fleets invest in ZEVs to: lower total ownership costs, meet ESG and climate goals, avoid stranded assets, meet operational needs
- Manufacturers make ZEVs with sufficient supply and offer at quality and cost sufficient to meet fleet needs
- Shareholders, brands, customers and communities push for ZEVs
Multifactor Assessment of U.S. Regions With Highest Potential for Large Scale ZEV Deployment

- 25 most ozone polluted cities (ALA)
- Top 30 Metro Area
- Top 10 Marine port
- Major Intermodal Railyard
- Top 30 Transit Agency (fleet size)

State / federal policy, plus corporate investments and commitments needed for this to be real
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