



A
PROGRAM
OF CALSTART

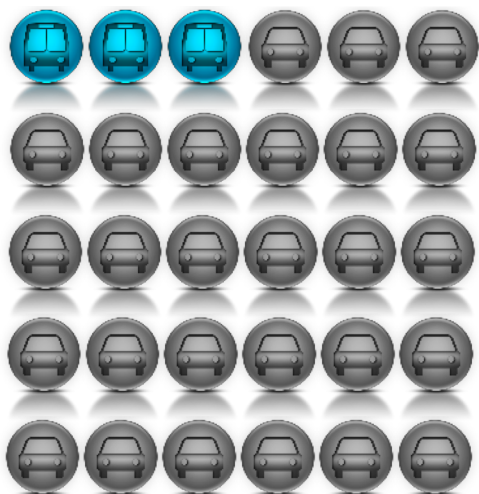
Global Commercial Vehicle Drive to Zero Program

Advanced Energy Group Q4 Stakeholder Challenge
December 12, 2019

Drive to Zero helps cities, states, and nations tackle climate change and urban pollution while spurring innovation

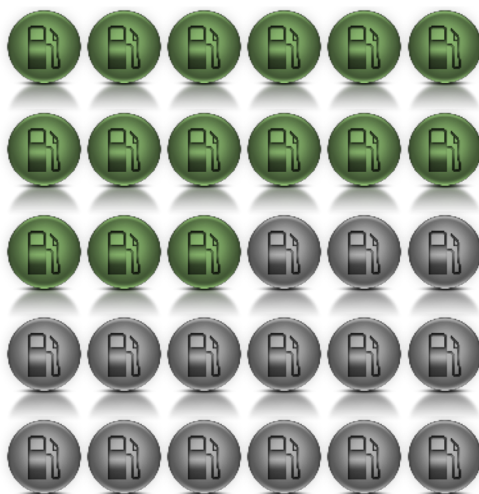
11%

on-road fleet



46%

on-road fuel consumption



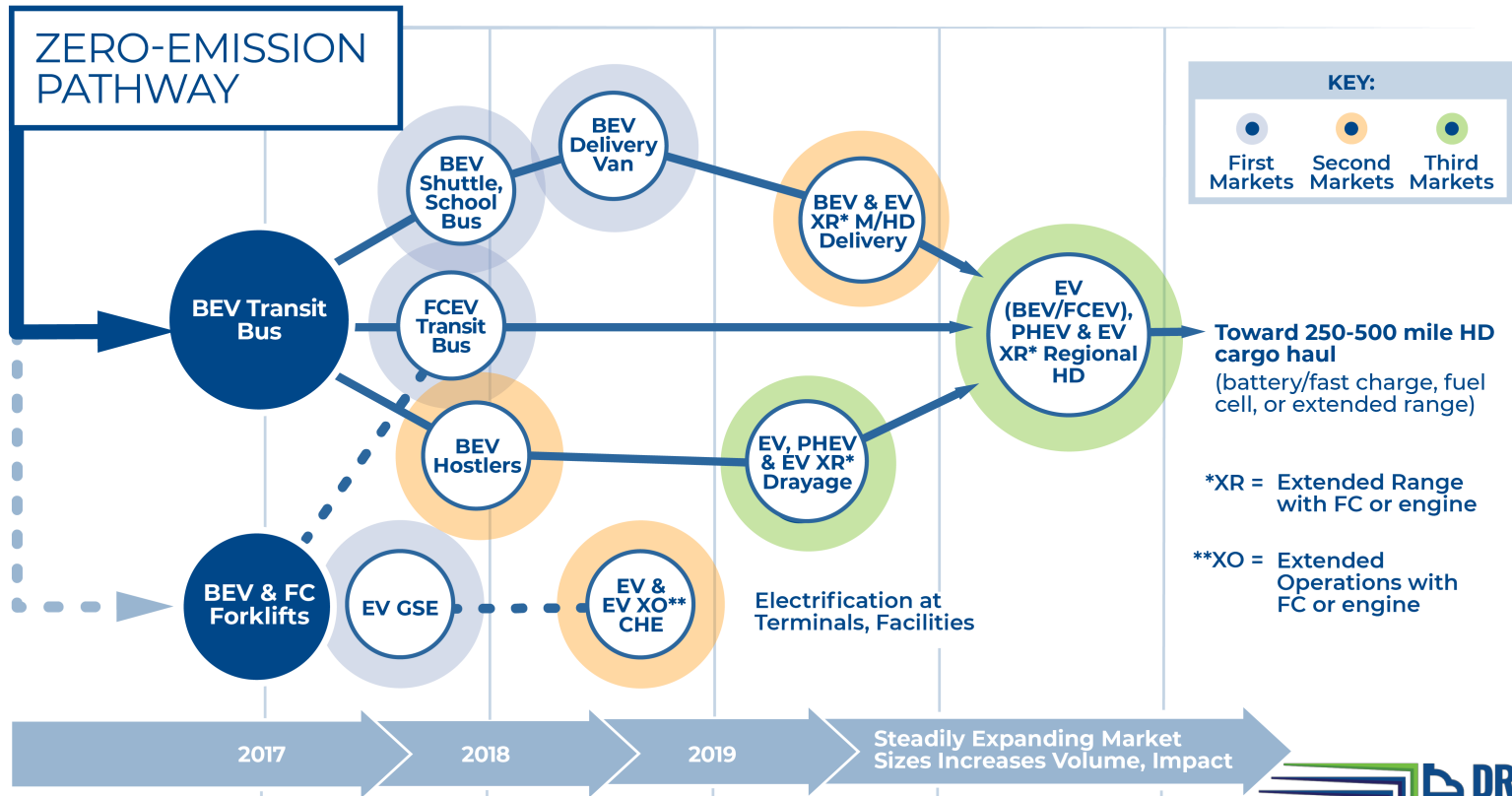
71%

on-road particulates



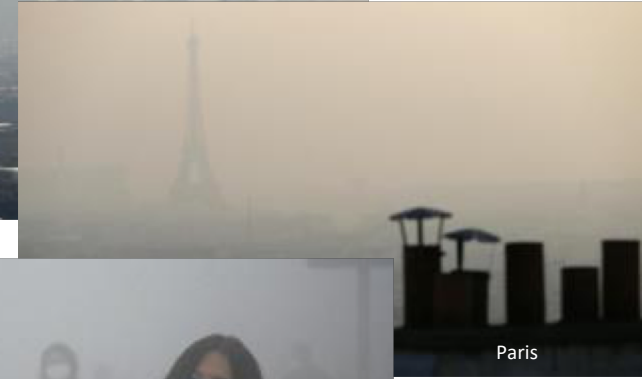
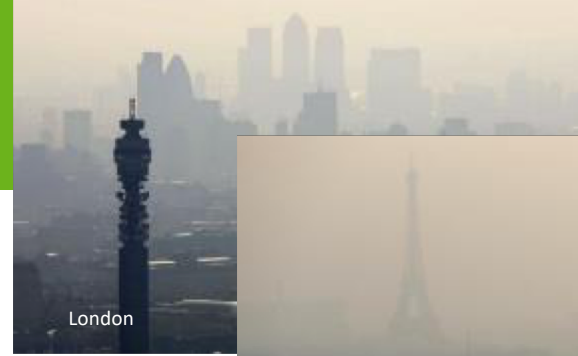
ICCT (2015): Policies to reduce fuel consumption, air pollution, and carbon emissions from vehicles in G20 nations

Our “beachhead” strategy targets vehicle segments where zero-emission technology is likely to succeed



Cities are leading the way on clean MHD policy

- Germany, Amsterdam, China signaling bans on combustion engines
- Paris, London discuss banning combustion vehicles by 2040
- Exclusion zone cities expand in EU
- Ports of LA/LB zero emission by 2035; higher fees for dirty trucks coming
- California in rule making for ZE urban trucks starting 2023
- NYC, LA renew look at congestion zones and pricing



MHD purchase incentives are the place to start



**Truck Voucher
Incentive Program**



Voucher Incentive Programs accelerate deployment of cleaner vehicles

- More than **8000 EV, hybrid, CNG** trucks and buses funded to date
 - Approximately **\$450M** mobilized to accelerate commercial technology
- Provide rapid reimbursement to vendors
- Bring automakers into new markets
- Compatible with various funding sources
- Can be designed to emphasize policy imperatives (e.g., air quality, environmental justice)



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For Mobility & Transportation to enable New York's decarbonization goals, we must focus on more than passenger cars and figure out the pathways to scale.

Benjamin Mandel
Northeast Regional Director

bmandel@calstart.org

(929) 295-6540

For more information:

www.globaldrivetozero.org