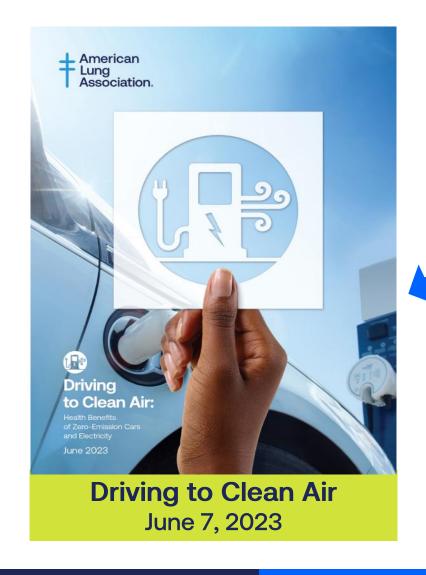


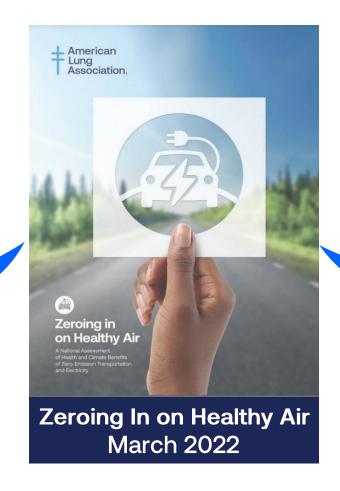
June 13, 2023

### Updated OMB Briefing: NHTSA Light Vehicle CAFE Standards Beyond MY 2026

#### **Driving to Clean Air:**

Health Benefits of Zero-Emission Cars and Electricity











## More than 1 in 3 Americans

live in places with unhealthy levels of air pollution.









People of color are 3.7x more likely than white people to live in a county with 3 failing grades.



### **NEW:** "Driving to Clean Air" Report

#### Transition to Zero-Emission Vehicles & Electricity Generation

- Full New Zero-Emission Passenger Vehicle Sales in the United States
  - 2035, 100% Passenger Vehicle Sales
- National Power Grid
  - 2035, 100% Non-Combustion Electricity Generation
- Fleet Modeling Tool: US EPA MOVES3
- Grid Mix Modeling Tool: ICF IPM Model
- Upstream Emissions: Argonne National Lab GREET2021
- Health Evaluation: US EPA COBRA
  - Note: Alaska and Hawaii not included in COBRA results



#### **LDV Emissions**



63%

Light Duty Vehicle
Share of
2050 On-Road
GHG Reduction



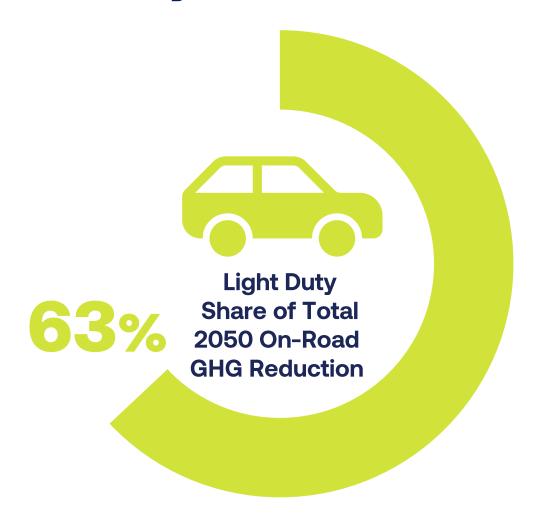
Light Duty Emission Reductions (2050)

 $NO_x - 92\%$  $PM_{2.5} - 58\%$ 

**GHG - 94%** 



# We anticipate significant carbon reductions for light-duty vehicles by 2050.





## \$978 Billion in health benefits.

#### How?





89K premature deaths avoided



2.2M asthma attacks avoided



10.7M lost work days avoided



#### **Light-Duty Downstream Reductions with ZEV Transition**

Assumption: 100 percent zero-emission light duty vehicle sales by 2035

On-Road Emission Reductions by Year			
	NO <sub>x</sub> (tpy)	VOC (tpy)	PM <sub>2.5</sub> (tpy)
2020	-284	-472	-25
2030	-23,124	-49,080	-2,903
2040	-80,975	-195,520	-11,369
2050	-111,168	-347,094	-16,170

