

Transportation Electrification Getting to 2050

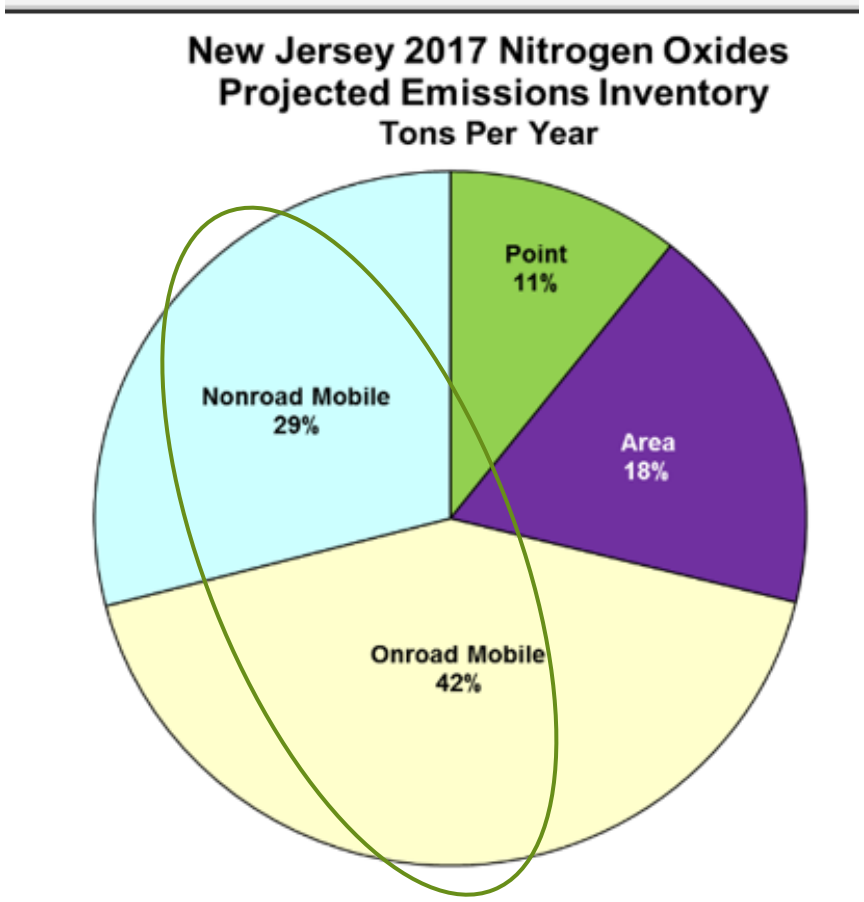
Melissa Evanego, Bureau Chief

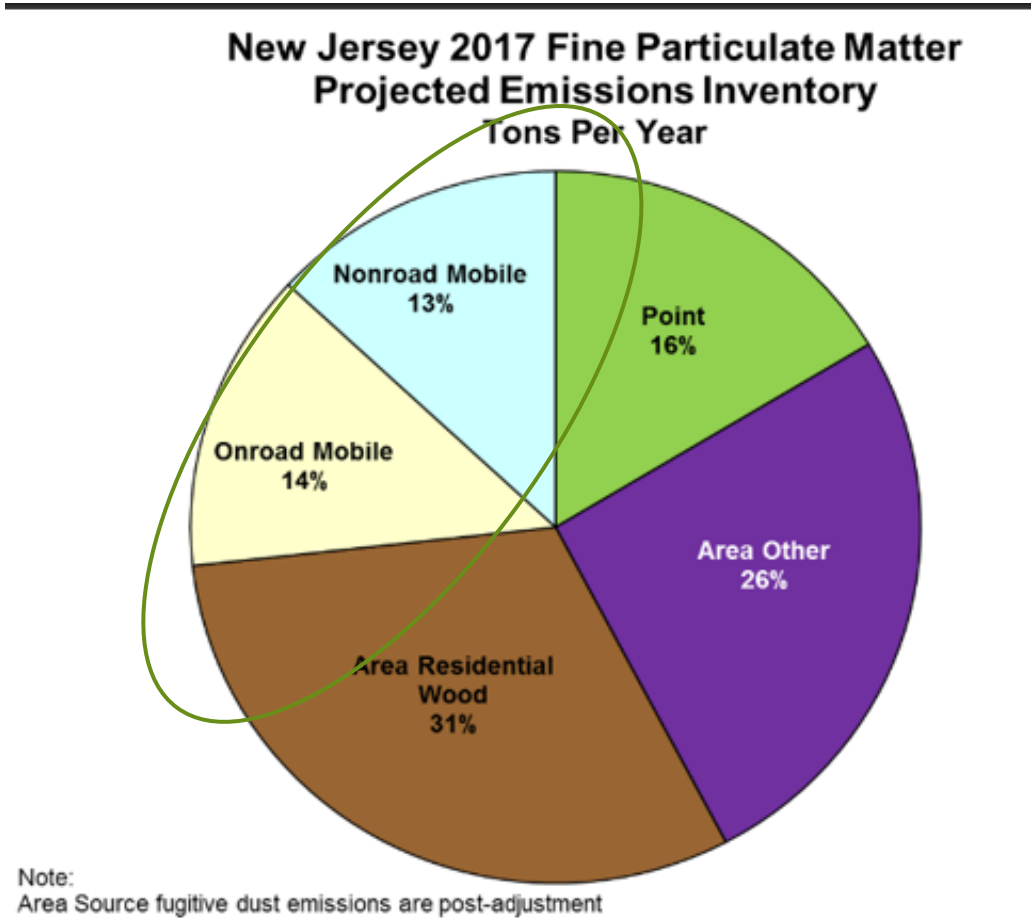
Division of Climate Change Mitigation & Monitoring

Bureau of Mobile Sources

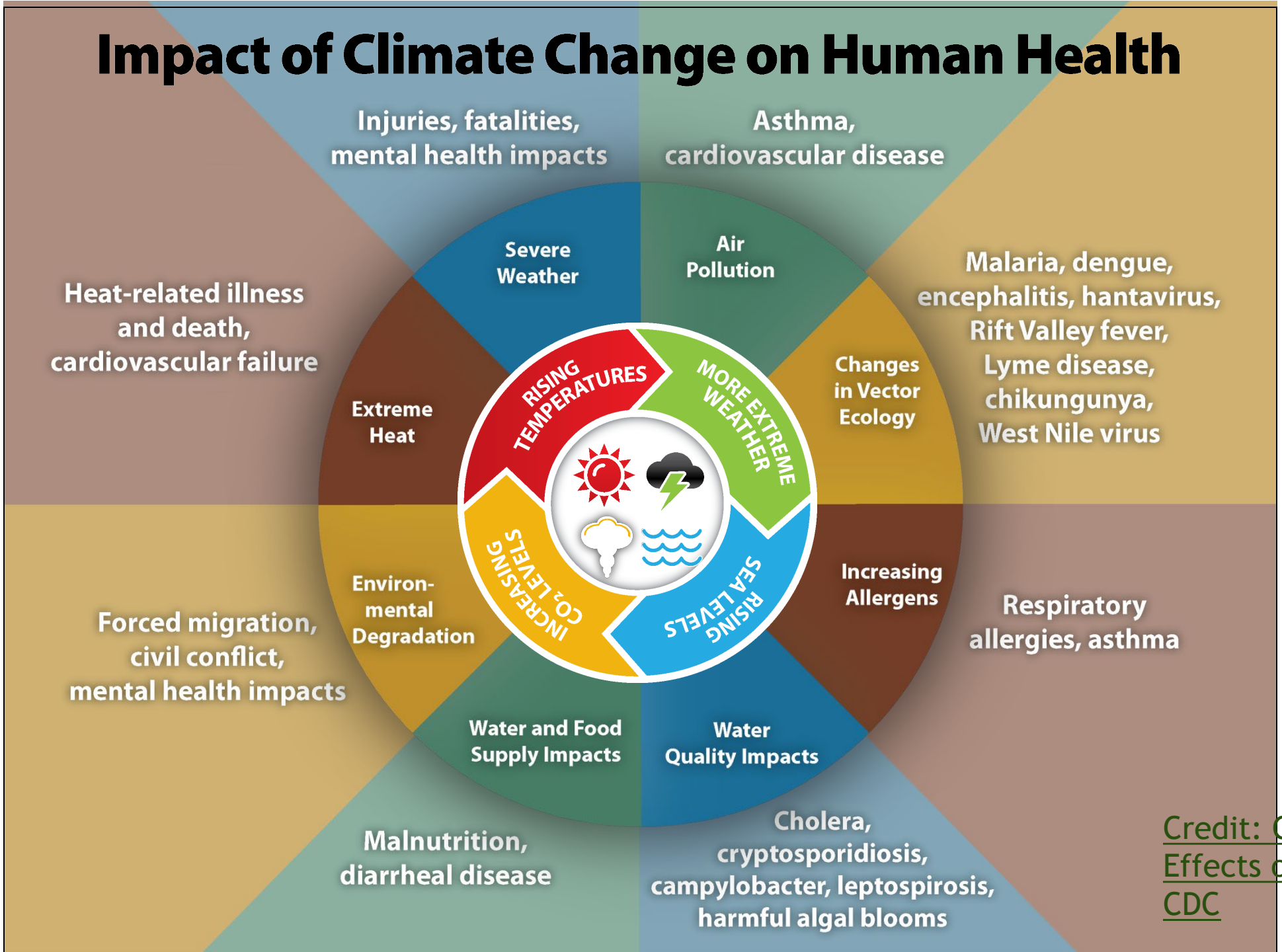
June 21, 2023

NOx and PM2.5 are still important!



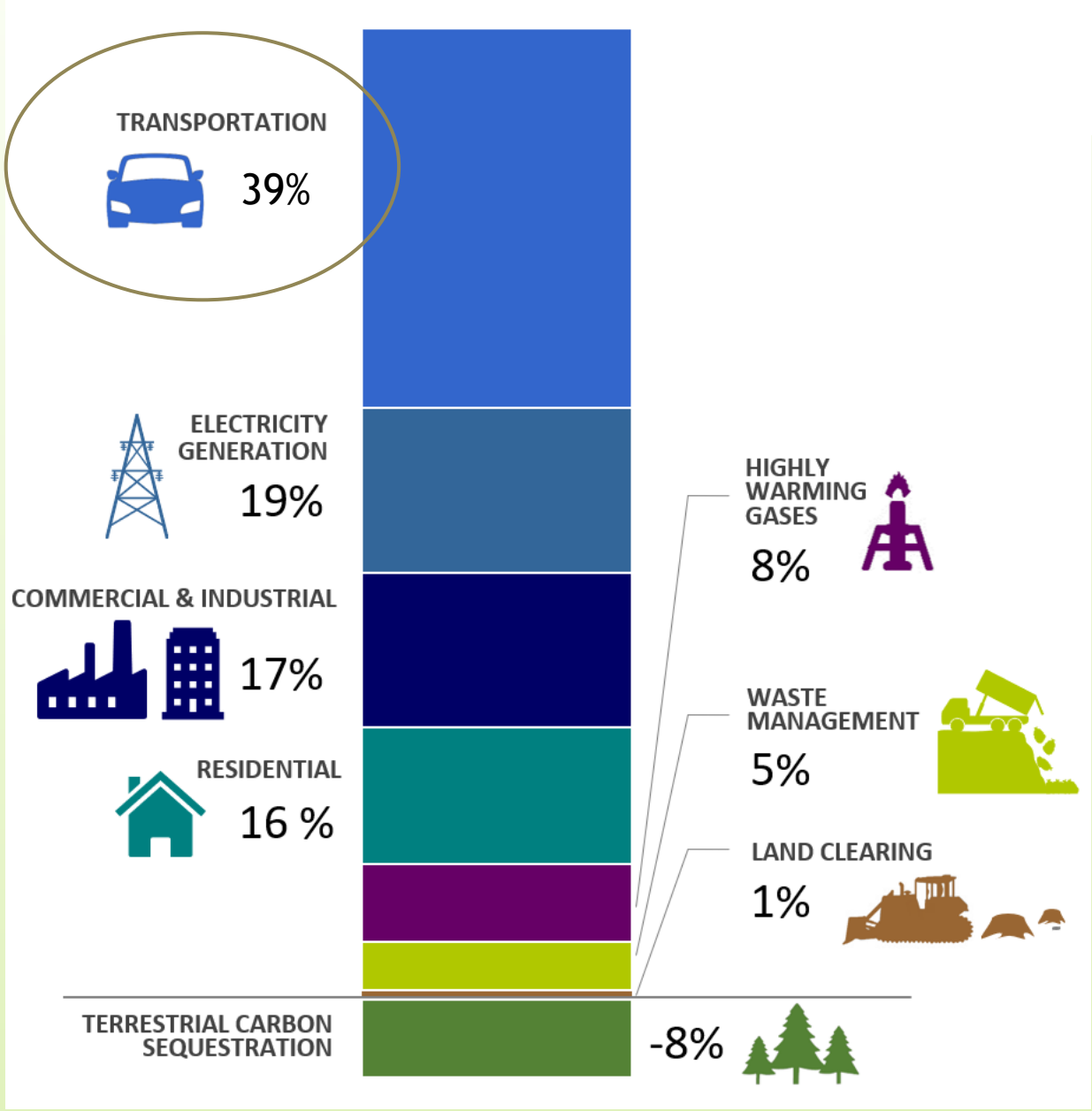


Note:
Area Source fugitive dust emissions are post-adjustment



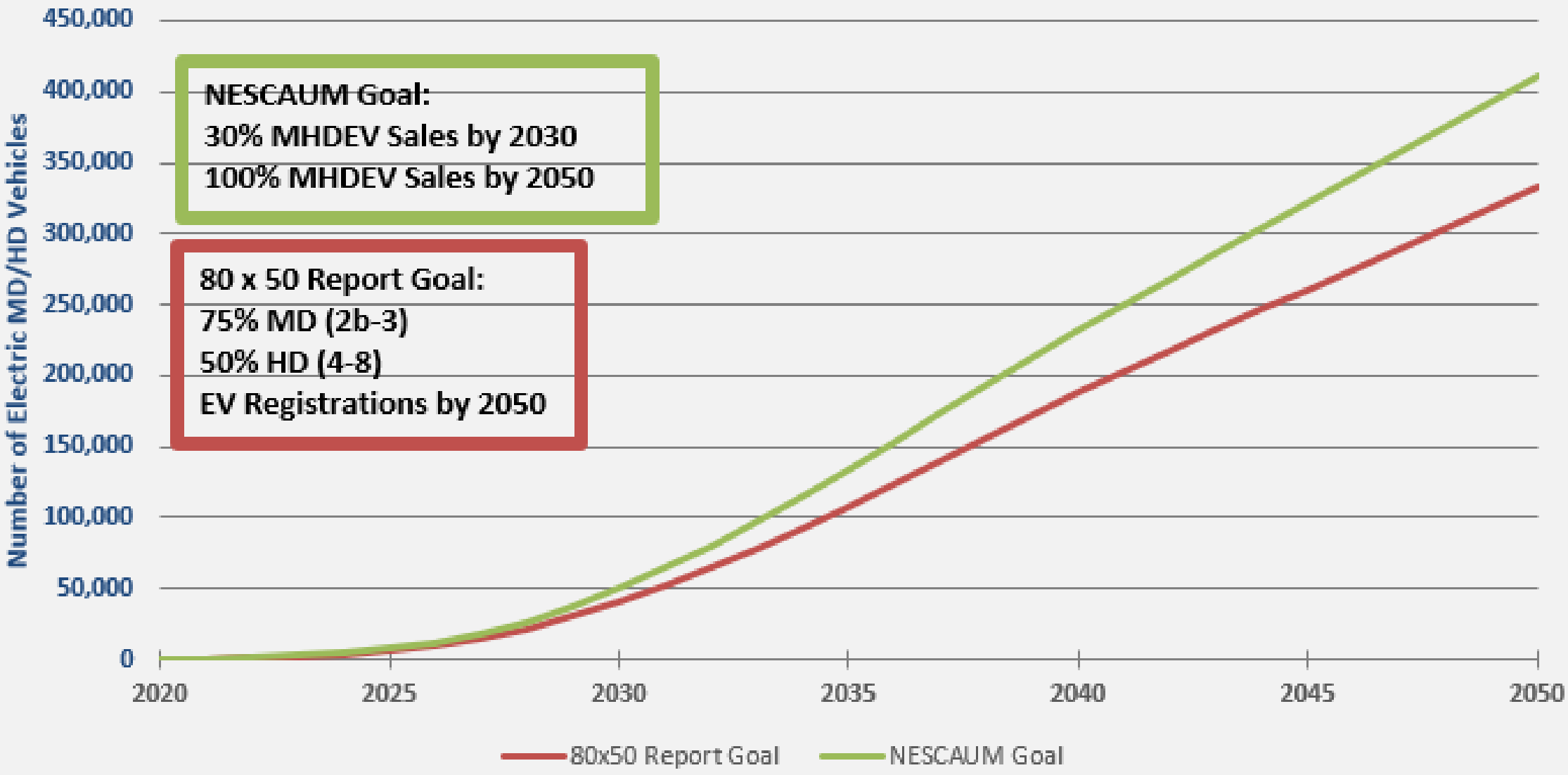
Credit: Climate Effects on Health | CDC

"Limiting human-induced global warming to a specific level requires limiting cumulative CO2 emissions, reaching at least net zero CO2 emissions, along with strong reductions in other greenhouse gas emissions."



New Jersey Greenhouse Gas Sources & Sinks 2018

Medium & Heavy Duty Electrification Goals





Medium & Heavy-Duty Vehicle Electrification Grants

DEP grants to replace old diesel vehicles & equipment with electric.

Examples: school buses, transit buses, garbage trucks, delivery trucks, port trucks and equipment. Includes associated charging equipment.

Overburdened communities will be prioritized.

Competitive solicitation.

Stay tuned for future funding rounds.







VW & RGGI School Bus Awards
200 buses awarded
~$70 million allocated

VW Mitigation Funds (2019-2021)			
Recipient	**Location**	**# of Buses**	**Cost**
Student Transportation of America	Trenton	5	$1,975,000
Durham School Services	Elizabeth	5	$1,921,510
Jersey City Public Schools	Jersey City	5	$1,839,500
Total		**15**	**$5,736,010**

RGGI Auction Proceeds (2020-2021)			
Recipient	**Location**	**# of Buses**	**Cost**
Belari Transport	Orange	7	$2,517,500
Belleville Board of Education	Belleville	2	$834,604
D&M Tours Inc.	Paterson	4	$1,628,136
Kearney Board of Education	Kearny	2	$715,564
Elizabeth Board of Education	Elizabeth	2	$800,000
Aldin Transportation Corporation	Paterson	6	$1,877,872
George Dapper Inc.	Mercer County	2	$524,615
Jay's Bus Service	Ocean County	8	$2,018,458
Yeshivah Masoras Avos	Ocean County	1	$252,307
United Talmudical Acamdeny of Lakewood	Ocean County	1	$252,307
Leonia Board of Education	Leonia	7	$1,776,151
First Student	East Orange	6	$1,696,062
Dover Board of Education	Dover	1	$252,307
Bogota Board of Education	Bogota	1	$252,307
Haledon Board of Education	Haledon	1	$400,000
Garfield Board of Education	Garfield	2	$504,616
Holcomb Transporation LLC	Camden	6	$1,615,844
Keyport Auto Body Inc (Shamrock Stagecoach)	Middlesex County	3	$882,316
Total		**62**	**$18,800,966**

RGGI Auction Proceeds 2022			
Recipient	**Location**	**# of Buses**	**Cost**
Best Choice Transportation	West Orange	2	$675,000
Clifton Board of Education	Clifton	3	$575,000
J. Carpiolin Transportation	Newark	3	$559,000
Presential Transportation	Lakewood	2	$550,529
Delsea Regional School District	Delsea	10	$4,323,020
Wall Township Public Schools	Wall Township	8	$3,691,008
Integrity Transportation	Egg Harbor City	6	$2,144,117
Jay's Bus Service 2	Lakewood	16	$5,640,000
Seman - Tov Bus Company	Neptune	30	$11,850,240
East Windsor Regional School District	East Windsor	4	$1,669,208
Jackson Twp School District - School Bus	Jackson Twp	8	$3,434,416
East Brunswick Public Schools	East Brunswick	11	$4,722,322
Township of Maplewood	Township of	3	$1,152,647
Irvin Raphael, Inc. / Raphael Bus Service LLC	Middlesex County	2	$775,000
Joshua Tours	Passaic/Essex County	4	$985,819
Student Transportation of America, Inc.	Trenton	7	$1,663,929
Klarr Transportation	Lakewood	1	$356,000
Leonia Board of Education Type A	Board of Education	1	$166,712
Leonia Board of Education Type C	Board of Education	1	$547,935
Weehawken Board of Education	Weehawken Board	1	$345,033
Total		**123**	**$45,826,933**

NJ ZIP: Zero-emission Incentive Program

ALL FUNDS HAVE BEEN ALLOCATED

Funding $90M

Eligibility Class 2b- Class 8 vehicles
Commercial, Industrial, or Institutional Organizations registered in NJ

Voucher Amounts

Vehicle Class	Voucher $
Class 2b	$20,000
Class 3	$50,000
Class 4	$65,000
Class 5	$75,000
Class 6	$90,000
Class 7	$135,000
Class 8	$175,000

Bonus voucher criteria

- Minority-, women-, or veteran-owned business
- Small business
- EJ bonus
- NJ-manufactured bonus
- School bus bonus

Basic program requirements

- $1000 application fee
- Buy new ZEV & register in NJ
- 3 years operation, 75% in NJ
- Vendor provides charging and in-state maintenance plan
- Comply with audit requirements

LEARN MORE AT www.njeda.com/njzip

Federal funding for electric school buses:

EPA's Clean School Bus Program

- The Infrastructure Investment and Jobs Act, aka the Bipartisan Infrastructure Law, was signed N**ovember 15, 2021**.
- $1000m/year nationally. Cap of 10% per state. EV and alt fuels eligible.
- National competition run by EPA.



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EPA's Clean School Bus Program

- The US EPA has announced their 2023 Clean School Bus Grant Program providing $400 million in grants for electric school buses.
- The EPA has designated 54 New Jersey school districts as priority.
- An additional 145 school districts are eligible to self-certify as priority.
- School districts can apply individually or as part of a third-party application in conjunction with three or more other districts. See table below for details.
- Applications are due Tuesday, August 22, 2023, at 11:59PM ET. For complete details, visit the EPA's Clean School Bus Program Grants website.

	Eligible entities	Number of Buses
Track 1: Individual School Districts	State and local governments	15-50
	Public and charter school districts	
	Indian Tribes and associated tribal organization	
Track 2: Partnership with third-party*	Bus manufacturers, dealers, and service providers	25-100
	Nonprofit school transportation associations	
	Private school bus fleets	
*Application must be made in conjunction with three or more other districts.		

Grant type	Electric Class 7 and 8 Funding Amount	Electric Class 3-6 Funding Amount
Priority	$395,000	$315,000
Non-priority	$250,000	$195,000



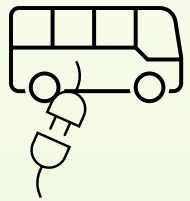


The New Jersey Electric School Bus Law

P.L.2022, c.86 (C.26:2C-8.58 et al.)

The Law: What Exactly?

*... the Department of Environmental Protection shall implement a three-year "Electric School Bus Program" **to determine the operational reliability and cost effectiveness** of **replacing diesel**-powered school buses with **electric** school buses for the daily transportation of students.*



Grants to purchase or lease all-electric school buses and charging infrastructure



10 or more passenger capacity



90 miles minimum electric range

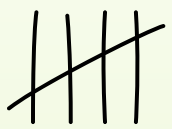


Grantee reporting and telematics data required



Training for personnel required

The Law: Who and How Much?



Award a minimum of six projects per year for three years



Include a mix of districts and contractors. Contractors must have a district partner.



Spread awards across state



At least 50% of funding must go to overburdened communities



$15 million per year, $45 million total

Program Design and Context

Guiding Principles

Electric School Bus Program

Maximize electric school bus adoption in NJ while gathering useful data

Ensure that buses are needed and utilized

- Grantees have financial “skin in the game”

Electric School Bus Program **DRAFT** Design Summary

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www.state.nj.us/dep/stopthesoot/sts-listserv.htm

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Thank you!

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