



**NYSERDA**

# **New York State Truck Voucher Incentive Program**

## **NEDC Partners Meeting**

**July 11, 2019**

# New York State Transportation Goals

- The vast majority of class 3-8 trucks and buses operate on diesel fuel.
- Diesel emissions include carbon dioxide, particulate matter and oxides of nitrogen (NOx). Carbon dioxide contributes to climate change.
- New York State (NYS) is committed to meeting multiple clean energy goals including a 40% reduction in emissions by 2030.
- Deploying clean trucks help reduce the negative impacts of trucks and buses that typically operate on diesel.
- The purpose of this effort is to continue and expand the New York Truck VIP within fleets in New York.

# What is NYT-VIP?

- NYT-VIP provides point-of-sale discounts to reduce the cost of all-electric (BEV) and alternative fuel vehicles (AFV)
- BEV and AFV technologies are cleaner, quieter, and frequently cost less to operate; vouchers reduce the payback period
- Scrappage ensures removal of the oldest, dirtiest diesel engines from New York roads

# Voucher History

- First round was active from 2013 through mid-2018

Technology	# Fleets	# Vehicles	Voucher Funds
DPF	9	124	\$2,452,304.80
EV	18	65	\$5,673,093.00
CNG	4	71	\$3,033,524.00
CNG Conversion	4	15	\$334,272.00
Hybrid	22	83	\$1,198,179.20
Hybrid Conversion	3	236	\$1,830,776.00
<b>Total</b>	<b>60</b>	<b>594</b>	<b>\$14,522,149.00</b>

# What's different?

## Highlights:

- Multiple funding sources
- Higher maximum voucher amounts
- Projects not necessarily confined to 30 urbanized counties
- No diesel retrofits
- Scrappage requirement for all projects
- Streamlined, online process replaces paper-based process

# Voucher Funding Sources

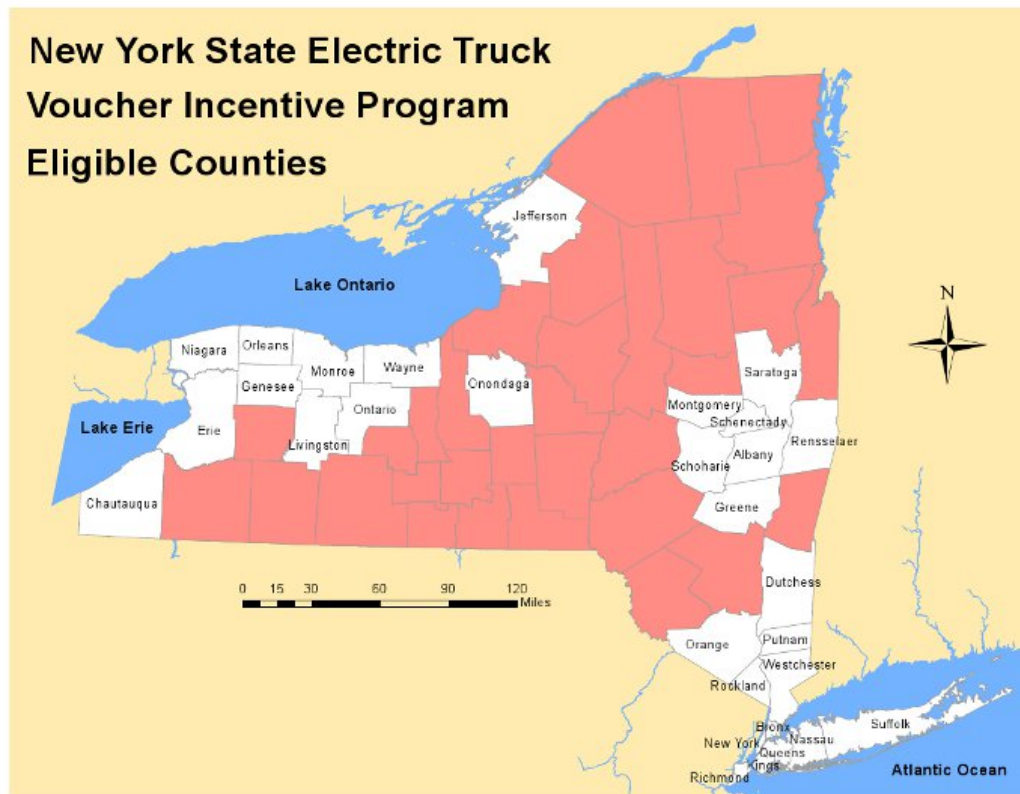
Funding Source	NYS Agency	Vehicle Types	Amount
CMAQ	NYSDOT	Class 3-8 BEV	\$10M
Volkswagen Settlement	NYSDEC	Heavy Trucks (Class 8)	\$3.6M
		Medium Trucks (Class 4-7)	\$4.8M
<b>TOTAL</b>			<b>\$18.4M</b>

# Voucher Funding Sources

## Congestion Mitigation and Air Quality (CMAQ) Improvement Program

- Funding originates from Federal Highway Administration (FHWA)
- Vehicles must be constructed with 100% domestic steel, iron, and manufactured products
  - Waiver in place for **Class 3-8 BEVs** with final assembly done in United States
- NY funding managed by NYS Department of Transportation (DOT)
  - Vehicles must be domiciled and operate in **one of 30 urbanized counties**

# Voucher Funding Sources (cont'd)





# Voucher Funding Sources (cont'd)

## Volkswagen (VW) Settlement

- Funding originates from Appendix D (NOx Mitigation Trust) of VW Settlement with U.S. Environmental Protection Agency
- Intended to replace oldest, dirtiest diesel engines that emit greatest amounts of nitrogen oxides (NOx)
- NY Department of Environmental Conservation (DEC) managing NY's allocation of \$127.7 million over 10 years
  - DEC working with NYSERDA to disburse several funding categories through NYT-VIP
  - Currently only vocations that do not transport passengers
  - Up to 33% of funding can be spent on non-BEVs

# Voucher Funding Sources (cont'd)

## Volkswagen (VW) Settlement (cont'd)

- Emissions standards:
  - CNG/LPG: Engines certified to the Optional 0.02 g/bhp-hr NO<sub>x</sub> standard are eligible for an additional incremental amount or an increase in the Class/Fuel Type, whichever is less
  - Hybrids: HEVs and PHEVs must be certified, or modeled to show compliance with, at least the 0.2 g/bhp-hr NO<sub>x</sub> certification standard
    - Vehicles meeting the 0.02 g/bhp-hr Optional NO<sub>x</sub> certification standard may qualify for higher funding amounts

# Eligible vehicle technologies

- Weight classes 3-8 (>10,000 lbs)
- Propulsion technologies:
  - Battery electric (BEV)
  - Plug-in hybrid electric (PHEV)
  - Conventional hybrid (HEV)
  - Compressed natural gas (CNG)
  - Propane (LPG)

# Voucher amounts and caps: Trucks

- Local freight (vocations that do not transport passengers)

Voucher Amounts and Caps by Vehicle Technology and Weight Class							
Vehicle Technology	Incremental Cost %	Vehicle Weight Class (GVWR)					
		3	4	5	6	7	8
BEV	80-95%*	\$60,000	\$100,000	\$110,000	\$125,000	\$150,000	\$185,000
PHEV	85-90%^	-	\$55,000	\$60,000	\$70,000	\$100,000	\$120,000
HEV	85-90%^	-	\$25,000	\$35,000	\$45,000	\$50,000	\$55,000
CNG	85-90%#	-	\$25,000	\$35,000	\$45,000	\$50,000	\$55,000
Propane	85-90%#	-	\$25,000	\$35,000	\$45,000	\$50,000	\$55,000

\* 80% incremental cost limit for Class 3 BEV only, and Class 3 BEVs must operate and be domiciled in a CMAQ county to be eligible; 95% incremental cost applies for Class 4-8 BEV

^ PHEVs and HEVs must comply with the 0.2 g/bhp-hr NOx certification standard. The applicable incentive funding % will be determined on a vehicle-specific basis based on the engine's emissions relative to either the 0.2 g/bhp-hr NOx certification standard (85%) or the 0.02 g/bhp-hr NOx standard (90%)

# Engines meeting the 0.02 g/bhp-hr NOx standard are eligible for 90% of incremental cost, subject to a \$5,000 higher cap in each weight class

# Voucher amounts and caps: Buses

- School, shuttle, and transit buses (currently CMAQ only)

Voucher Amounts and Caps by Vehicle Technology and Weight Class							
Vehicle Technology	Incremental Cost %	Vehicle Weight Class (GVWR)					
		3	4	5	6	7	8
BEV	80%*	\$60,000	\$90,000	\$100,000	\$110,000	\$120,000	\$150,000

\* BEVs must operate and be domiciled in a CMAQ county to be eligible

# Get in touch!

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