



NYSERDA

New York Truck Voucher Incentive Program

Transit buses

January 14, 2020

Agenda and Ground Rules

Agenda

- Program background – NYSERDA
- Voucher funding sources and amounts – NYSERDA
- Program eligibility guidelines – CALSTART
- Voucher process and mechanics – CALSTART
- Voucher Help Center – Center for Sustainable Energy
- Discussion/questions

Ground rules

- Webinar is being recorded
- Slides will be posted: <https://nyserdera.ny.gov/Truck-Voucher-Program>
- To raise questions:
 - Type questions in the “Questions” box
 - Click the “Raise Hand” button

Program Background

New York State Transportation Overview

- The vast majority of class 3-8 trucks and buses operate on diesel fuel
- Diesel emissions include carbon dioxide, particulate matter and nitrogen oxides (NOx) - carbon dioxide contributes to climate change, and particulate matter and NOx can harm human health
- New York State is committed to meeting multiple clean energy goals, including a 40% reduction in greenhouse gas (GHG) emissions by 2030
- Deploying electric and alternative fuel trucks and buses helps reduce the negative impacts of trucks and buses that typically operate on diesel
- Continuing and expanding NYTVIP will make deployment of alternative fuel trucks and buses more affordable and easier for fleets in New York

What is NYTVIP?

- NYTVIP provides point-of-sale discounts (vouchers) to reduce the cost of battery-electric bus (BEB) technologies
- BEB technologies are cleaner, quieter, and frequently less costly to operate; vouchers reduce the upfront purchase costs and the payback period
- Program brings together vehicle manufacturers, dealers (Contractors), and fleets to get cleaner trucks and buses on the road
- Scrappage ensures removal of the oldest, dirtiest diesel engines from New York State 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 (HEV)	22	83	\$1,198,179.20
HEV Conversion	3	236	\$1,830,776.00
Total	60	594	\$14,522,149.00

What's different this time?

Highlights:

- Multiple funding sources
- Higher maximum voucher amounts
- Projects may be eligible outside of 30 counties currently or recently in non-attainment with NAAQS
- Scrappage requirement for most projects
- Streamlined, online process through NYSERDA website

NYTVIP team

- Program Administrator: NYSERDA
- Voucher Help Center (VHC): Center for Sustainable Energy
- Outreach Lead / Technical Support: CALSTART
- Reporting & Analysis: Industrial Economics

Voucher Funding Sources and Amounts

Voucher Funding Sources

#	Funding Source	NYS Agency	Vehicle Types	Amount
1	CMAQ	NYSDOT	Class 3-8 Battery Electric Vehicles	\$10M
2	Volkswagen Settlement	NYSDEC	Class 8 Trucks	\$3.6M
3			Class 4-7 Trucks	\$4.8M
4			Class 4-8 Electric Transit Buses	\$16.7M
			TOTAL	\$35.1M

Volkswagen (VW) Settlement Funding

- 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)
- DEC working with NYSERDA to disburse several funding categories through NYTVIP

VW Settlement Funding (cont'd)

Estimated New York State Funding by VW Settlement Mitigation Action Item			
Eligible Mitigation Action Item	New York State Estimated Funding	Funding (%)	Anticipated # vehicles total/electric
Item 1: Class 8 Local Freight & Port Drayage Trucks	Up to \$11,500,000	Up to 9%	145/60
Item 2: Class 4-8 School Bus, Shuttle Bus, or Transit Bus	At least \$52,400,000	At least 40.5%	Up to 500/100+
Item 3: Freight Switchers	Up to \$8,000,000	Up to 6%	10/0
Item 4: Ferries/Tugs	Up to \$3,500,000	Up to 2.5%	12/0
Item 5: Ocean Going Vessels (OGV) Shorepower	\$0	0%	N/A
Item 6: Class 4-7 Local Freight Trucks	\$8,500,000	7%	265/65
Item 7: Airport Ground Support Equipment (Charging Equipment)	\$3,200,000	2.5%	77
Item 8: Forklifts and Port Handling Equipment	Up to \$1,000,000	Up to 1%	4/4
Item 9: Light Duty Zero Emission Vehicle Supply Equipment	\$19,200,000	15%	Tbd
Item 10: Federal Diesel Emission Reduction Act Option	Up to \$10,000,000	Up to 8%	300/0
Administrative Costs (excluding Item 9)	Up to \$10,900,000	Up to 8.5%	N/A
Mitigation Trust Funding Totals	\$127,701,807	100%	Up to 1,313/229+



VW Funding: Eligible Authorities and Municipalities

1. Broome County Transit
2. Capital District Transportation Authority (CDTA)
3. Central New York Regional Transportation Authority (Centro)
4. Chemung County (C Tran)
5. Dutchess County Public Transit
6. Greater Glens Falls Transit
7. Nassau Inter-County Express (NICE)
8. Niagara Frontier Transportation Authority (NFTA)
9. Port Authority of New York and New Jersey (PANYNJ)
10. Rochester-Genesee Regional Transit Authority (RTS)
11. Suffolk County Transportation
12. Tompkins Consolidated Area Transit (TCAT)
13. Transport of Rockland
14. Ulster County Area Transit (UCAT)
15. Westchester County Bee-Line Bus System
16. The City of Long Beach, Department of Transportation
17. Clinton County Public Transit
18. Huntington Area Rapid Transit

Transit Bus Funding – VW option

- The 18 entities listed are eligible for up to 100% of incremental cost
 - Cannot be combined with other funds for more than 100% of incremental cost

Voucher Amounts and Caps						
Vehicle Technology	Incremental Cost %	Vehicle Weight Class (GVWR)				
		4	5	6	7	8
BEV / FCEV	100%	\$ 100,000	\$ 125,000	\$ 150,000	\$ 250,000	\$ 385,000

- Scrappage of an existing bus is required
- Infrastructure support through NYPA will be available for VW-funded buses
- Above funding amounts guaranteed for 18 months

VW Vehicle Scrappage Requirements

- Goal: Reduce diesel exhaust emissions by replacing older, dirtier diesel buses with new electric buses
- Eligibility: Vehicles with 1992-2009 model year diesel engines
 - Vocation and GVWR must be similar to new vehicle
- Scrappage must occur at a NYSERDA-approved facility

Exception: CMAQ-funded transit buses for public transit entities



VW Vehicle Scrappage Requirements (cont'd)



- Definition: “Scrapped” shall mean to render inoperable and available for recycle, and, at a minimum, to:
 - Cut a 3-inch hole in the engine block
 - Disable the chassis by cutting frame rails completely in half
- Documentation:
 - The completed NYSDEC Vehicle Scrappage Certification
 - Before photos (vehicle, chassis, engine, VIN)
 - After photos (engine destruction, cut chassis)

VW Environmental Justice Requirements

- Transit buses funded through VW Settlement must be either:
 1. Domiciled within, or operated within 0.5 mile of, a DEC-defined Potential Environmental Justice Area as defined by: <https://www.dec.ny.gov/public/911.html>; or
 2. (If the all-electric transit bus depot is not located within a DEC defined Potential Environmental Justice Area) The transit authority or NYSERDA must identify proposed operational route(s) for DEC approval
- NYSERDA shall coordinate a Community Outreach Plan to increase program participation, particularly in Potential Environmental Justice areas

VW NYPA Infrastructure Support

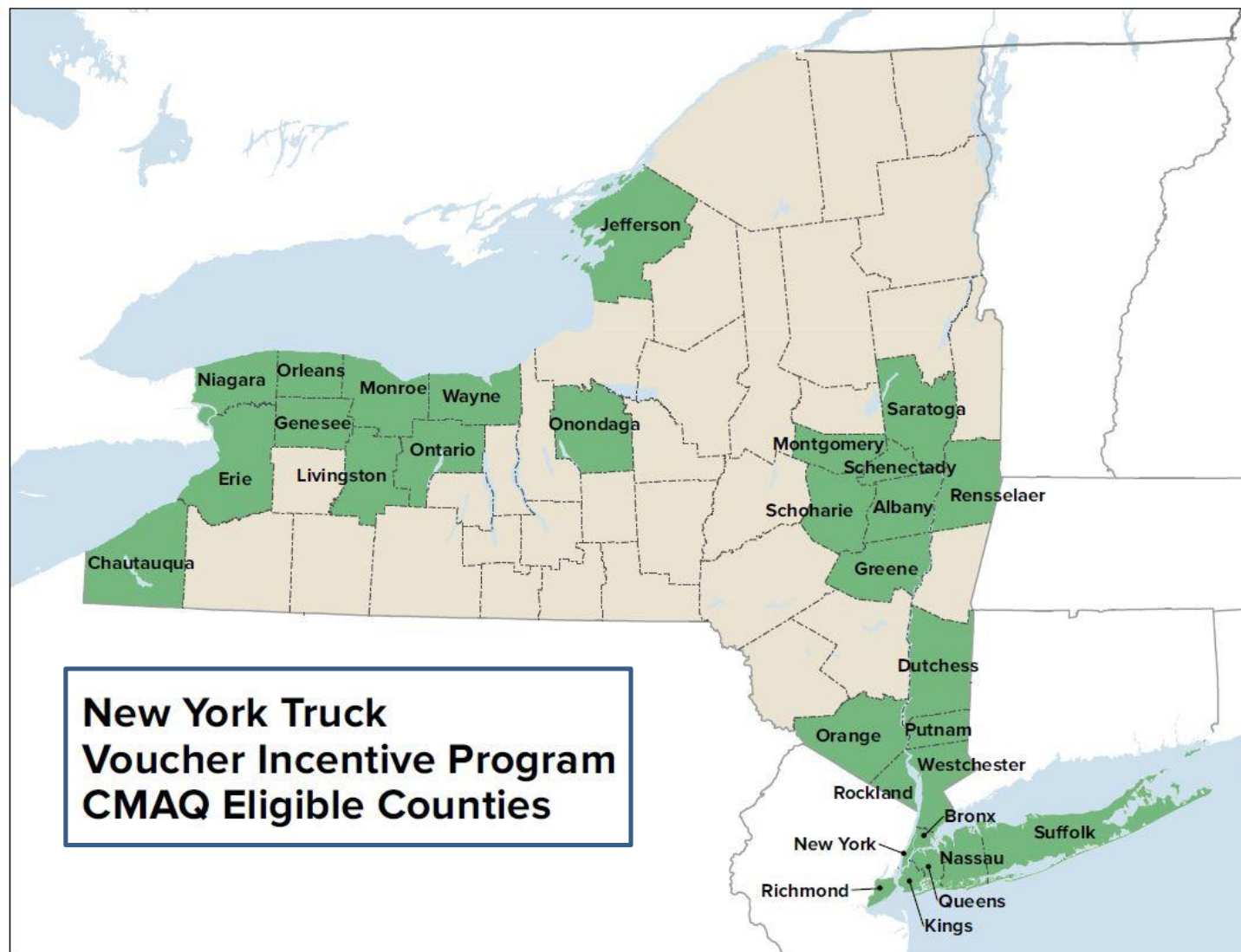
- Entities receiving VW voucher funding for new electric transit buses may also be eligible to receive VW funds for charging infrastructure incentives from NYPA
- VW funded charging infrastructure must be associated with a VW funded electric transit bus
- It is important to work with NYPA to understand electric transit bus charging infrastructure options and potential utility upgrade requirements
- More details on VW funded charging infrastructure incentives will be announced shortly

CMAQ Funding

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 non-attainment or maintenance counties**

CMAQ-Eligible Counties



Transit Bus Funding – CMAQ option

- If you are not eligible for VW funds, but are located in a CMAQ county, you may qualify for up to 80% of the incremental cost:

		Voucher Amounts and Caps					
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

- Access to these funds does not require scrappage of an existing vehicle for public transit agencies and transportation services for the public (e.g., paratransit)*

Pause for Questions on Funding Sources

Program Eligibility Guidelines

Fleet Eligibility and Requirements

- Commercial, non-profit, or public fleets (excluding federal govt)
- No single fleet may claim more than 25% of total funding
- Buses purchased through the Program must be operated for a minimum of five years
- Semi-Annual Fleet Usage Reports are required for three years following voucher payment

For leased vehicles:

- Lease term must be at least five years
- Leasing company is purchaser of record, responsible for ensuring compliance with all requirements (e.g., reporting)
 - Leasing company needs to keep this in mind when entering into the lease agreement with the fleet

Eligible Bus Technologies

- Weight classes 4-8 (>14,000 lbs)
 - Battery electric (BEV) (*class 3 also eligible, CMAQ only*)
 - Fuel cell electric (FCEV) (*VW only*)
- BEV repowers are eligible technologies (*CMAQ only*)
 - Must be certified with an operational lifespan of 10 years

Bus Eligibility Requirements

- Engine/motor, drive train, and battery packs must be under manufacturer warranty for 36 months or 50,000 miles
- When applying for vehicle eligibility, manufacturer, upfitter, or dealer must submit a plan to provide warranty service, replacement parts, and technical support in NYS
- Fuel-fired heaters are permitted for use in a BEV bus but are not an eligible expense

Voucher Process and Mechanics

Involved Parties

Manufacturers

Original Equipment Manufacturers (OEM), Upfit/Retrofit Manufacturers (URM), or engine/powertrain producers with vehicle(s) to be sold through the Program

- Submit *Vehicle Eligibility Application*

Contractors

Dealers / vendors that market and sell approved vehicles through the Program and receive voucher payment from NYSERDA

- Submit online *Contractor Application*
- Submit online *Voucher Application*
- Responsible for providing documentation to VHC to redeem voucher

Vehicle Fleets

Commercial, non-profit, or non-federal government fleets that use point-of-sale discounts to purchase or lease new EV or AFV

- Responsible for scrappage of an eligible diesel vehicle (if applicable)
- Works with Contractor to supply all information for Voucher Application / redemption
- Responsible for compliance with Semi-Annual Fleet Usage reporting requirement

Voucher Process at a Glance

Fleet initiates purchase from Contractor (and identifies vehicle for scrappage)

Contractor submits Voucher Application, including Purchaser Terms & Conditions

NYSERDA reviews Voucher Application; if satisfactory, funding is reserved

Contractor completes redemption, documenting final sale, delivery (and scrappage)

NYSERDA reviews redemption materials and issues payment

Program Timelines

- The Program is now live and ready to accept applications
- No application deadline; the program will continue until all of the funds have been allocated
- Voucher applications reviewed and accepted on a first-come, first-serve basis
- Applicants have **18 months** from voucher approval to redeem the voucher
 - Applicants may petition the Program for a 6-month extension for a maximum total duration of 24 months

Voucher Help Center (VHC)

Voucher Help Center

- Operated by the Center for Sustainable Energy (CSE)
- Manages intake of Vehicle, Contractor, and Voucher Applications
- Works with NYSERDA to approve/deny and process applications
- Point of entry for general inquiries

- Contact the Voucher Help Center
NYTVIP@energycenter.org
866-595-7917

Get in touch!

<https://nyserda.ny.gov/truck-voucher-program>

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Questions & Discussion