TRANSITions 2021 Transit Webinar Series



GreenPower Motor Company San Joaquin Valley Air Pollution Control District January 21, 2021

AGENDA

- 1:30pm Allowing time for the attendees to arrive
- 1:33pm Welcome and Housekeeping
- 1:35pm GreenPower Motor Company Site Tour Video
- 1:45pm Ryne Shetterly, VP Sales and Marketing, GreenPower Motor Company
 - http://www.greenpowerbus.com

Questions and Answers

- 2:05pm Matt Bischoff, Air Quality Specialist I, San Joaquin Valley Air Pollution Control District California Volkswagen Mitigation Trust Funding: Zero-Emission Transit, School and Shuttle Buses
 - http://vwbusmoney.valleyair.org

Questions and Answers

- 2:20pm Closing Remarks from Ryne Shetterly and Matt Bischoff
- 2:25pm Closing Remarks from Linda Urata

You are invited to the TRANSITions 2021 Site Tour Webinar: City of Porterville Leads the Charge! January 28, 2021 10am to 11am









Electric Vehicles

About GreenPower



- Began in 2010 with the vision to advance the adoption of EVs by making battery-electric buses and trucks affordable, durable, and easy to deploy.
- Offer commercial vehicles for delivery, public transit, schools, vanpools, micro-transit, shuttles, and more.
- Our vehicles are built from the ground up to be electric and are never converted.
- The 'clean sheet' design allows for optimal placement of the battery and propulsion systems, increasing the overall vehicle strength and significantly enhancing the battery weight distribution compared to other electric vehicles.

The GreenPower chassis is designed to be the strongest, safest, and most durable product on the market.

EV Star CC



- The EV Star CC, bare cab and chassis, takes our concept of purpose-built to the extreme! Your body on our chassis, with all the benefits of being zero-emission.
- Industry-proven platform that can be outfitted to meet any industry needs.
- The Cab and Chassis' highly adaptable platform can take on your most difficult routes with maximum efficiency.



EV Star



- The EV Star is a multi-purpose, zero-emission MineBus that can be used for paratransit, employee shuttles, micro-transit, vanpools, and more.
- Range of up to 150 miles and offers dual charging capabilities as a standard.
- GreenPower offers multiple configurations that fit operators' needs to include ADA wheelchair access, luggage racks, and luxury seating.
- The EV Star is the only Buy America compliant and FTA Altoona-tested vehicle in its class.



EV Star +



- Seating capacity of up to 24
 people and wheelchair position
 options available
- EV Star Plus is a cutaway bus with a wider body utilizing interior space more effectively as it is poised for a para-transit fleet operations.



EV Star Cargo



- Purpose-built, class 4 vehicle
- 1-2 person seating capacity
- 22.6 ft. in length
- Perfect for last mile delivery solutions.
- Range of up to 150 miles and class leading carrying capacity of 5,000+ pounds.



EV Star Cargo +



- The EV Star Cargo+ is the zero-emission vehicle for your last-mile delivery solutions.
- The Cargo+ is the only purpose-built Class 4, electric delivery truck currently available in North America and combines the EV Star CC with a dry freight body from highly reputable body manufacturers such as Marathon.
- Utilizing state-of-the-art lightweight and aerodynamic components, the EV Star Cargo+ features the same industry-leading range of up to 150 miles.



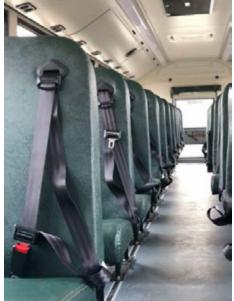


BEAST



- Battery Electric Automotive School Transportation
- Seatbelts are a standardized feature
- Longest driving range of up to 150 miles
- B.E.A.S.T. features a Monocoque chassis and has been designed from the ground up to be battery electric.
- Standardized features include air ride suspensions, ABS disk brakes, and passthrough storage.
- Seating capacity of up 90 passengers.





EV250



- Features a monocoque chassis body with a stainless-steel chassis.
- The advanced battery systems gives the EV250 a range of up to 140 miles on a single charge.
- It has a seating of 21 seats plus standees



EV350



- The EV350 has a range of up to 200 miles on a single charge.
- It has a seating plan of 40 seated passengers plus standees and 2 wheelchair-positions.

Operating locally at Porterville Transit.

























University of California San Francisco

Thank you!



Ryne Shetterly

Vice President of Sales and Marketing ryne@greenpowerbus.com (909) 954-7530



greenpowerbus.com



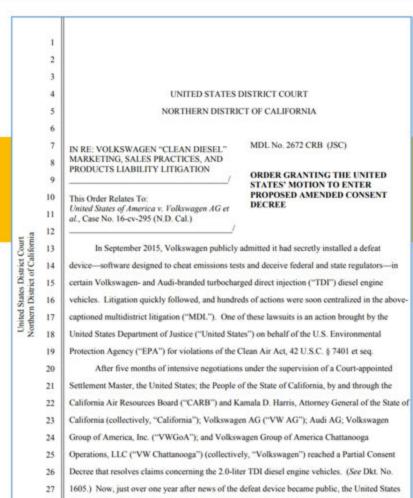
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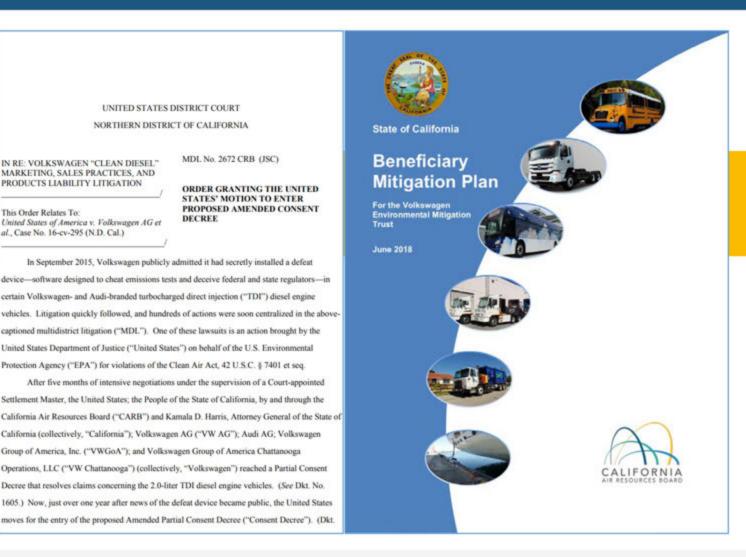
South Coast Air Quality Management District
Bay Area Air Quality Management District
San Joaquin Valley Air Pollution Control District



Overview of the Volkswagen Environmental Mitigation Trust











Zero-Emission Transit, School, and Shuttle Buses Eligible Projects and Funding Amounts

\$65M to Replace Class 4-8 Transit and Shuttle Buses

Transit Buses

Up to \$180,000

For a new, commercially-available, battery-electric bus

Up to \$400,000

For a new, commercially-available, fuel-cell bus

Shuttle Buses

Up to \$160,000

To replace an eligible shuttle bus with new, commerciallyavailable, zero-emission technology

- ✓ Total funding for this category is \$65 million, with \$4 million remaining for Transit and Shuttle Buses
- ✓ No more than 50% of available funds in each increment will be allocated to a single bus category
- ✓ Total cost per vehicle must not exceed 75% for non-government owned and 100% for government owned vehicles
- ✓ Stacking of VW funds with HVIP and other CARB funds not allowed



Zero-Emission Transit and Shuttle Buses Key Points



Open to public and private organizations



First Come, First Served



\$130M Total Funding \$4M available in 2021



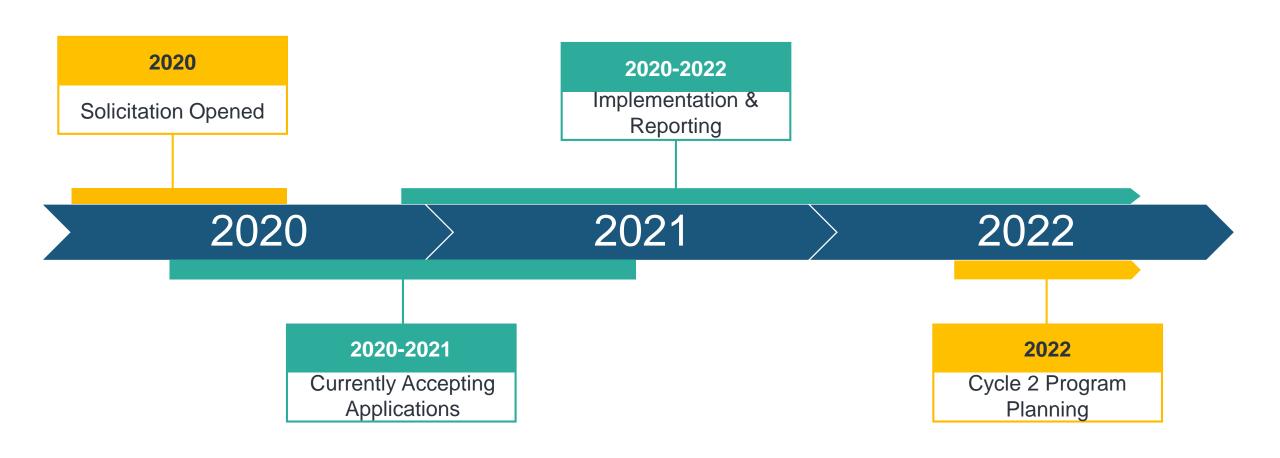
50% of funding to disadvantaged or low-income communities





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Zero-Emission Transit and Shuttle Buses Tentative Schedule





Zero-Emission Transit, School, and Shuttle Buses Overview

- Applications must be submitted electronically through the online portal at http://vwbusmoney.valleyair.org
- Requirements for Old Bus (to be replaced)
 - Internal combustion engine (gasoline, diesel, CNG, or propane)
 - GVWR 14,001 or greater (Class 4 − 8)
 - Transit and shuttle buses must be 2009 or older
- Requirements for the New Bus (replacement bus)
 - Must be zero-emission (hydrogen fuel cell and battery electric-powered)
 - Listed on HVIP Eligible Vehicle List at www.californiahvip.org/
- Funding Limitation
 - The maximum funding expenditures per Entity, as determined by Tax Identification Number, is \$3,250,000
- Contract is required prior to beginning project, with three (3) year annual report
- Funds are disbursed upon verification of project completion (reimbursement)



Grantee Reporting and Operational Requirements



Inspections

Make old and new engine / vehicle available for inspection



Operations

Operate the "grant-funded" engine / vehicle in accordance with the contract



Payment

Submit request for grant funds AFTER receiving award and completing project



Reporting

Submit annual reports for the term of the contract (expected 3 years)



Scrapping

Scrap an older engine / vehicle and replace it with the "grant-funded" engine / vehicle



Public Benefit Grants Program New Alternative Fuel Vehicle Purchase

- The San Joaquin Valley Air Pollution Control District (SJVAPCD) is currently accepting applications on a first-come, first-serve basis from Valley public agencies and eligible community action agencies requesting funding for the purchase of new alternative-fuel vehicles.
- Eligible vehicle must be a new electric, plug-in hybrid, or alternative fuel vehicle with a Gross Vehicle Weight Rating (GVWR) less than or equal to 14,000 pounds.
- Law enforcement agencies may apply for pursuit-rated hybrid police vehicles.
- Funding:
 - \$20,000 maximum for each new vehicle
 - \$100,000 maximum funding amount per calendar year per agency
- For additional information please contact program staff at (559) 230-5800 or visit our website at http://valleyair.org/grants/publicbenefit.htm
- A list of eligible on-road vehicles is available on our website.



Contact Information

Questions regarding the Clean Vehicle Fueling Infrastructure Program:

Call or email SJVAPCD Incentives Department:

Attn: Kevin Ng or Ashley Burrow

559-230-5800

grants@valleyair.org

Ask for the Public Benefit Program

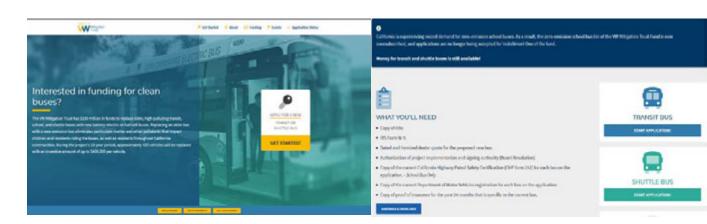
Sign up for SJVAPCD E-mail notifications at http://valleyair.org/lists/list.htm



Questions and Contact

Contact us at...

- http://vwbusmoney.valleyair.org
- Email General Inquiries to www.vwbusmoney@valleyair.org
- Sign Up for Updates at http://lists.valleyair.org/mailman/listinfo/vw_mitigation_trust_busmoney
- Call us at 1-833-Bus-Money
- Questions?





TRANSITions 2021 Transit Webinar Series



City of Porterville Leads the Charge! January 28, 2021 10am to 11am **GoToMeeting**

AGENDA

10:00am Allowing time for the attendees to arrive

10:02 am Welcome and Housekeeping – Linda Urata

10:04am Introduce the agenda – Linda Urata

10:06am City of Porterville Site Tour – Linda Urata introduce

10:15am Vice Mayor Martha A. Flores

10:25am Field Services Manager, Richard Tree

10:40am Mayor and SJVAPCD Board Member Monte Reyes

10:50am Questions and Answers

10:55am Closing Remarks Please watch for your emails for more TRANSITions Webinars in February 2021

Contact Information

City of Porterville Porterville City Hall 291 North Main Street

Porterville, California 93257 Phone: (559) 782-7499

Email: mgr-office@ci.porterville.ca.us

TTY: 1-800-855-7100 English TTY: 1-800-855-7200 Spanish

Kern Council of Governments

Linda Urata, Regional Planner lurata@kerncog.org

TRANSITions 2021 Webinar City of Porterville Leading the Charge!

Thu, Jan 28, 2021 9:45 AM - 11:30 AM (PST)

Please join my meeting from your computer, tablet or smartphone.

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Thank you to today's webinar partners:









Photo by Abra Rispoli

Leading the Charge 4





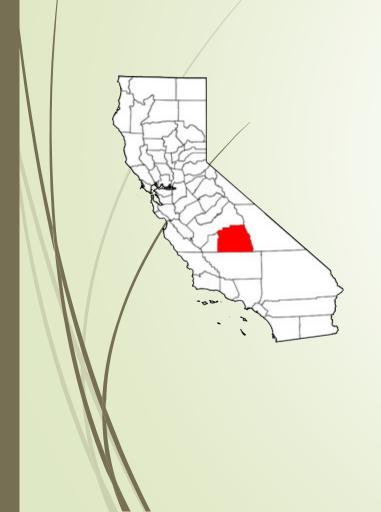
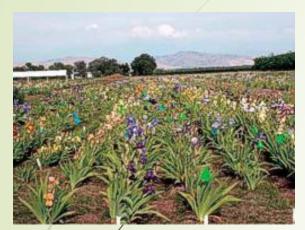




Photo by Shauna Craig













































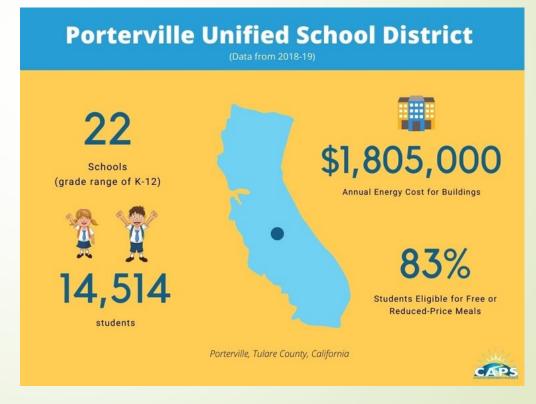


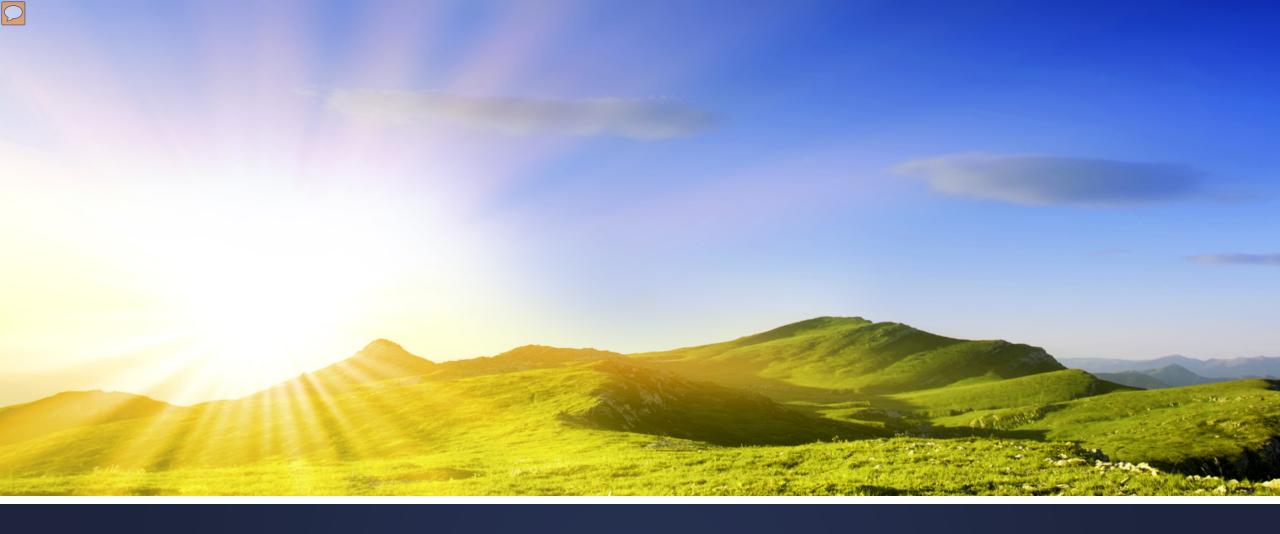














Richard Tree

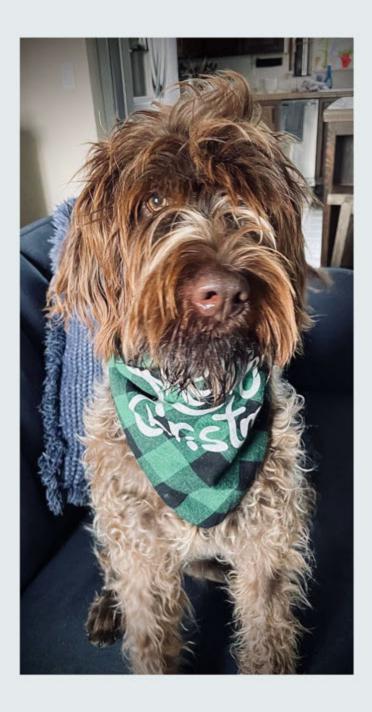
rtree@ci.porterville.ca.us

(559) 782-7448

www.ridept.com



Meet HANK









Preparing for Zero Emission

Top 5



Identify Your Barriers

- #1 Infrastructure
- #2 Utility Rate Structure
- #3 EV Knowledge
- #4 Service Requirements
- #5 Commitment



Commitment



- Public
- Board
- Elected Officials
- Local Air District
- Staff

Funding

- Federal
- State
- Local



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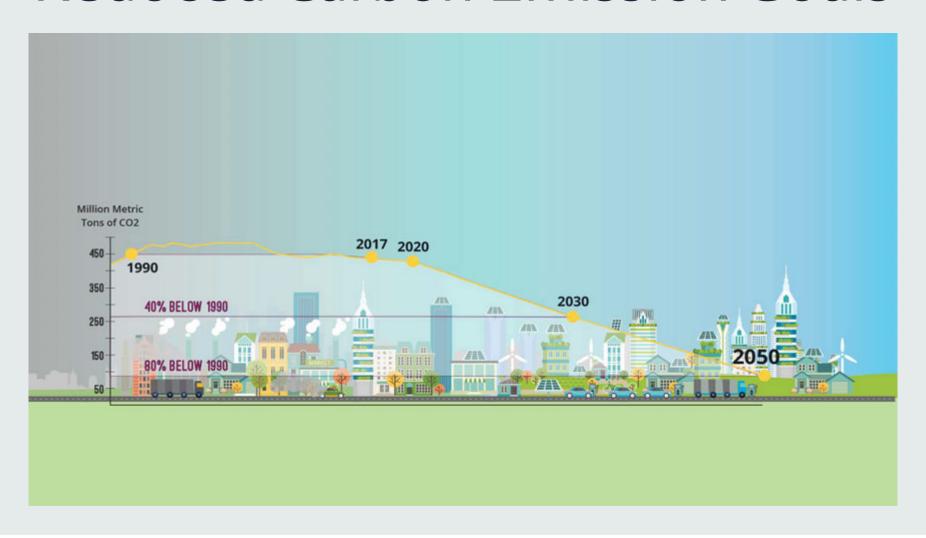
Utility Provider Is Your Partner

Help Remove Barriers





Increased EV Adoption & Reduced Carbon Emission Goals



- Infrastructure Rebates, Grants, Etc.
- Rate Structure Designed To Encourage Adoption, Cost-Effectiveness
- Collaboration Pilot Projects, Design, Future Needs

Charging Station Infrastructure

Infrastructure Planning

- Utility
 - Early Involvement in planning process
 - Understand Rates and Low Carbon Fuel Credits
- Electrical Engineering
 - In-House vs Consultant
- Technology
 - Smart Charging
 - Charging Status and Communication

Path for Sustainability

	Baseline	Matching w/ RECs
Annual kWh	1,917,000 kWh	1,917,000 kWh
LCFS Credits	2,687	3,249
Current Value (\$/LCFS Credit)*	\$195.00	\$195.00
Gross Notional Value	\$523,965	\$633,555
SRECTrade Fees (10%)**	\$52,367	\$63,356
Cost to Procure RECs (est.)***	N/A	\$19,170
Annual Net Value	\$471,568	\$551,029
Value per kWh	\$0.246	\$0.287

^{*}Current market value. Price subject to market fluctuation.

Source: SRECTrade Estimates and indicative spot market pricing.



30.9 cents/kWh average revenue from LCFS

VS.

14.5 cents/kWh average cost of electricity

*2020 run-rate based on Q1 2020 revenue.

^{**}Fee structure will be based on schedule defined in SRECTrade's Client Engagement Agreement.

^{***}Uses \$10/MWh as an estimate. Value per REC can fluctuate.

Seek Funding NOW

Major Funding Programs in California

Provider	Program	
FTA	 National LoNo – over \$100M since 2014 Section 5307 Capital Funds 	
California Air Resources Board (CARB) (Cap and Trade)	 Zero-Emission Bus Pilot Commercial Deployment Project Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) 	
California Air Resources Board (CARB)	Low Carbon Fuel Regulation	
California Air Resources Board (CARB)	VW Mitigation Trust - \$130 Million	
California State Transportation Agency (CalSTA)	Transit and Intercity Rail Capital Program (TIRCP)	
Caltrans	Low Carbon Transit Operations Program (LCTOP)	
Local Air Districts	Public Benefits Grant	
Finance Options	Lease OptionsBattery Financing	

Electric Transit Bus

<u>Source</u>	<u>Amount</u>	<u>Task</u>
California Air Resources Board (CARB)	\$9,516,422	10 Buses12 Charging StationsSpare Parts
San Joaquin Valley Air Pollution Control District (SJVAPCD)	\$1,088,477	"Matching Funds"BusesCharging Stations
Southern California Edison (SCE)	\$1,000,000*	Utility UpgradesCharging Station RebateDemand Charge Waiver
Federal Transit Administration	\$2,064,319	Infrastructure
TOTAL	FUNDING	\$13,669,219

















Electric Transit Vans

<u>Source</u>	<u>Amount</u>	<u>Task</u>
California Air Resources Board (HVIP)	\$880,000	 Voucher
Caltrans SB1/SGR	\$255,806	• Vans
Local Sales Tax Measure	\$600,000	• Vans
Local Transportation Funds	\$489,450	• Vans
Southern California Edison (SCE)	\$800,000*	 Utility Upgrades Charging Station Rebate Demand Charge Waiver
Federal Transit Administration	\$800,000	Infrastructure
TOTAL	FUNDING	\$3,825,256







Valley Air Clean Vehicle Programs

www.valleyair.org/grants



Focused on Zero & Near Zero Emission Vehicle Deployment

- Drive Clean Rebate
- Drive Clean Replace
- Charge Up!
- School, Transit, & Shuttle Bus
- Public Benefits
- Heavy Duty Truck Program
- Heavy Duty Alternative Fuel Infrastructure





Large Scale Projects

- Electric and Natural Gas
 Powered Equipment at Frito Lay
 Distribution Center
- Battery-Electric Locomotive and Electric & Hybrid Freight Equipment at BNSF Railway
- Battery-Electric Delivery
 Vehicles for United Postal
 Service & Aramark





Rebates to Support Adoption

Drive Clean Rebate

- Up to \$3,000 for zero emission
 - (battery or fuel cell)
- Up to \$2,000 for plug in hybrid vehicles
- Up to \$1,000 all-electric motorcycles
 - No limit on number of vouchers per person, per household
 - No income or MSRP limit
 - Must be registered with SJVAPCD at time of purchase

Charge Up!

- Up to \$5,000 per single-port L2 charger
- Up to \$6,000 per dual-port L2 charger
- Up to \$25,000 per L3 (DCFC)
 - Maximum funding \$50,000 per applicant per year
 - Can be used for publicly accessible employee charging or multi-unit dwellings



Volkswagen Mitigation Funds

\$4,000,000 available for transit and shuttle bus

- \$160,000 for zero-emission electric shuttle bus
- \$180,000 for zero-emission electric transit bus
- \$400,000 for zero-emission fuel cell transit bus
 - Requires a 2009 or older bus to permanently scrap
 - Funding available to public and private entities



Heavy Duty Truck Replacement

- Up to \$200,000 for zero-emission heavy duty truck replacement
- Up to \$100,000 for optional low NOx truck
 - (0.02 g NOx engine)
 - 2009 or older truck and fleet must be in compliance with On-Road Truck Regulations
 - Must be domiciled with the District and operate at least 75% of annual miles in CA and 50% within District boundaries



Public Benefits Grant Program

- Up to \$20,000 per vehicle
 - Maximum \$100,000 per agency per year
 - Both electric vehicles & electric carts
 - First come first served basis



City of Porterville Future on Clean Transportation



- 1. Reduce our Carbon Footprint
 - 100% Zero-Emission Fleet (Heavy & Light)
 - Energy Efficient Facilities
- 2. Prepare for Autonomous Vehicles (Electric)
- 3. Infrastructure to Support State Regulations (2035)
- 4. Renewable Energy Systems & Battery Storage
 - Enhance Grid Resilience
- 5. Smart City
 - Microgrids



