



# SRP Electrification Electric Vehicle “EV” and Fleet Assessment Program



## SRP 2035 Goals

**Provide thought leadership on emerging climate change policies, with a focus on:**

- Supporting the enablement of 500,000 EVs in the SRP service territory.
- Electric Technologies – Expand portfolio of electric technology (non-EV) programs to deliver 300,000 megawatt-hours of annual aggregate energy impact.

# SRP Business Solutions - Electric Vehicle Programs

## SRP FY22 Program

(May 1, 2021 - April 30, 2022)

- Support 800 EV charging ports for FY22
- Implement program for fleet assessments to help customers develop an EV road map
- Support new residential construction with wiring rebates and work with local codes to encourage EV charging infrastructure
- Discounted EV chargers on SRP Marketplace for residential customers



Ford Lightning, Hybrid now, 2022 Electric Model Debut

*Ford Motor to discontinue manufacturing internal combustion powered vehicles by 2030.*

*- NY Times – February 2021*

# SRP Business Solutions - Electric Vehicle Programs

## How does the business program work?

- \$1,500 to \$4,000/port rebate – \$4000/port is for Gov't, NP, Schools and Multifamily
- No preapproval required
- Apply for rebate once station is energized
- Turn in your invoices and sign SRP's terms and conditions
- Online portal and landing page available at **[savewithsrpbiz.com/ev](https://savewithsrpbiz.com/ev)**
- Turn in application by July 30, 2022, for projects completed May 1, 2021 - April 30, 2022.



2 ports at 1 station = \$3,000 rebate

*President Biden signed an Executive Order calling for the entire Federal fleet to be zero-emission vehicles.*  
– *Whitehouse.gov*



# SRP Fleet Advisory Service via Electrification Qualified Service Providers “eQSP”

# Electrification Qualified Service Provider (eQSP)

Closed network of service providers that meet SRP criteria to provide eligible services under program rules. SRP will pay you or your contractor 50% of approved cost for the study and the other 50% if the project moves forward

- Process Overview
  - Submit Initial Vendor Application
  - Attend a Training
  - Submit Project Application and Receive Pre-Approval
  - Complete Minimum Assessment Requirements



Rivian RT1 – Available July 2021

# eQSP Assessment Incentives – Fleet Electric Vehicles

Fleet Assessment Incentive	Light Duty		Medium/Heavy-duty		Mixed Fleet	
	20 or more	50 or more	5 or more	20 or more	10 or more	20 or more
	Up to \$14,000	Up to \$20,000	Up to \$14,000	Up to \$20,000	Up to \$14,000	Up to \$20,000

# 1.Electric Vehicle Rebate Summary

Electric Vehicle Charging Rebates	Customer Rebate
<b>Fleet Assessment for Light, Medium and Heavy-Duty Fleets**</b>	Up to \$20,000/assessment
<b>Commercial and Industrial Projects Level 2 Network Charger</b>	\$1,500/port
<b>Government, Nonprofit, and School Projects Level 2 Network Charger</b>	\$4,000/port

## 2. Electrification Rebate Summary (Another program)

Electrification Rebates	Customer Rebate
<b>Commercial and Industrial Assessments</b>	Up to \$10,000/assessment
<b>Non-Road Assessment Service - Material Handling</b>	Up to \$5,000/assessment
<b>Forklifts Class 1- 2 (Replacing IC)*</b>	\$2,000/unit
<b>Forklifts Class 1- 2 (Fleet Expansion or First-Time Purchase)*</b>	\$500/unit
<b>Forklifts Class 3 (Replacing IC only)</b>	\$350/unit
<b>High-Frequency Forklift Battery Charger*</b>	\$150/unit
<b>Medium/Heavy-Duty On-Road - Refuse, Last Mile (Pilot Program)</b>	\$0.10/kWh
<b>E/S TRUs and Truck Stop Electrification</b>	\$1,000/unit
<b>Custom Program (See eligible equipment in this document)</b>	\$0.10/kWh (for first year's usage)

\*\$500 bonus forklift incentive available for qualified small businesses for first two lifts; kWh <145k



# Commercial/Industrial and Non-Road Assessment Funds

## Material Handling Equipment - \$5,000

- Forklifts (Rapid Charge) Prescriptive
- Forklifts (Conventional Charge) Prescriptive
- Electric-standby Truck Prescriptive
- Refrigeration Units Prescriptive (REEFERs)
- Refrigerated Rail Cars

## Marine/Port Equipment - \$10,000

- Ship-to-Shore Electrification-Cold Ironing (per visit)
- Shore-side Port Cranes (Wharf Cranes)
- Rubber-tired Gantry Cranes (RTGs)
- Rail-mounted Gantry Cranes (RMGs)
- Wide-Span Cranes
- Yard Hostlers/ Drayage Trucks
- Dredgers
- Harbor Craft

## Airport Ground Support Equip \$10,000

- Pushbacks Rapid
- Belt Loaders
- Tugs and Tow Tractors
- Ground Power Units
- Pre-conditioned Air Units (PCAs)

## Locomotives - \$10,000

- High-Speed Passenger Trains
- Shore Power plug-in unit for Locomotives
- Battery-electric Switch Locomotives

## Mining Equipment - \$10,000

- Underground Mining
- Shuttle Cars / Haul Trucks
- Continuous Miners
- Hydraulic Shovels
- Blasthole Drills

## Agricultural - \$10,000

- Agricultural Pumps (Vertical, Mixed-flow Propeller)
- Battery Powered Sprayers

## Other Equipment - \$5,000

- Truck Stop Electrification
- Auxiliary Power Units
- Turf Trucks
- Golf Carts
- Ride-on Sweepers
- Walk-Behind Scrubbers
- Walk-Behind Burnishers
- Personnel/Burden Carriers
- Ride-On Scrubbers
- Walk-Behind Sweepers

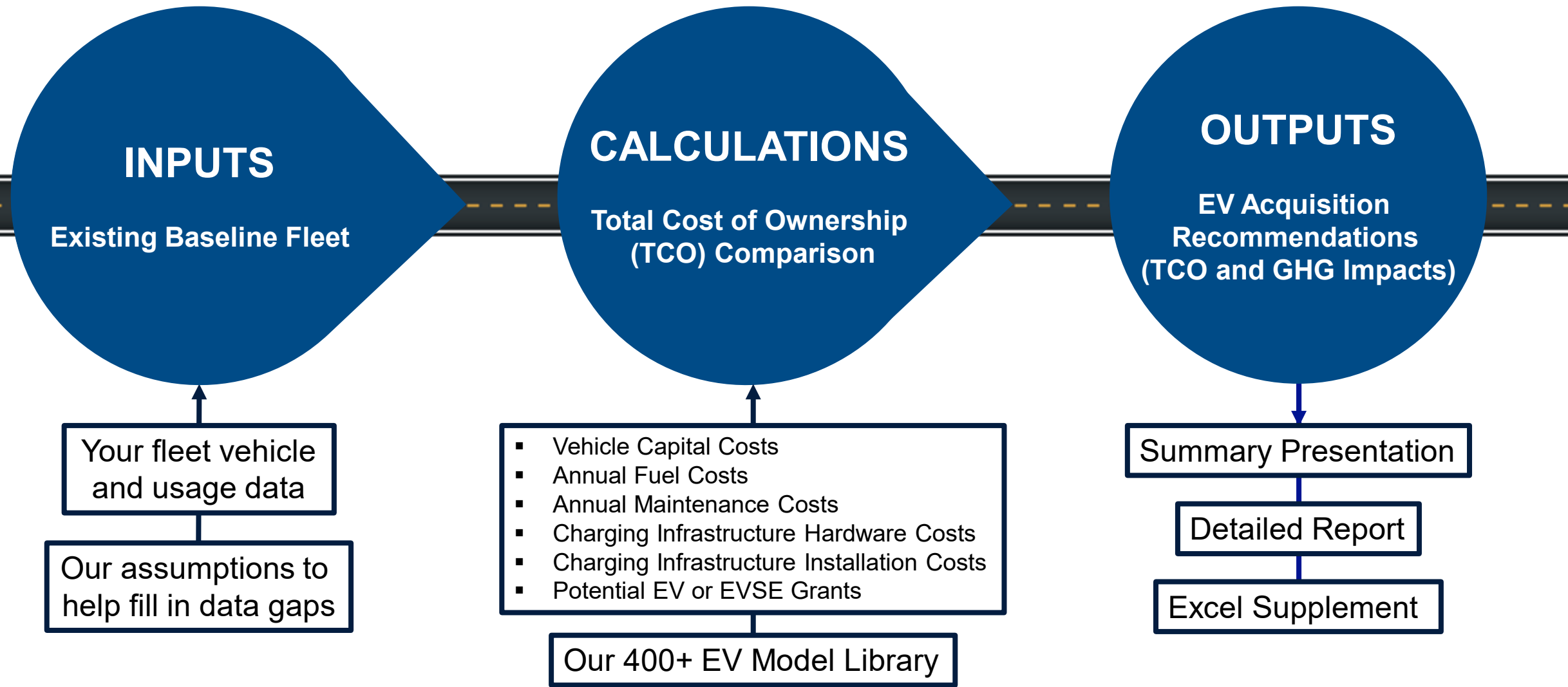
## Process, Comfort and Water Heating - \$10,000

- Induction Heating
- Infrared Heating
- Electric Arc furnaces
- Vacuum Furnace
- Ultraviolet Curing
- Heat Pumps
- Electric Boilers



# SRP Fleet Advisory Service

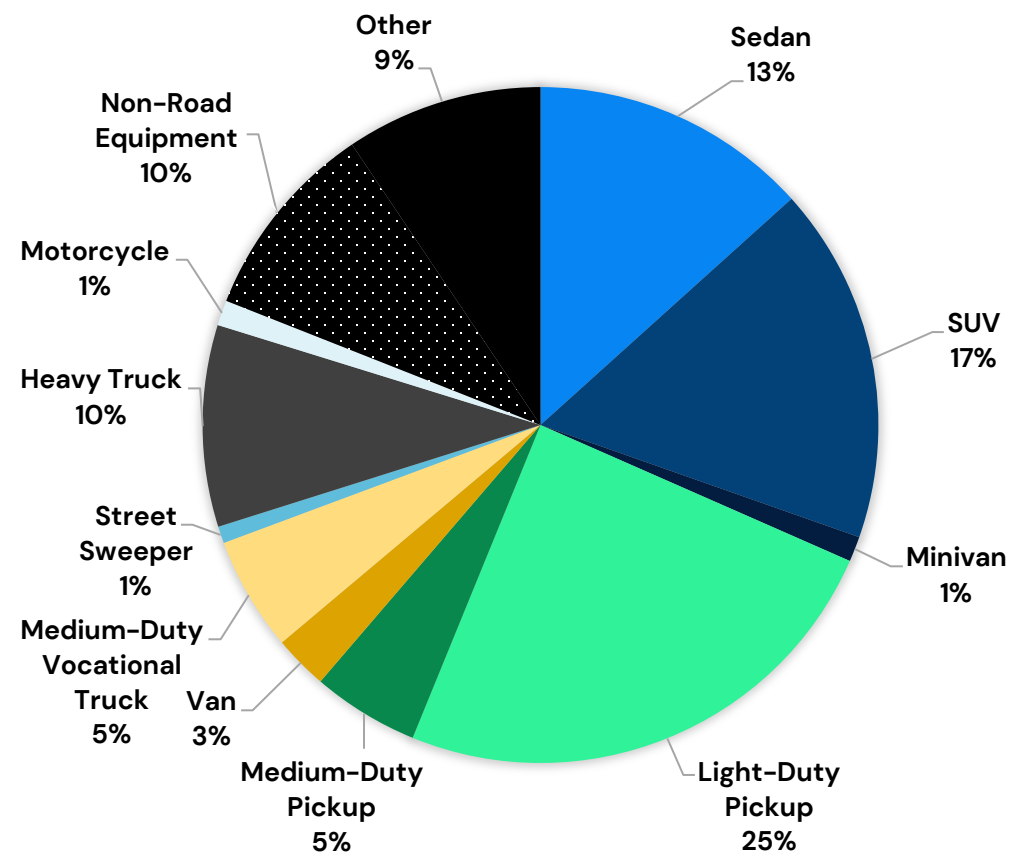
## Sample Electrification Recommendations



→ **Fleet Assessment Process**

# Existing Fleet Summary

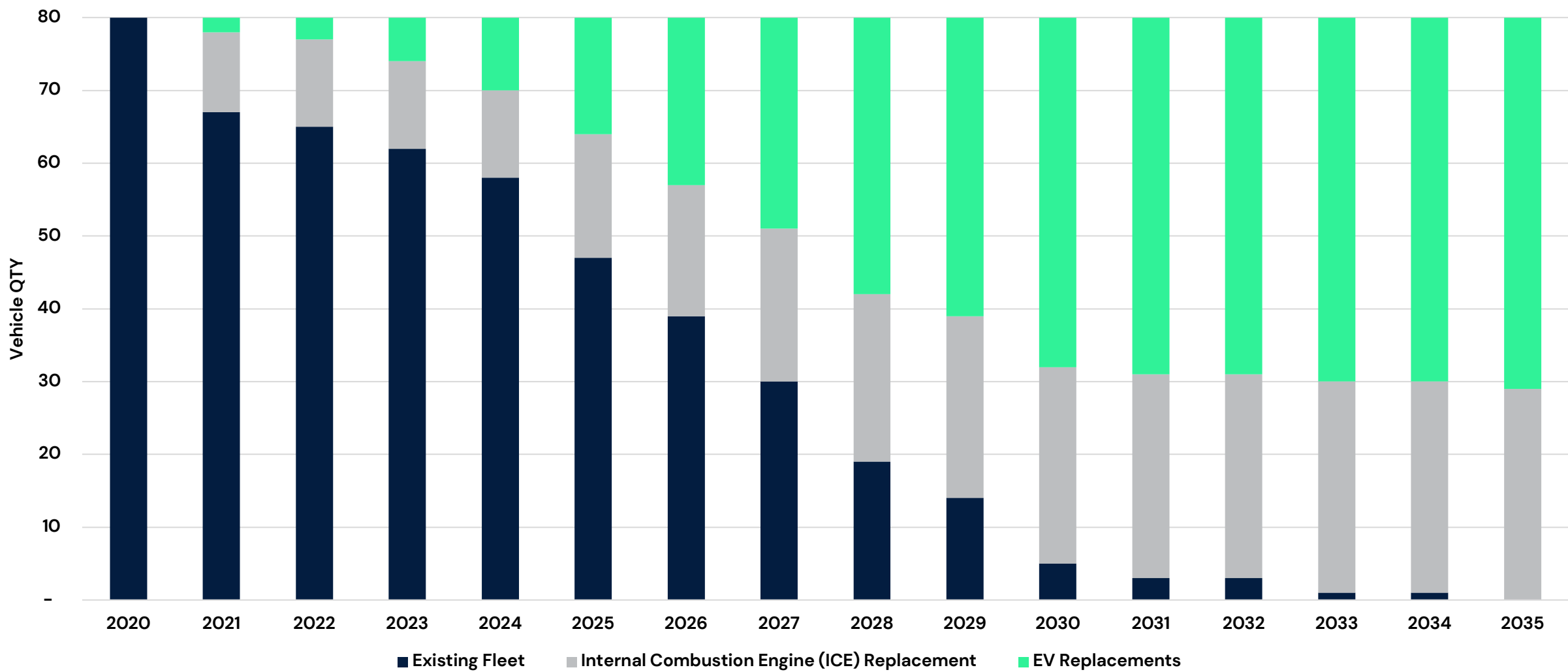
Existing Fleet Fuel Type Distribution			
Vehicle Type	Gasoline	Diesel	BEV
Sedan	XX	0	0
Sedan (Police)	XX	0	0
Sports Utility Vehicle (SUV)	X	0	0
SUV (Police)	XX	0	0
Minivan	X	0	0
Light-Duty Pickup	XX	X	0
Medium-Duty Pickup	XX	0	0
Van	XX	0	0
Medium-Duty Vocational Truck	X	X	0
Street Sweeper	0	X	0
Heavy Truck	0	XX	0
Motorcycle	X	0	0
Non-Road Equipment	X	X	X
Other	X	0	0
TOTAL	XXXX	XXX	XX



# Available Incentives

Program	Light-Duty EVs	Medium-Duty EVs	Heavy-Duty EVs	Administrator	Vehicle Costs	EVSE Installation	EVSE Hardware	Program Offerings	Upcoming Deadlines
<a href="#">Business EV Charging Rebate</a>				SRP		✓	✓	\$1,500 per networked L2 EV charging port. \$4,000 per port for government, non-profit, and school customers. Limit 50 ports per customer per year.	PY 21/22 deadline: 7/31
<a href="#">Diesel Emission Reduction Act (National)</a>		✓	✓	EPA	✓		✓	Up to 45% of EV and EVSE costs, must replace a diesel vehicle with 7,000+ annual miles.	TBD

# Recommended Replacement Timeline



# Recommendation Impacts

Based on our analysis, converting 848 vehicles to EVs is estimated to produce the following impacts:



**\$X,XXX,XXX**

TCO savings over 30 years\*



**\$X,XXX,XXX**

fuel cost savings over 30 years\*



**\$X,XXX,XXX**

maintenance savings over 30 years

**XXX,XXX**

metric tons (MT) of CO2 eliminated over 30 years

Over 30 years, those estimated CO2 reductions equate to:



eliminating **XX,XXX** homes' energy use for one year, or:



switching **XXX,XXX** incandescent lamps to LEDs, or:



recycling **XX,XXX** tons of waste instead of landfilling it, or:



planting **X,XXX,XXX** trees.

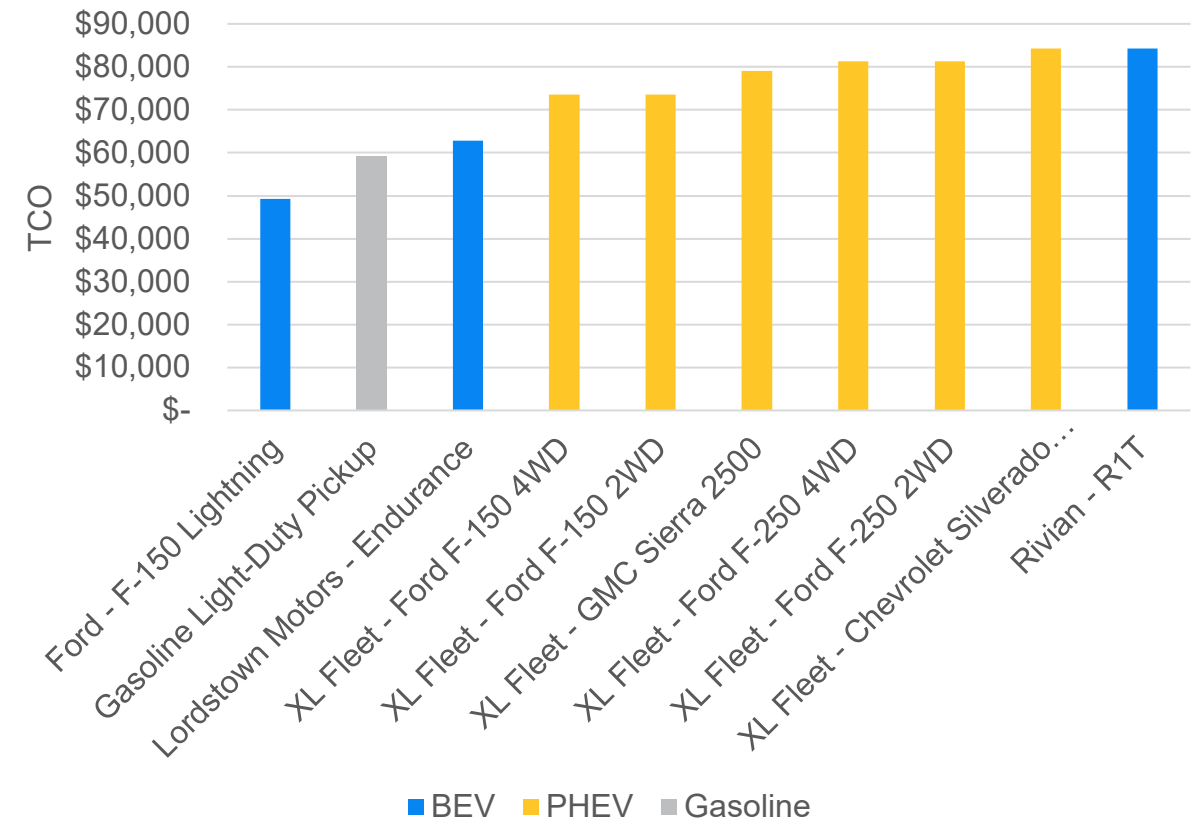
# Vehicle Recommendations

15-Year Electrification Recommendations							
Vehicle Type	Quantity Up for Retirement (in 15 Years)	Quantity Recommended to Convert to Electric	Recommended Make/ Model/ EV Type	Financial Savings (across 30 years)	GHG Emission Reductions (across 30 years, MT)	EVSE	
						L2	DCFC
Sedans	58	20	Nissan/ Leaf S/ BEV	\$87,662	1,331	20	0
Sedans (Police)	...	...	Chevrolet/ Bolt EV LT/ BEV	...	...	X	0
SUVs			Mazda/ MX-30 EV/ BEV			X	0
SUVs (Police)			Tesla/ Model Y Performance AWD/ BEV			X	0
Light-duty Pickups			Ford/ F-150 Lightning/ BEV			X	X
Medium-duty Pickups			Atlis/ XT (300 mi)/ BEV			X	X
Minivan			Canoo/ Lifestyle Vehicle/ BEV			X	0
Van			Electric Last Mile Solution/ Urban Delivery Van/ BEV			X	0

# Vehicle Recommendations

- Over 400 EV models in our EV library used for comparison
- Our EV acquisition recommendations are based on the model with the lowest TCO available that fits your fleet's needs
- The report provides additional EV models options for each vehicle type within the same price range

Light-Duty Pickup EV Model Total Cost of Ownership Comparison\*



\*Does not include EVSE costs or potential grants/incentives

# Charger Recommendations

Charger Recommendations					
Type	Number Recommended	Total Equipment Cost	Total Installation Cost	Description	Typical Light-Duty Range and Charge Times
Level 2	##	\$XXX	\$XXX	Use a 208 V (commercial) or 240 V (residential) AC split phase service	10-20 miles of range per hour (4-6 hours for full charge)
DC Fast	##	\$XXX	\$XXX	Use 208 V or 480 V AC, three-phase service connection requiring a dedicated circuit	60-80 miles in 20 minutes of charging (~0.5 hours for full charge)

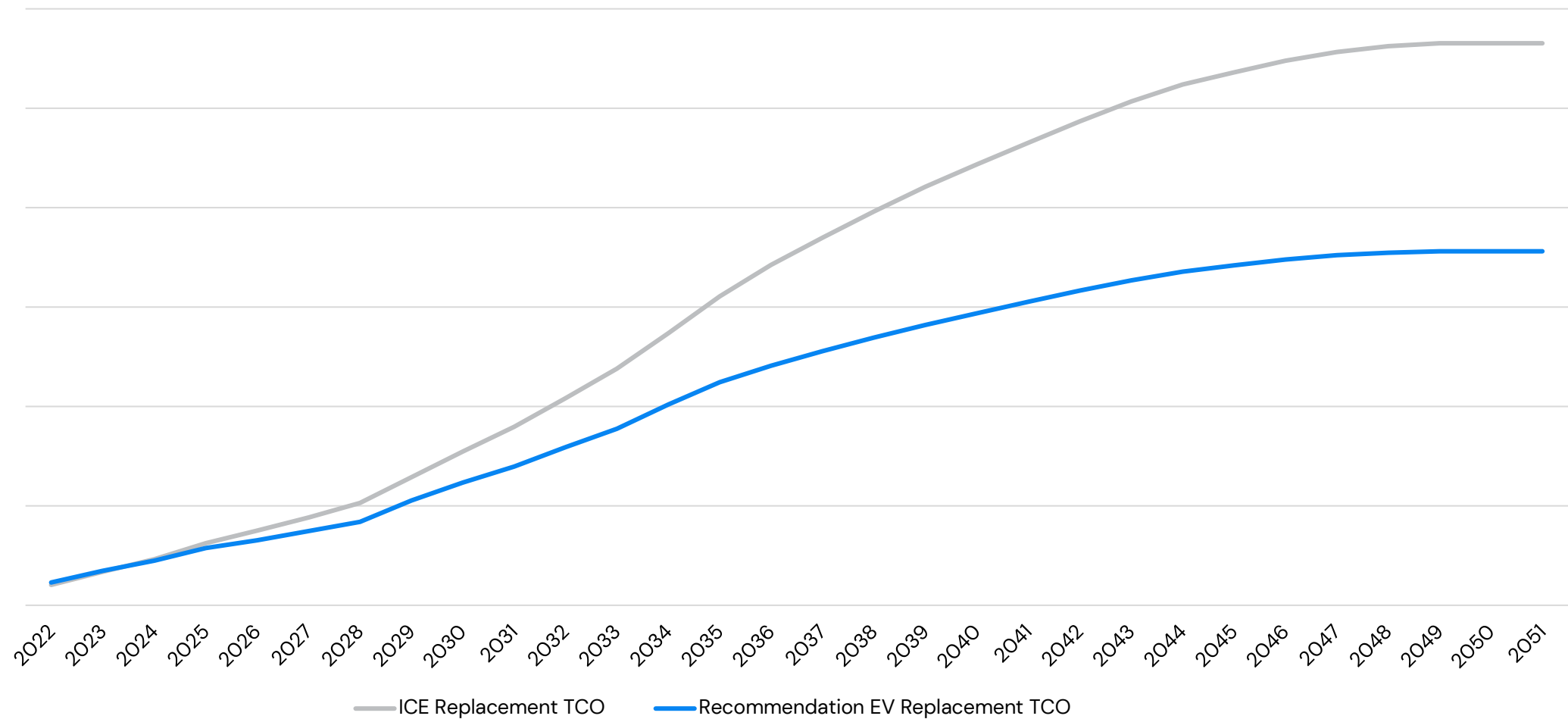
# Charger Recommendations by Site

If vehicles can be allocated to sites, that allows for more targeted conversations with your utility around cost.



Site Name	L2 (Qty)	DCFC (Qty)	Demand (kW)
Site 1	6	0	43.2
Site 2	4	2	128.8
Site 3	-	-	-
Site 4	15	0	108
TOTAL	25	2	280

# Recommendation Impacts



# Recommendation Environmental Impacts

By converting the 848 recommended vehicles to EVs:

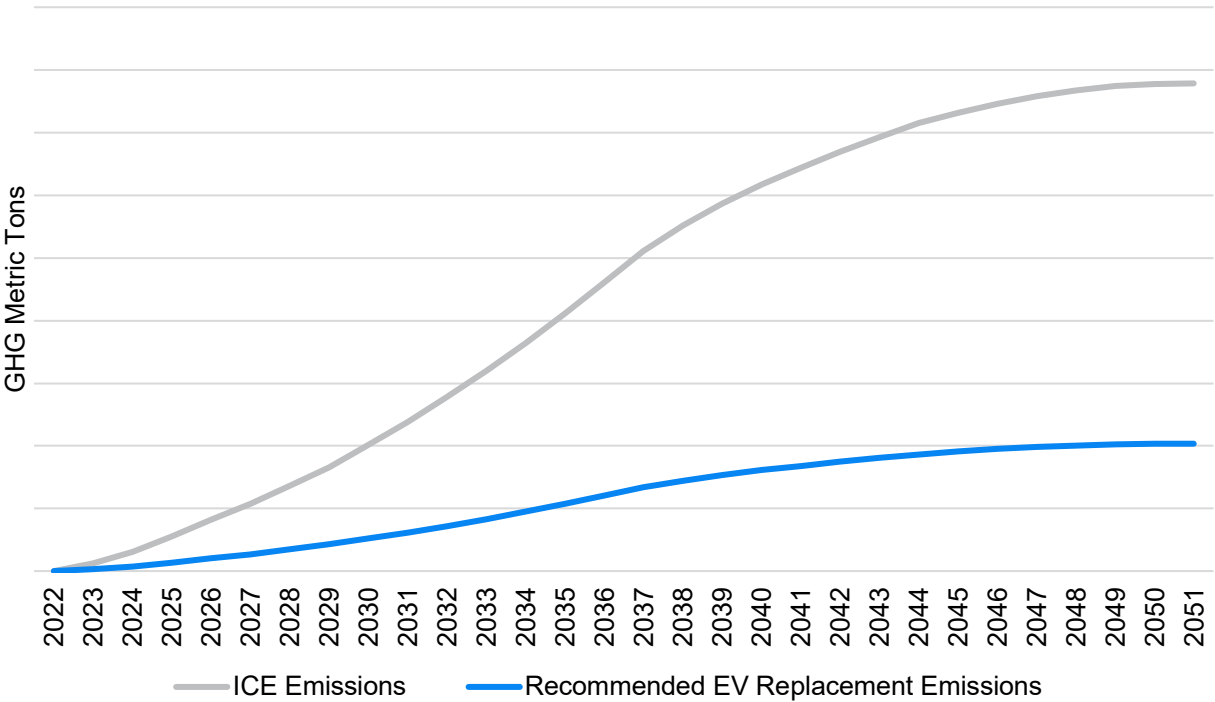
XXX GHG Emission Reductions (MT over 30 years)

XXX NOx Emission Reductions (Lbs. over 30 years)

X,XXX Equivalent to removing passenger vehicles from the road for one year

XX,XXX Equivalent to tree seedlings grown for 10 years

Cumulative Fleet Green House Gas Emissions



# Questions?

# Contact Us

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Source: electrek.co

*Amazon has officially started using the first Rivian electric vans to make customer deliveries with plans for 100,000.*

