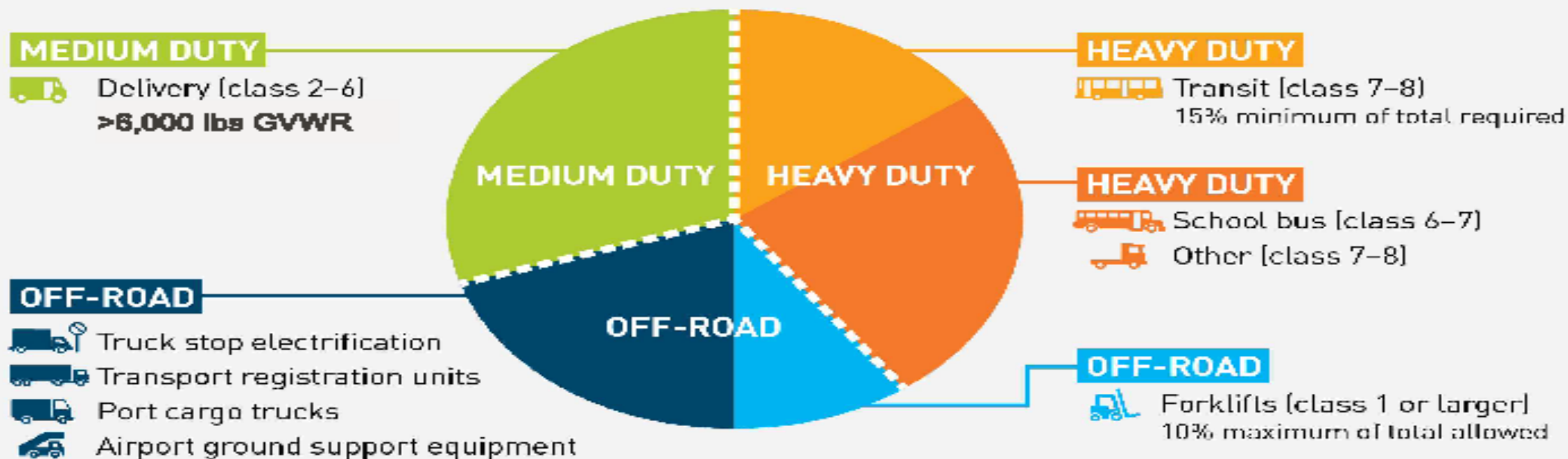# ZEV

Zero Emissions Vehicle mandate from CARB

EV Fleet vehicle sector mix

EV Fleet will target a diverse mix of medium- and heavy-duty vehicle types*

VEHICLE TYPE ESTIMATES

MEDIUM DUTY
- Delivery (class 2–6)
- **>6,000 lbs GVWR**

HEAVY DUTY
- Transit (class 7–8)
  - 15% minimum of total required

HEAVY DUTY
- School bus (class 6–7)
- Other (class 7–8)

OFF-ROAD
- Truck stop electrification
- Transport registration units
- Port cargo trucks
- Airport ground support equipment

OFF-ROAD
- Forklifts (class 1 or larger)
  - 10% maximum of total allowed

Pie chart labels: MEDIUM DUTY, HEAVY DUTY, OFF-ROAD

*Actual representation of vehicle types subject to vary based on program implementation, project costs, and market readiness

EV Fleet electrification process

PRELIMINARY DESIGN (3–5 months)

- ● CUSTOMER TASK
- ● PG&E TASK

START

1 — SUBMIT EV FLEET APPLICATION
Consult with your fleet OEM and/or electrical contractor to prepare and complete a PG&E EV Fleet program application pge.com/evfleetapp

2 — CUSTOMER INFRASTRUCTURE DESIGN
Electrical contractor designs your charging system infrastructure behind-the-meter (BTM), which includes charging stations

6 — SIGN CONTRACT
All parties review and approve the proposal. Contract is signed

5 — PG&E ESTIMATE
PG&E calculates the time, effort and cost of your build-out (referred to as rough order of magnitude, or ROM)

PG&E INITIAL DESIGN
PG&E works with you and your electrical contractor on an optimal design
- 3 — PG&E estimates how much electric capacity you'll need (referred to as a capacity check)
- 4 — PG&E surveys your site and provides initial design of your to-the-meter (TTM) infrastructure build-out

FINAL DESIGN and EXECUTION (6–8 months)

7 — CUSTOMER BEGINS BTM CONSTRUCTION PROCESS
Submit/obtain permit from local jurisdiction

8 — PG&E FINAL DESIGN
PG&E finalizes TTM design

CUSTOMER BTM CONSTRUCTION
- 9 — Construct electrical infrastructure behind the utility meter
- 10 — Install EVSE/charging equipment
- 11 — Complete municipal inspection(s)

12 — PG&E TTM CONSTRUCTION
PG&E constructs utility infrastructure, installs meter and makes any necessary transformer upgrades

14 — CUSTOMER COMMISSIONS EVSE EQUIPMENT
Ensure equipment is functioning as intended:
- ● Test EVSE for voltage
- ● Ensure connectivity to equipment manufacturer network
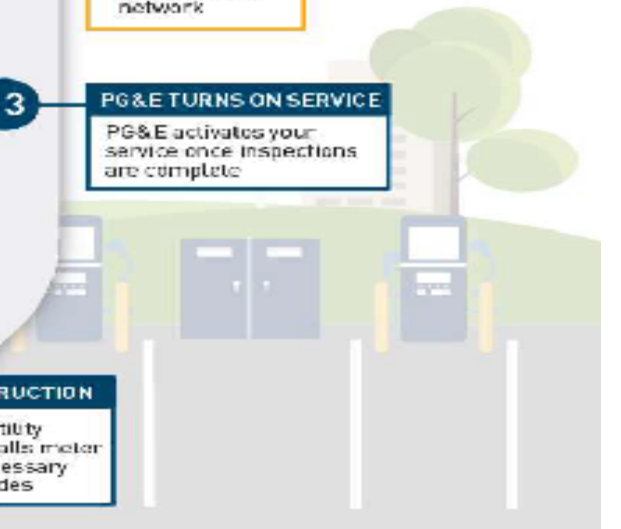
15 — PG&E ISSUES QUALIFYING REBATES

COMPLETE

13 — PG&E TURNS ON SERVICE
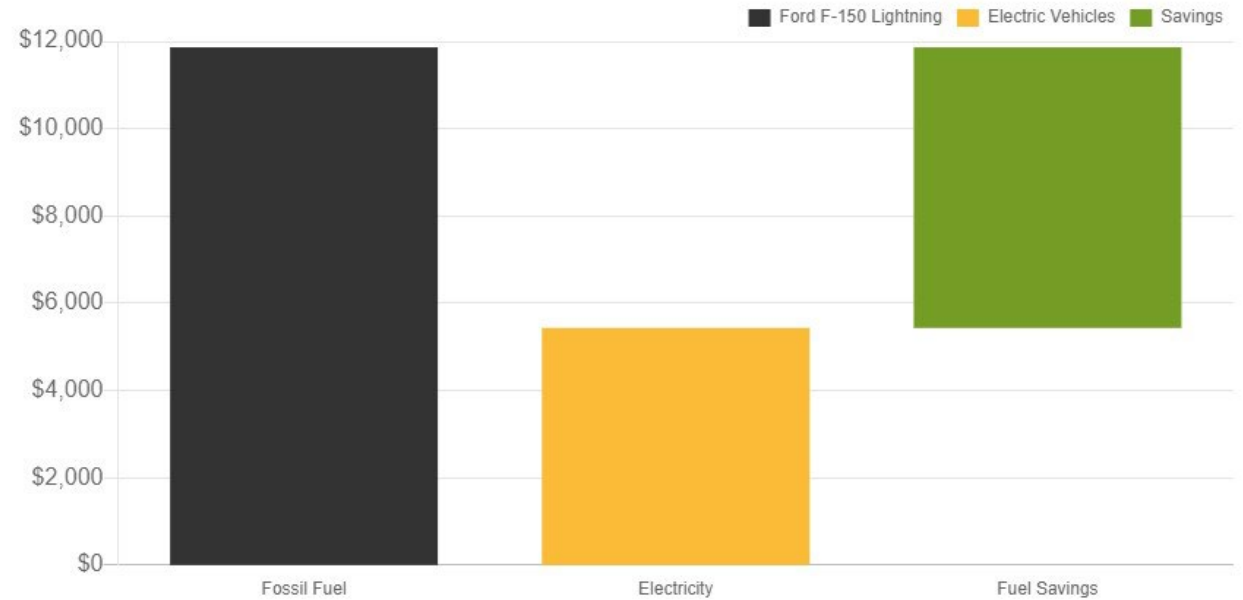PG&E activates your service once inspections are complete

Fuel Savings

- Assumptions:
- Four (4) vehicles
- 60 miles per vehicle daily, five (5) days a week
- $3.60 per gallon fuel costs

Based on your selections, using electricity instead of fossil fuel saves **$6,000** per year.

ANNUAL FUEL COSTS

Legend: ■ Ford F-150 Lightning ■ Electric Vehicles ■ Savings

Y-axis: $12,000 / $10,000 / $8,000 / $6,000 / $4,000 / $2,000 / $0

X-axis: Fossil Fuel / Electricity / Fuel Savings

To maximize BEV rate inputs, we have set your rate to **Business Low Use EV**, with a subscription level of **2 blocks**. Check out the Business EV Rate Calculator to explore your options.

The total monthly cost would be **$453**, which includes the cost to recharge to full and the subscription charges.

Cost of EV vs Fossil Fueled Vehicle

- Assumptions:
- Four (4) vehicles
- 60 miles per vehicle daily, 5 days a week
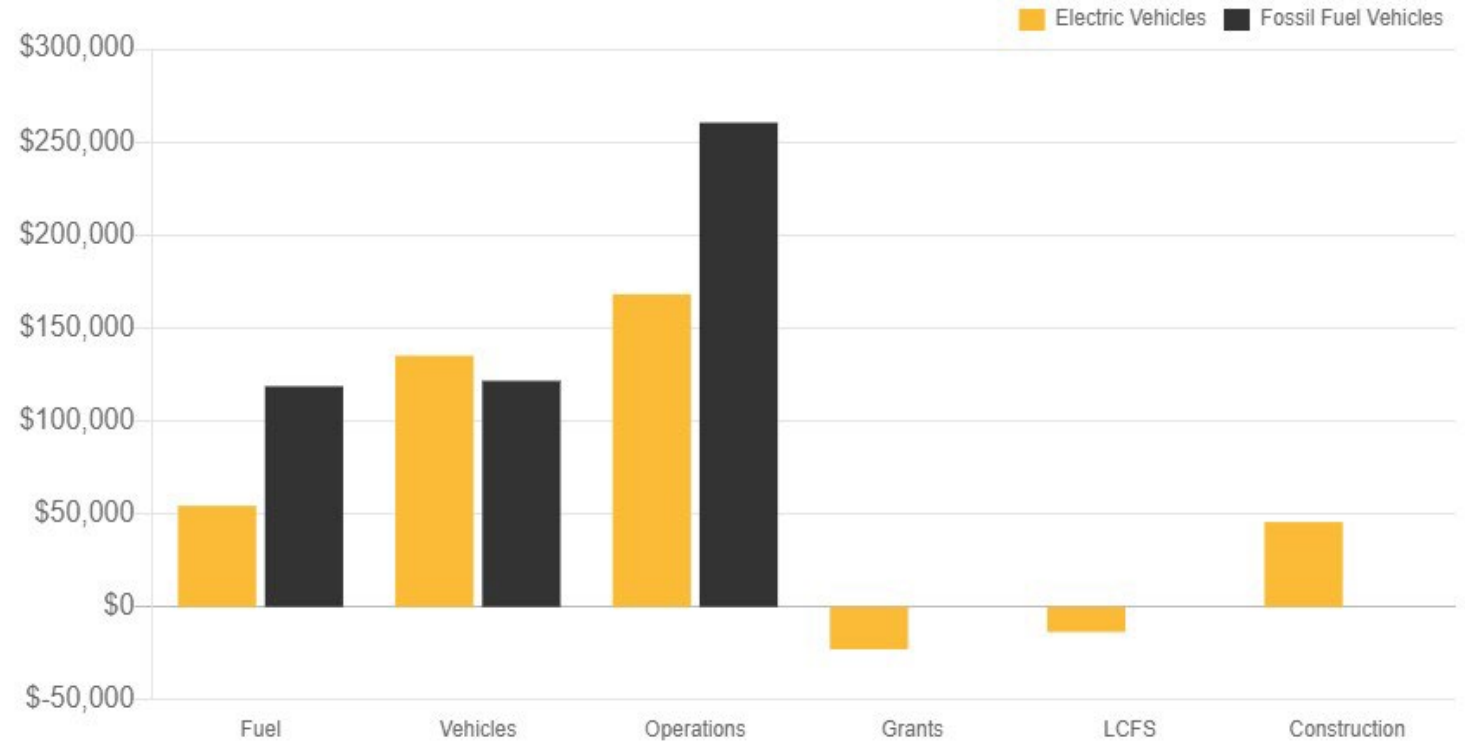- $3.60 per gallon fuel costs

		Electric Vehicle(s)	Fossil Vehicle(s)	EV Savings
Fuel		ⓘ $54,340	ⓘ $118,638	$64,298
Vehicles	Purchase	$199,980	ⓘ $180,000	$-19,980
	Resale	$-64,932	$-58,444	$6,487
Operations	Maintenance	ⓘ $130,095	ⓘ $226,165	$96,070
	Insurance	ⓘ $37,996	ⓘ $34,200	$-3,796
Grants ⓘ		$-22,800	N/A	$22,800
LCFS		ⓘ $-13,500	N/A	$13,500
Construction		ⓘ $45,600	N/A	$-45,600
Total		$366,780	$500,559	$133,779
Total (Rounded)		**$367,000**	**$501,000**	**$134,000**

Savings

- Four vehicles
- Over ten years
- Fuel
- Vehicle Maintenance
    - Oil Changes
    - Periodic Maintenance (10,000-mile svc, 50,000-mile svc, etc.)
    - Belts, hoses, fluids, etc.

You're looking at **$133,779** in **Savings** over the life of the vehicles.

TOTAL COSTS

■ Electric Vehicles ■ Fossil Fuel Vehicles

Fuel | Vehicles | Operations | Grants | LCFS | Construction

Expected Costs for EV Adoption

- Replaces superintendent trucks, on-call operator trucks, light-duty maintenance trucks, and situations where a small (1200-watt) generator is needed to run equipment

- $50,000 and up for the pro model (allows running of small electric tools from the truck)
  - Rebates Available:
    - $7,500 Federal rebate
    - $2,500 State of CA rebate
    - $4,000 rebate from PG&E
    - Additional grants available from SLO County APCD and others
  - Net Cost: $36,000 each

- Installation costs $45,600
  - $30,000 for electricity from switchgear to charger (Engineering, permitting, installation)
  - $15,600 for the chargers

- Total: $190,000
  - $47,500 per truck