



CAMBRIA COMMUNITY SERVICES DISTRICT

| MEETING | TIME & DATE | LOCATION |
|--------------------------------------|------------------------------------|---|
| Resources & Infrastructure Committee | 2:00 PM Monday, May 13, 2024 | Cambria Veterans' Memorial Hall 1000 Main Street, Cambria, CA 93428 |

AGENDA

Regular Resources & Infrastructure Committee Meeting

Monday, May 13, 2024 2:00 PM

In person at:

**Cambria Veterans' Memorial Hall
1000 Main Street, Cambria, CA 93428**

AND via Zoom at:

Please click the link to join the webinar: [HERE](#)

Webinar ID: 833 8243 8369

Passcode: 090720

Copies of the staff reports or other documentation relating to each item of business referred to on the agenda are on file in the CCSD Administration Office, available for public inspection during District business hours. The agenda and agenda packets are also available on the CCSD website at <https://www.cambriacsd.org/>. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting or if you need the agenda or other documents in the agenda packet provided in an alternative format, contact the Confidential Administrative Assistant at 805-927-6223 at least 48 hours before the meeting to ensure that reasonable arrangements can be made. The Confidential Administrative Assistant will answer any questions regarding the agenda.

1. OPENING

1.A Call to Order

1.B Establishment of Quorum

1.C Chair Report

1.D Ad Hoc Subcommittee Report(s)

1.E Committee Member Communications

1.F Utilities Department Manager Report

2. PUBLIC COMMENT

Members of the public may now address the Committee on any item of interest within the jurisdiction of the Committee but not on its agenda today. Future agenda items can be suggested at this time. In compliance with the Brown Act, the Committee cannot discuss or act on items not on the agenda. Each speaker has up to three minutes.

3. CONSENT AGENDA

3.A Consideration to Approve the April 8, 2024 Regular Meeting Minutes and April 15, 2024 Special Meeting Minutes

4. REGULAR BUSINESS

4.A Receive Presentation on Co-Generation Options for Cambria

4.B Receive Updated Report from Ad Hoc Committee on Climate Change, Discussion and Consideration to Forward Report to the Board of Directors

4.C Receive Presentation on Advanced Clean Fleet and Regulations, Discussion and Consideration to Forward a Recommendation to the Board of Directors

5. FUTURE AGENDA ITEM(S)

6. ADJOURN



CAMBRIA COMMUNITY SERVICES DISTRICT

MINUTES OF APRIL 8, 2024, REGULAR RESOURCES & INFRASTRUCTURE COMMITTEE MEETING OF THE CAMBRIA COMMUNITY SERVICES DISTRICT

A regular meeting of the Resources & Infrastructure Committee of the Cambria Community Services District was held at the Cambria Veterans' Memorial Hall, located at 1000 Main Street, Cambria, CA 93428, on Monday, April 8, 2024, at 2:00 PM

1. **OPENING**

1.A **Call to Order**

Chairperson Dean called the meeting to order at 2:00 pm

1.B **Establishment of Quorum**

A quorum was established.

Committee members present: Karen Dean, Juli Amodei, James Webb, Steve Siebuhr, Mark Meeks, and Derrik Williams.

Staff present: General Manager Matthew McElhenie, Confidential Administrative Assistant Haley Dodson, Administrative Department Manager Denise Fritz, Utilities Department Manager Jim Green, Program Manager Tristan Reaper, and Wastewater Superintendent Toni Artho.

Others in attendance: Directors Michael Thomas and Harry Farmer (remote). Public members Allan Dean, Dennis Dudzik; Laura and Crosby Swartz (remote), Keith Hinrichsen (remote), and Tina Dickason (remote)

1.C **Chair Report**

None

1.D **Ad Hoc Subcommittee Report(s)**

None

1.E **Committee Member Communications (Time: 2:01 PM)**

Committee member Meeks has continued to investigate the costs of solar water panels and is looking into discounts for buying multiple panels.

Committee member Williams said he had no news regarding the geophysical studies.

Committee member Amodei attended an online workshop for the Skate Park grant. She also mentioned that we have resubmitted a grant application for Skate Park maintenance. The resubmittal was required because the grantee updated its software.

Public Comment

None

1.F Utilities Department Manager Report (Time: 2:06 PM)

Utilities Department Manager Green reported on the following:

- **San Simeon pipeline alignment.** The preferred alignment will go to the Board of Directors this Thursday. Based on board approval, the District will meet with the contractor to discuss next steps. The District is meeting with State Parks to discuss issues or concerns.
- **Water replacement project.** The District has ordered 1,700 endpoint replacements (meters).
- **EV charging station.** The station is built, and we are working with ChargePoint to finalize software and then get final sign off from the County.
- **East Park Restroom.** No report. The prefabricated restroom has been ordered.
- **Skate Park Bathroom.** There is room for a small single room restroom at the Skate Park. It is going to PROS this week.
- **Stuart Street Tank.** The preliminary geotechnical report is complete. It requires some changes to the tank pads from the current pads. This should not delay the design process. The 65% design should be complete in June.

Public comment

Ms. Dickason would like to see Rodeo Grounds Road paved before more work is completed in East Ranch. Utilities Department Manager Green has reached out to County Public works regarding the road but has not heard back from them. General Manager McElhenie states the Board of Directors plans to introduce a resolution urging the County to take care of the road.

Ms. Dickason asks how long well SR#3 has been out of commission. Utilities Department Manager Green states that the March storms took a toll on some of the electrical equipment in Tin City. The County is concerned that tank at this well was not providing adequate chemical treatment. The District is working with Division of Drinking Water to clarify the new tank requirement. SR#3 will not be operable until the new tank is designed and installed.

2. PUBLIC COMMENT (Time: 2:22)

None

3. CONSENT AGENDA (Time: 2:23)**3.A Consideration to Approve the March 11, 2024, Regular Meeting Minutes**

Committee Member Webb moved to approve the minutes as written.

Committee Member Amodei seconded the motion.

The motion was approved: 5-Ayes; 0-Nays; 0-Abstain; 0-Absent.

4. REGULAR BUSINESS (Time: 2:24)

4.A Receive the Ad Hoc Committee Report on Prioritization and Ranking of the Capital Improvement Projects on the CIP Lists, and Discuss the Prioritization Criteria Utilized and Purpose or Use of the CIP Lists

Utilities Department Manager Green reports that staff worked collaboratively with the Ad Hoc committee on the list. The list was ranked established by the following three criteria:

- Safety
- Regulatory compliance
- Urgency and outstanding asset improvements

Chairperson Dean reminds the Committee the joint R&I/budget meeting agreed on a B, 1, 2, and 3 ranking. Mr. Williams says that was how the CIP list was developed. Ms. Fritz says the budget list will include the rankings, but the budget will be within the annual budget numbers.

Chairperson Dean reminds the Committee that that this document should be designed to track progress as well as budgeted expenditures on projects. Ms. Fritz says this is still the intent. The new CIP list will include a description of the CIP process and calendar.

Public Comment

None

4.B Discussion Regarding Long Term Water Supply Development (Time: 2:37)

Utilities Department Manager Green has met with the County regarding a Drought Resiliency Task Force. The County is looking for grant funding for this task force. The District has been asked to sit on the task force. The County is focusing on resiliency in the City of San Luis Obispo and south but may be interested in the North Coast because of the San Simeon CSD issues. The District will be voting member of the task force. The District participants will include General Manager Matthew McElhenie, Project Manager Reaper, and Utilities Department Manager Green.

Committee member Webb notes that having a seat on the task force is critical, particularly if Whale Rock Reservoir allocations are reallocated. Utilities Department Manager Green states that Whale Rock Reservoir water allocations will likely not be redistributed in the near future.

Public Comment

Mr. Dudzik asked if the public are invited to the task force meetings. Utilities Department Manager Green believes probably not initially.

Ms. Dickason asks for clarification on how the County might look at the North Coastal portion of the County. She states her opinion that Whale Rock is not a viable possibility for future water supplies. Ms. Dickason would like off-stream storage to be reconsidered by the Committee.

Project Manager Reaper states that he has recently been looking at reports from the early 1990s that looked at various off-stream storage options. He will make this report available to others after he digitizes it. Utilities Department Manager Green points out there are some difficulties in changing the District's diversion permits to allow storage, environmental permitting, and treating for public

consumption. Utilities Department Manager Green suggests an off-stream reservoir should be a minimum of 1,200 acre-feet of storage, and preferably 1,500 acre-feet of storage.

Mr. Dudzik states that a water supply portfolio approach means that one supply should not provide the entire need of the community. A smaller reservoir could be part of a portfolio and would still provide a significant improvement, even if it doesn't supply all of the District's needs.

Ms. Dickason reminds the committee that Warren reservoir would hold 600 to 700 acre-feet and suggests that this reservoir be considered. Ms. Dickason also states that the San Simeon CSD interim General Manager believes discharge through the San Simeon outfall will be disallowed in the future.

Committee Member Amodei moved to endorse Staff's participation in the County's Drought Resiliency Task Force

Committee Member Webb seconded the motion.

The motion was approved: 5-Ayes; 0-Nays; 0-Abstain; 0-Absent.

5. FUTURE AGENDA ITEM(S) (3:01)

Chairperson Dean asked for any future agenda items.

- The Committee will hold a special meeting on April 15 to discuss the CIP list
- A discussion of the Advanced Clean Fleet will be included on the April 15 meeting.
- The May meeting will potentially look at Co-Generation and the Annual Water Supply and Demand Assessment.
- Any updates on the Water Supply Alternatives will be presented.

6. ADJOURN (3:03)

Chairperson Dean adjourned the meeting at 3:03 p.m.



CAMBRIA COMMUNITY SERVICES DISTRICT

MINUTES OF APRIL 15, 2024, SPECIAL RESOURCES & INFRASTRUCTURE COMMITTEE MEETING OF THE CAMBRIA COMMUNITY SERVICES DISTRICT

A special meeting of the Resources & Infrastructure Committee of the Cambria Community Services District was held at the Cambria Veterans' Memorial Hall, located at 1000 Main Street, Cambria, CA 93428, on Monday, April 15, 2024, at 12:30 PM

1. OPENING

1.A Call to Order

Chairperson Dean called the meeting to order at 12:30 pm

1.B Establishment of Quorum

A quorum was established.

Committee members present: Karen Dean, James Webb, Mark Meeks, and Derrik Williams.

Committee members absent: Juli Amodei, Steve Siebuhr.

Staff present: Confidential Administrative Assistant Haley Dodson, Administrative Department Manager Denise Fritz, Utilities Department Manager Jim Green, Program Manager Tristan Reaper, Water Systems Superintendent Cody Meeks, Fire Chief Michael Burkey, and Facilities and Resources Manager David Aguirre.

Others in attendance: Director Michael Thomas, and Debra Scott (remote). Public members Dennis Dudzik, Allan Dean, Donn Howell, and Keith Hinrichsen (remote).

1.C Chair Report

None

2. PUBLIC COMMENT ON AGENDA ITEMS

None

3. REGULAR BUSINESS (Time: 12:32 PM)

3.A Receive and Discuss the Updated Prioritized CIP List and General Fund CIP Budget Requests and Consideration to Forward the Updated CIP Lists to the Finance Committee for Review in the 2024/2025 Fiscal Year Preliminary Budget

Administrative Department Manager Fritz presented details of the CIP list, using the new format. Items labeled with a "B" were budgeted in 2023/2024 or prior years. Items labeled with a "1" are items being put in front of this committee for approval for the 2024/2025 fiscal year.

Administrative Department Manager Fritz states that items labeled with a "4" will be reassigned a priority of "3"

Items that are budgeted this year will be promoted to a “B” priority.

General Fund CIP Budget

Administrative Department Manager Fritz presents the items in the General Fund budget. The Committee reviewed and discussed all items labeled with a “1”.

Chair Dean requests that groups of projects be combined, possibly under a bolded heading under a particular department.

Administrative Department Manager Fritz stated that an additional \$30,000 is being requested for the already budgeted Vets Hall Sound System based on bids and estimates that have been received.

Fire Department Budget (Time: 12:57 PM)

Fire Chief Michael Burkey presents the items in the Fire Budget. The Committee reviewed and discussed all items labeled with a “1”.

Public Comments

None

Water CIP Budget (Time: 1: 18 PM)

Water Systems Superintendent Meeks presents the items in the Water CIP. The Committee reviewed and discussed all items labeled with a “1”.

Water Systems Superintendent Cody Meeks notes that on line 36 “Stuart Street” should be “San Simeon”. Similarly on line 42, “Stuart Street” should be “San Simeon”.

Chairperson Dean requests that the “Date Completed” column be added to the list of completed WRF projects.

Public Comments

None

Chairperson Dean proposes a meeting recess (Time 1:54 PM)

Chairperson Dean reconvenes the meeting (Time 2:03 PM)

Wastewater CIP (Time: 2:03 PM)

Utilities Department Manager Jim Green and Program Manager Tristan Reaper presented the Wastewater CIP

The Wastewater CIP focusing on the SST projects.

Utilities Department Manager Jim Green confirms that tertiary treatment (line 22) would require the other items (line 13 through 21) be completed before it is implemented. Program Manager Tristan Reaper states that there is room for tertiary treatment at the current treatment site if some tanks are removed which are no longer used.

Water Systems Superintendent Meeks requests an additional \$30,000 for the already budgeted Lead and Copper Service Line Regulations

Water Systems Superintendent Meeks requests an additional \$68,000 for the Rodeo Grounds Generator because it went out last year and it needs to be completely replaced.

Utilities Department Manager Jim Green proposed adding \$50,000 for Preliminary Consulting Studies for the Long-Term Water Supply to the Water CIP. It will be a priority 1.

Chair Dean clarifies the priorities are (generally)

B – budgeted

1 – Top priority to be budgeted in 2024/2025

2 – Important but not vital for 2024/2025

3 – Future needs

Committee Member Williams moved to Forward the Updated CIP Lists to the Finance Committee for review in the 2024/2025 Fiscal Year Preliminary Budget – as amended.

Committee Member Meeks seconded the motion.

The motion was approved: 3-Ayes; 0-Nays; 0-Abstain; 2-Absent (Amodei and Siebuhr)

3.B EV Fleet and Advanced Clean Fleet Regulations

Deferred to future meeting.

4. FUTURE AGENDA ITEMS (Time: 2:41)

None

5. ADJOURN (Time: 2:41)

Chairperson Dean adjourned the meeting at 2:41 p.m.

Cogeneration Project Discussion

The Fire Safe Council is sponsoring a discussion to site a cogeneration plant in Cambria to burn and sequester the carbon in the chips produced in the fuel reduction efforts on-going in the Cambria/San Simeon area. The US Forest Service is interested in assisting communities with forest management and the management of the woody biomass that is a byproduct of that management. All Power Labs is a Berkeley company working to take biomass and convert it to usable energy and biochar. The discussion will center around the possible use of an All Power product to convert the chips in our area to usable products. The Forest Service will discuss possible ways they can assist in this and other innovations to reduce the amount of woody biomass waste.

Jim DiPasquale is a Wood & Biomass Utilization Specialist with the Forest Service in Vallejo. Here is a link to their programs <https://www.fs.usda.gov/detail/r5/communityforests/?cid=fseprd475019>

Austin Liu is Principal Biochar Investigator for All Power Products. Attached is a data sheet on a possible product for Cambria.



80KW HYBRID BIOMASS MICROGRID

RENEWABLE ON-DEMAND POWER



CONTAINERIZED DUAL PP30 GENSET

The new **80 kW Power Pallet Hybrid Biomass Microgrid** genset is an expedited answer to the urgent need for portable high-density power. By combining two of our highly optimized and refined PP30 Power Pallets within a single, standard 20-foot shipping container envelope, we are able to provide a commercially applicable genset, ready to be dropped off a truck anywhere in the world and begin to provide renewable, distributed, low-carbon energy.

Using a variety of configurations for both on, off-grid, and microgrid use, this 80 kW Power Pallet Hybrid Container features 60 kWh of lithium-ion battery storage with an inverter to provide an intermittent load capacity of 80 kW when the PP30 and inverter outputs are combined. This is the most versatile generator APL has ever offered.

Our unique patented multi-stage gasification architecture, in combination with our innovative gasifier-engine thermal integration, electronic control system and waste-heat recycling, gives the Power Pallet base units unprecedented biomass fuel flexibility and efficiency. Combined with our unique integrated power and feedstock handling, this mid sized Powertainer also has unprecedented power-demand flexibility.

The Power Pallet uses agricultural and forestry waste materials that can be readily sourced very near the point of generation. It is compact and portable, easily transported to where the fuel is and where the power is needed. Unlike diesel fuel or gasoline, this fuel is often available at little or no cost, and most importantly, depending on feedstock selection and use details, the Power Pallet is capable of carbon-negative operation.

PERFORMANCE

| | |
|------------------------------------|-------------------------|
| Peak Combined Electric Power: | 80 kW@60 Hz/74 kW@50 Hz |
| Continuous PP30s Only: | 50 kW@60 Hz/44 kW@50 Hz |
| Inverter Only: | 30 kW |
| Sound Level @ 7 meters: | 65 dB(A) |
| Biomass Consumption: | 1.0 kg/kWh (dry basis) |
| Run Time per Hopper Fill: | 5 kW: 12 hrs |
| Approximate @ | 10 kW: 6 hrs |
| 250 kg/m ³ Fuel Density | 15 kW: 4 hrs |
| Max. Continuous Operation: | >16 hours |
| Start Up Time: | 10-15 minutes |

COMBINED HEAT & POWER (CHP)

| | |
|--|--|
| Electrical Efficiency: | ~23% (woody biomass, LHV) ~28% (syn-gas) |
| Electrical+Thermal Efficiency: | >65% (biomass) |
| Gasifier HX+Engine Cooling+Exhaust HX: | >80% (syngas) (3 stage) |
| CHP Heat Output: | 3 stage: 2.0 kWth per 1 kWe 2 stage: 1.5 kWth per 1 kWe |
| Engine Coolant: Working Fluid: | Up to 50% PEG |
| Temperature Range: | 75-95°C (165-205°F) |
| Customer-side CHP: Loop Temp: | 75-90°C (165-195°F) |
| Minimum Flow Rate @ 100 kWth: | 4.4 m ³ /hr (19 GPM) |
| Minimum Heat Delivery: | 0 kWth (native radiator backup) |
| Plumbing Connection: | 1.5 inch sanitary fitting |

GRID TIE / PARALLELING

| | |
|-------------|-----------------------|
| Controller: | Deep Sea DSE8610 MKII |
|-------------|-----------------------|

OPERATING CONDITIONS

| | |
|-----------------------------|--|
| Ambient Temperature: | 5-40°C/40-100°F |
| Ambient Relative Humidity: | 5-95% |
| Installed Footprint: | 7 x 5 x 3 meters 23 x 16 x 10 feet |
| Site Requirements: Outdoor: | 1.75 m Overhead Clearance Well-ventilated, Level Pad, |

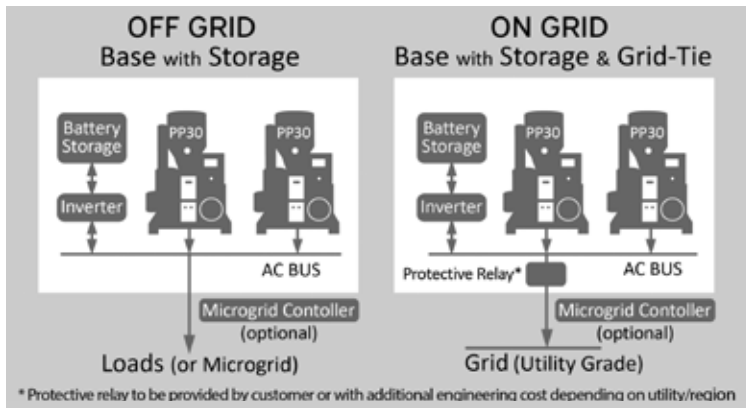
GAS FILTRATION

| | |
|---|--|
| Dry Filtration System: with HX Temp Control | Cyclone+Bag House Gang with Clean-in-place Shaker System |
| Gas Cooling Pre-filtration: Prevents Tar and H ₂ O Condensation | Engine Coolant HX Controls to 80-100°C HX In-situ Cleanable |

SHIPPING

| | |
|---------------------------------------|--|
| Standard Inter-modal Dimensions: : | 20 ft x 8 ft x 8.5 ft. high 6.06 m x 2.44 m x 2.59 high |
| Weight: | 5000 kg 11,000 lbs |

All specifications are subject to change without notice



INVERTER

| | |
|------------------------|------------------------------|
| Typical CEC Efficiency | 97% |
| Maximum AC Power | 80kVA @ 480 V _{RMS} |

STORAGE BATTERY

| | |
|------------------------------|------------|
| Battery Capacity | 120 kWh DC |
| System Round-Trip Efficiency | 89% (RTE) |

ALL Power Labs

APL is the global leader in small-scale gasification technology. For the past two decades we have been designing and perfecting waste biomass gasifiers. Using these groundbreaking technologies, we are developing broad product line of biomass-fueled power generators that are ready for everyday work, serving real-world, distributed-energy needs. We have placed our compact gasifier gensets in over thirty countries, where they are supporting research at more than fifty universities and providing low carbon energy around the world. They are at work now helping to solve the complex and interconnected problems of waste disposal, energy distribution, and climate change mitigation. We are very proud of the work we are doing at our facility in Berkeley, CA. Please contact us to arrange a visit the next time you are in the Bay Area. We would love to show you around.



WARRANTY

ALL Power Labs products are covered by a 100% money back guarantee. If you buy something & find yourself unimpressed with the value of the product or company, we'll refund all your money (minus shipping costs) within 30 days of delivery. APL directly warrants all parts we manufacture (i.e. gasifiers, electronics, & related components) for two years or 4000 hours, & passes along the OEM warranty for parts we source & configure into our end products (e.g. engines & genheads). See <http://allpowerlabs.com/products/warranty> for full details.

GAS MAKING SYSTEM

| | |
|------------------------------|---|
| Gasifier Type: | APL v5.x Patented Multistage Heat Recycling Downdraft |
| Materials: | 304/310/321 SS / Mild Steel |
| Hearth: | Coated Ceramic |
| Char-Ash Removal: | Automated Auger to 16 hour batch vessel |
| Fuel Feed: | Automated: Hopper to Reactor |
| Hopper Capacity: | 333 liters (88 gallons) |
| Hopper Filling: | Batch: Manual while operating Automatic: Continuous Feed Gate (optional) |
| Control System: | On-Board Automation |
| Flare: Clean Swirl Combustor | Auto Ignitor / Manual Mixture |

ENGINE

| | |
|---|--|
| Type: | Ashok Leyland: Hino-Toyota Design |
| Displacement: | 4.0 liter |
| Cylinder Configuration: | Inline 4 cylinder |
| Compression Ratio: | 12:1 |
| RPM: | 1500 @50 Hz, 1800@60 Hz |
| Valve Configuration: | Overhead, Pushrod |
| Engine Block: | Cast Iron: Industrial Diesel Based Cylinders Lined for In-frame Rebuild |
| Pistons: | Aluminum Alloy: Center Dished Ring-trench Inserts Prevent Sticking |
| Cylinder Head: Circumferal Squish Combustion | Cast Iron Crossflow w/ Hardened Exhaust Inserts |
| Ignition: | Electronic: ECU Controlled |
| Lube Oil Capacity: | 8 liters (8.5 quarts) |
| Coolant Capacity: | 15 liters (16 quarts) |
| Auto Shutdown: | Low Oil Pressure High Coolant Temperature |
| System voltage: | 12 VDC |
| Charging System: AC Genhead | Switch-mode Charger |
| System Voltage: | 12 VDC |
| Recommended Battery: | Grp 24 Marine: 75Ah, 880 CCA |
| Auxiliary Components: ECU Controlled 12 VDC | Cooling Fans Water Pump |
| Auxiliary Parasitic Load | 850 Watt, 300 Watt w/o Radiator |
| Speed Control: Elect. Gov. | Woodward L-Series |
| Automated Mixture Control | Bosch Wide-Band O ₂ Sensor |

GENERATOR

| | |
|----------------------------|------------------------------|
| Type: | Marathon 284CSL1542, 12 wire |
| AVR: | DSE A106 MK II |
| Available Voltages: | 480 VAC |
| Total Harmonic Distortion: | <5% |
| Efficiency: | 92% |
| Motor Surge Starting Cap: | >300% |
| Maximum Step-load | 50% of Rated Power |

All specifications are subject to change without notice

Date:

To: CCSD Board

From: Ad Hoc Climate change committee

Subject: Climate Change Policy Recommendations

SUMMARY:

In response to the Climate Change Policy document dated December 27, 2022. Karen Dean requested volunteers to form an Ad Hoc sub-committee to make recommendations to the board for adoption or revisions to an existing CC SD policy. Juki Amodei and Mark Meeks accepted the request.

ACTIONS

1. After a few meetings the committee resolved that there was not enough current information on the specific sources of pollution within Cambria and an environmental study would be helpful if not essential in:
 - Identifying and measuring sources of air pollution /GHG
 - Electrical use.
 - Recommend means of monitoring such sources.

2. Through research, the committee was able to identify a state funded grant program for climate change Climate Adaption and Resiliency Planning. At the time of discovery, the deadline for applying was a mere three weeks away. The committee decided to request a application anyway and was allowed to submit. The grant was written and submitted by Ray Deinzo with letters of recommendation from County supervisor Bruce Gibson, Cambria Chamber of Commerce and a budget proposal from an environmental engineering firm. After passing the first round of elimination Cambria's grant request was denied in what was termed a "very competitive turn out." We were encouraged, however by an offer by the Governor's Office of Planning and resources to participate in a round two of funding that will take place early next year, and an offer to consult with us in our effort going forward.

3. The committee requested and held a meeting with District supervisor Bruce Gibson to further discover what existing programs or funding opportunities might be available. Supervisor Gibson gave a list of organizations that we might contact they are:
 - Tri-County Reginal Network
 - 3-CE
 - CSDA
 - SLO County Planning
 - SLO County Public works

The Supervisor also related that SLO County has done little to implement “Climate Change” policies or programs after they completed a 2012 Climate Action Plan. He stated that SLO County was not required, and funds were not available. And basically, related that Cambria was free to obtain our own funding from external sources.

4. Reviewed several cities published Climate Action Plans and attended a zoom meeting with
 - City of San Luis Obispo
 - City of Santa Barbara
 - City of Santa Cruise
 - Monterrey County
 - City of Watsonville

At least one committee member concluded that: 1.) Climate Action Plans, in general, tend to be very similar when pointing to sources of GHG emissions. 2.) Smaller communities have limited abilities to attract funding and, are very challenged to “move the Needle” in terms of mitigating climate change.

RECOMMENDATIONS

- Follow up on applying for the State grant offering early next year.
- Hire a Professional Grant writer. Funding is essential to make changes.
- Focus on city improvements that can be attributed to Climate Change and continues to ally for Grants to accomplish these goals.
- Most Green House Gasses (CO2 emissions) are identified in all the CAP’s that we have seen. Look at ways to reduce vehicle traffic, particularly from tourism.
- Expand and promote Cambria’s Community Bus to include, Perhaps, daily transport to Morro Bay, SLO and Paso Robles.

Climate Change Planning and Policy in Cambria

Date: April 28, 2024

Summary

As we all must recognize, climate change is a reality that is affecting the earth's weather and therefore all segments of our environment. Awareness and concern are not enough however, Change and adaptation is necessary to mitigate or lessen the effects of climate change that will undoubtedly impact the environment and the way we all live and work in the future.

The community of Cambria acknowledges the need for change and adaptation and is now tasked with making decisions that will be effective and achievable. Chairwoman Karen Dean of Cambria's Resource and Infrastructure committee has directed an ad hoc committee to research what steps we as a community should be implementing by making recommendations to the CCSD board. The formal request made in 2021 was responded to in a number of ways, the latest of which was documented in "Climate Action Plan Recommendations". *Dated August of 2023; See Attached.*

This document is an update of the last nine months.

Actions

It has become apparent that Cambria cannot rely on SLO County for financial support for climate change initiatives. With that in mind, the R&I committee has again engaged with California's Adaptation Planning Grant Program (ADGP) for the second round of grants.

- This year CCSD General Manager McElhenie will lead Cambria to focus on the potential of widespread wildfire and begin looking to establish evacuation routes. This grant, if awarded, will fund a comprehensive study of existing routes and point to areas of improvement. It should be noted this the grant program does not allow for construction or materials costs.

Without funds to make major changes, conservation is the most approachable way to mitigate the effects of climate change. Cambria's Water Department has begun to address climate change in several ways through water conservation efforts they are:

- The wastewater treatment plant is continuing to upgrade hardware and software within the multi phased SST program. Many if not all the replacements and modernization efforts reduce greenhouse gases and the overall carbon footprint of the plant.
- Implementing a program to replace residential water meters with advance meter information (AMI) that allows end users to track, in real time, water usage. The meter replacement program incorporates the added benefit of locating with water leak alerts.

During the rainy season, the wastewater treat plant becomes inundated with storm water run-off that infiltrates into the sewer system. This is a significant amount of water that taxes the entire process and consumes a tremendous amount of electricity by processing storm water from the plant.

- Began a program to raise and replace sewer manhole covers that are below surrounding grade with sealed manhole covers.
- Optimize pump operation by scheduling pump operations to off- peak hours. Thus, reducing our carbon footprint in a significant way.
- Installing VFD's at Leimert pumping station. These devices allow pump speeds to be adjusted by demand and not just one speed.

Other on-going programs aimed at Climate Change:

- Installing water saving devices in public buildings and water treatment plants.
- Continuing to raise public awareness to conserve water.

As existing equipment requires replacement new equipment is selected with conservation as a priority.

- Constantly reviewing existing drought contingency plans.
- Continue to educate and re-educate in order to keep up with ever changing technologies and best practices.
- Fleet transition to EV vehicles as mandated by the state.

Recommendations

- Improve Fire Fighting Capacities.
 - 1) Improve water distribution systems and storage tanks.
 - 2) Clear brush and understories.
 - 3) Replace outdated equipment.
- Promote and expand public transportation.
- Intact ways reduce Power consumption.
 - 1) Replace motors with high efficiency motors. (*Ongoing in SST Program*)
 - 2) Install VFD drives controlling electrical devices as necessary. (*Ongoing in SST Program*)
 - 3) Eliminate incandescent lighting.
 - 4) Limit outdoor lighting in residential areas.
- Raise awareness.
 - 1) Promote conservation in tourist's areas.
 - 2) Utilize public service announcements on local radio.
- Establish a Climate Action Plan Committee

- 1) Set goals.
- 2) Promote and monitor actions for improving conservation and making changes.
- 3) Be active in identifying and applying for Grants to fund actions.
- 4) Become active in the “climate change community” and continue to educate ourselves on current technologies. Now is the time for opportunities.

CAMBRIA COMMUNITY SERVICES DISTRICT

TO: Resources and Infrastructure Committee

AGENDA NO. 4.C.

FROM: Jim Green, Utilities Department Manager

Meeting Date: May 13, 2024

Subject: Receive Presentation on Advanced Clean Fleet and Regulations, Discussion and Consideration to Forward a Recommendation to the Board of Directors

FISCAL IMPACT:

The estimated costs are \$7,800 for each charger, \$50,000 for each program-compliant vehicle (Ford F-150 Lightning), and design and installation costs are estimated to be \$30,000 for a total estimated project cost of \$137,800. Of this, rebates will reduce the total cost of the vehicles by \$14,000 each, and the estimated rebate amount for design and installation would be \$18,900 with the total estimated savings being \$46,900. The total estimated net cost for this project is \$90,900. The total estimated savings per year are \$2,000.

Background:

The California Air Resources Control Board (CARB) has adopted the Advanced Clean Fleets Regulation (ACF Rule). Starting November 1, 2023, initial compliance to this rule is needed with reporting for zero emission phase-in for certain fleet types beginning December 31, 2023. The ACF Rule is a program by CARB to accelerate the transition of medium and heavy-duty trucks to zero-emission vehicles.

Starting January 1st, 2024, a minimum of 50% of any new vehicles purchased by the District with a gross vehicle weight rating (GVWR) above 8500 pounds must be zero-emission vehicles. For reference an F150 (or similar) truck has a GVWR of 7000 pounds, and an F250 (or similar) has a GVWR of 10,000 pounds. Starting January 1st, 2027, 100% of the vehicles with a GVWR above 8500 pounds purchased by the District must be zero-emission vehicles. This rule impacts the District because we are a government agency with more than ten vehicles in our fleet. Staff have determined that acquiring electric vehicles (EVs) and EV charging infrastructure is the best way to meet this new mandate. In addition, right now, PG&E is offering rebates and project assistance through ratepayer-funded programs for fleet owners to electrify their fleets, which offers us an incentive to move quickly with an initial program to take advantage of those offers and reduce the cost of EV adoption.

DISCUSSION:

In response to the State developing the ACF Rule, PG&E has developed its EV Fleet Program to assist agencies with cost savings for charging infrastructure. PG&E's comprehensive program encompasses incentives, rebates, site design, permitting, construction, and activation.

Normally, the addition of an electrical service to PG&E requires the customer to pay for the installation costs of all the connecting infrastructure between the electrical service lines and the electric meter. Through the EV Fleet Program, PG&E will construct, own, and maintain all electrical infrastructure from their electrical service lines to the customer meter. Fleet operators, (in this case the CCSD), will design,

build, own, operate, and maintain the electrical infrastructure from the customer meter to the EV charger. The program supports level 2 and DC fast chargers for installation configurations based on a fleet operator's needs, and rebates are available for charger purchases. PG&E offers a vehicle purchase incentive of up to \$4,000 per vehicle, in addition to the \$7,500 Federal incentive and the \$2,500 State rebate per vehicle. The San Luis Obispo Air Pollution Control District (SLO APCD) offers a rebate of up to 50% of the costs of installing the chargers.

PG&E's program closes to new applications on June 30th, 2024, so the CCSD must act fast to take advantage of this program.

Funding Requirements

- The district must provide EV usage data for at least five years after the chargers are installed and operational.
- The district must agree to operate and maintain the EV charging equipment for at least ten years.
- The CCSD must purchase at least one charger and two program-compliant vehicles over a five-year period. A program-compliant vehicle is an EV with a GVWR of greater than 6,000 lbs.

Staff recommend the R&I Committee approve and forward on to the Board of Directors the recommendation that the CCSD apply for PG&E's program and commit to installing a minimum of one program-compliant charger, purchasing a minimum of two (2) program-compliant EVs, and agree to the terms listed in the "Funding Requirements" Section above.

Attachments: EV Fleet Electrification Path
EV Yearly Savings



ZEV

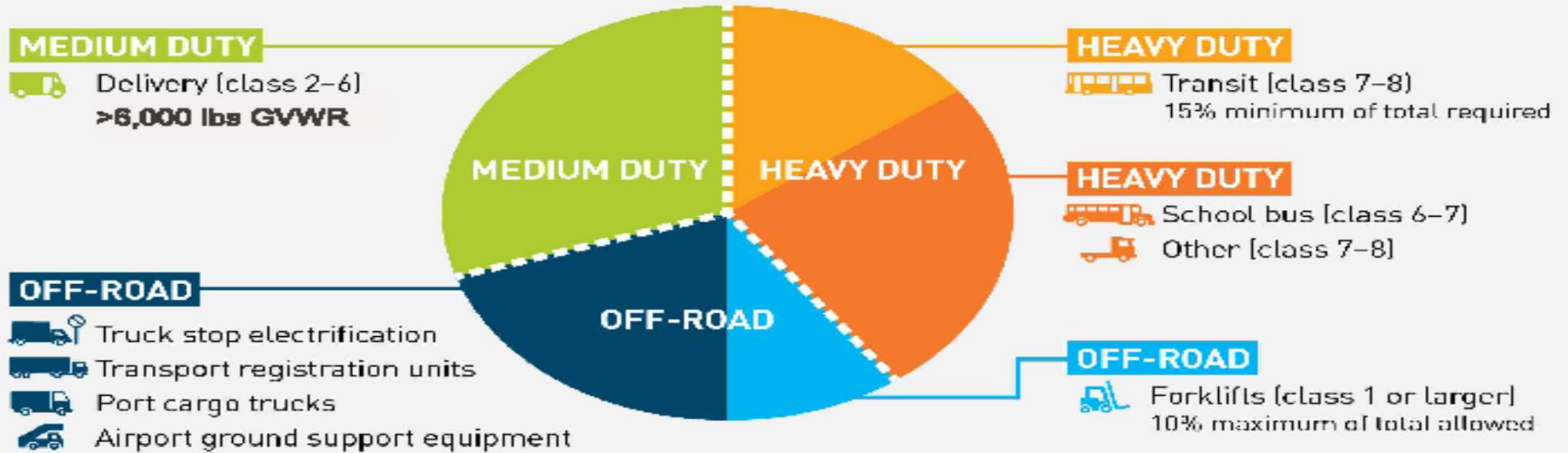
Zero Emissions Vehicle mandate from CARB



EV Fleet vehicle sector mix

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

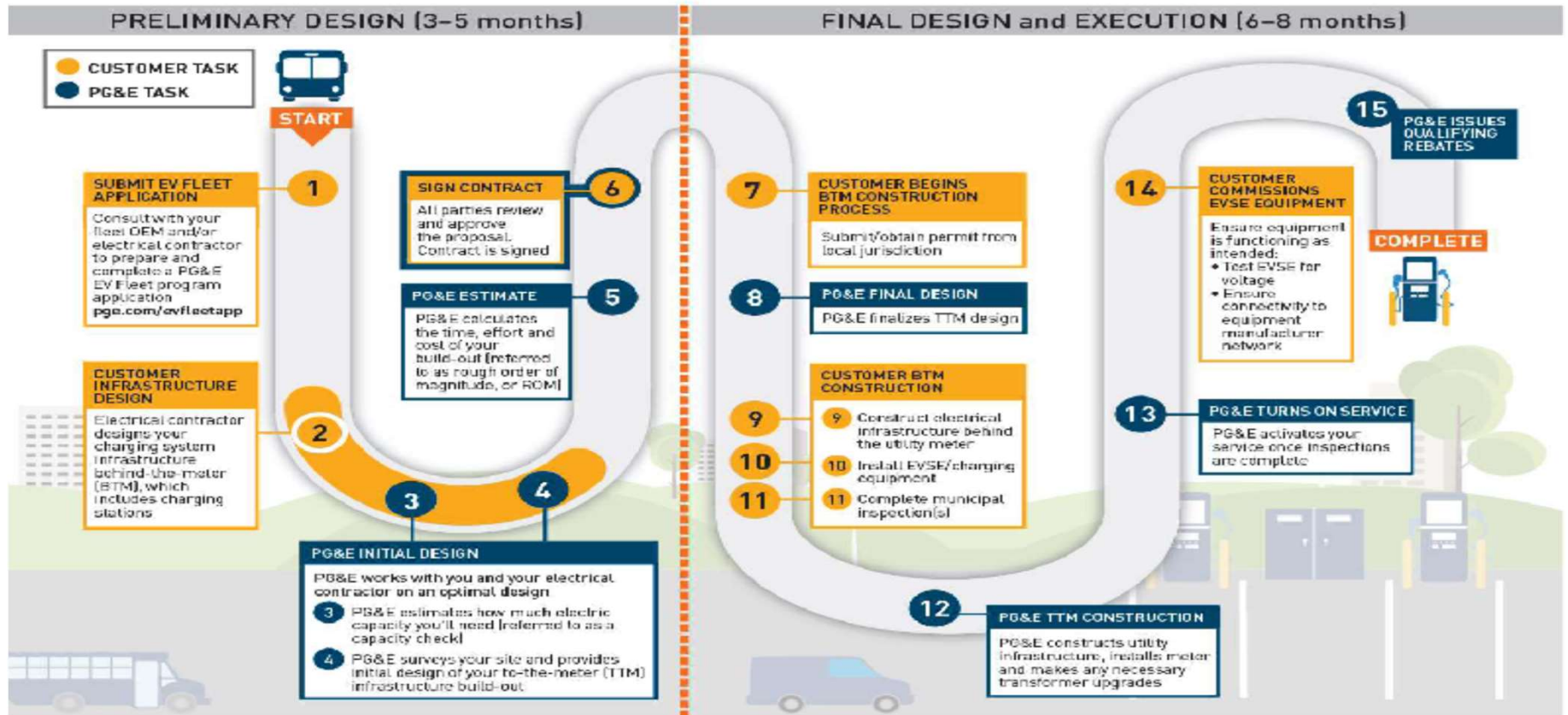
VEHICLE TYPE ESTIMATES



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

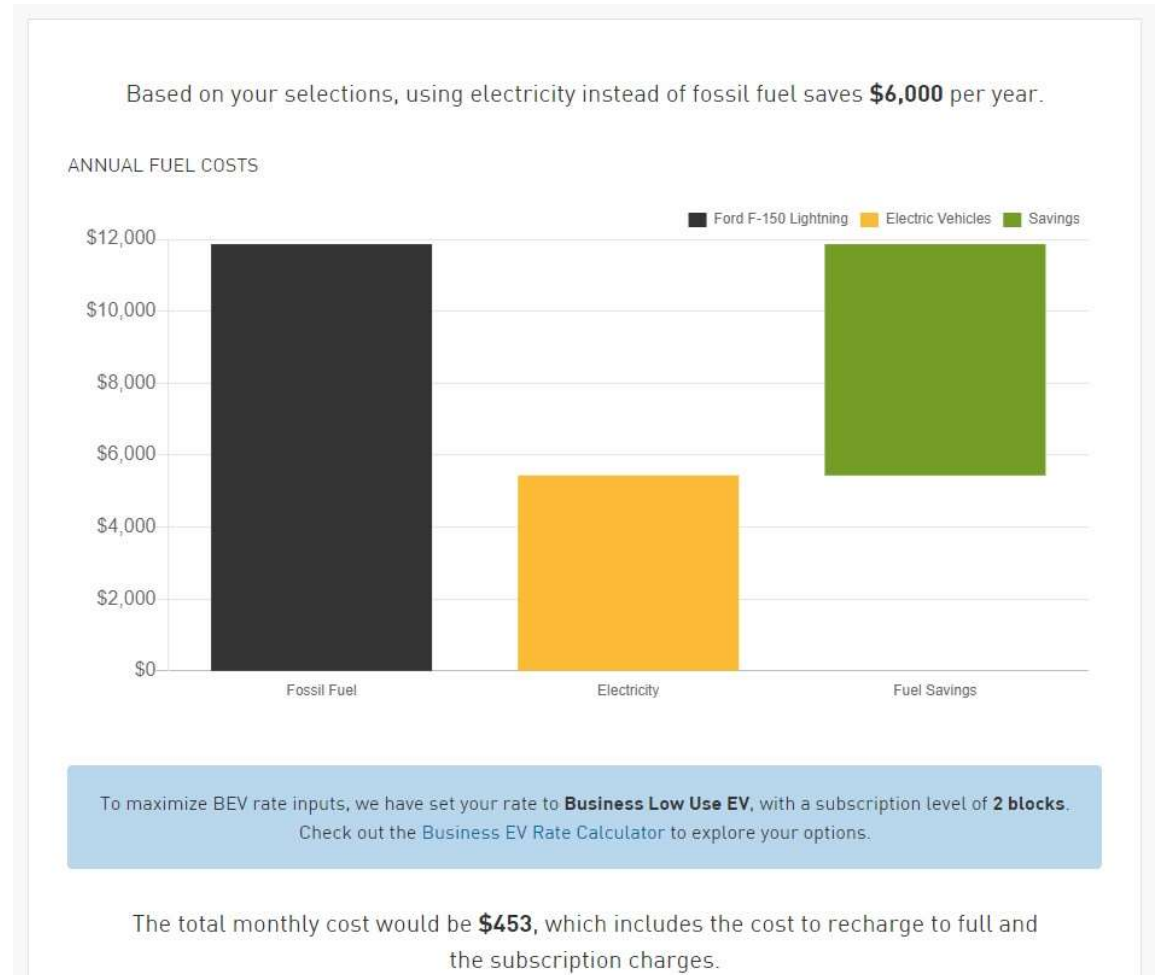


EV Fleet electrification process



Fuel Savings

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



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

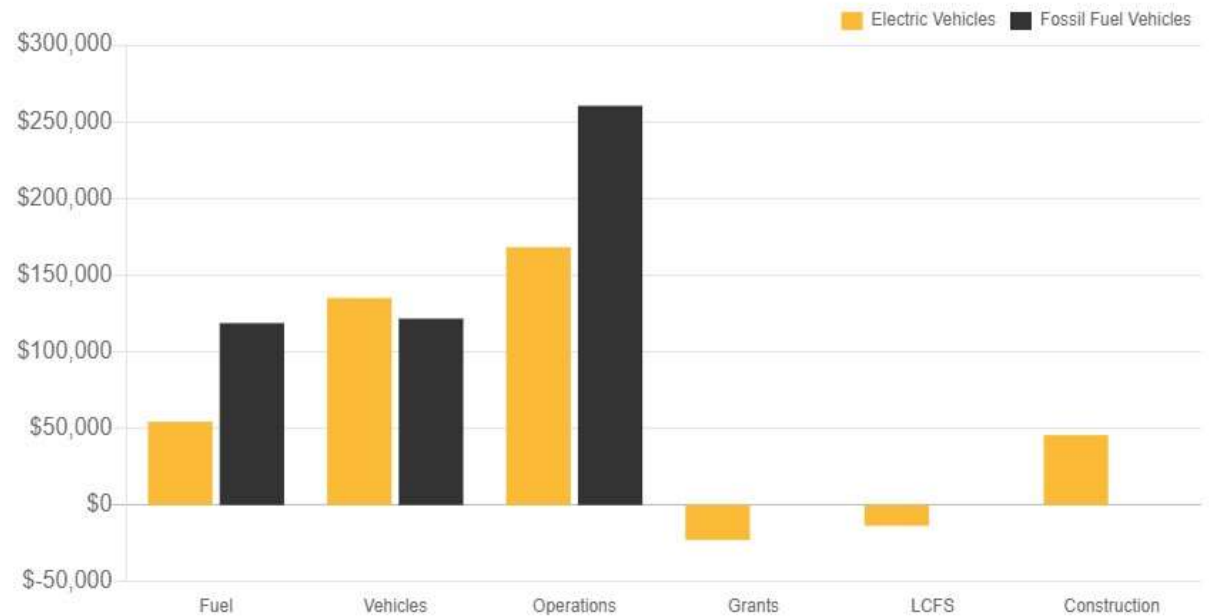
| | | Electric Vehicle(s) | Fossil Vehicle(s) | EV Savings |
|------------------------|-------------|---------------------|-------------------|------------------|
| Fuel | | ① \$54,340 | ① \$118,638 | \$64,298 |
| Vehicles | Purchase | \$199,980 | ① \$180,000 | \$-19,980 |
| | Resale | \$-64,932 | \$-58,444 | \$6,487 |
| Operations | Maintenance | ① \$130,095 | ① \$226,165 | \$96,070 |
| | Insurance | ① \$37,996 | ① \$34,200 | \$-3,796 |
| Grants ① | | \$-22,800 | N/A | \$22,800 |
| LCFS | | ① \$-13,500 | N/A | \$13,500 |
| Construction | | ① \$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



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

VEHICLES

2x Pick-up Truck Light Duty

Miles per vehicle
Days Operating
Charging60
Weekdays
9pm - 5am

+ Add a new vehicle

FUEL

GASOLINE PRICE (\$/GAL)

3.3

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10

ELECTRICITY SOURCE

California Grid

Carbon neutral generation creates more LCFS credits. Carbon neutrality can be achieved with clean on-site generation or Renewable Energy Credits (RECs).

FINANCIAL

ELECTRICITY

VEHICLES

CHARGERS

EMISSIONS

Based on your selections, using electricity instead of fossil fuel saves **\$2,000** per year.

ANNUAL FUEL COSTS

