Fleet Regulatory Update
Finance & Administration Committee
June 19, 2023

CARB Advanced Clean Fleet Regulation (ACF)

- **Applies to all state and government agencies**

- All vehicles over 8,500 lbs. (think F250 and above)
  - Emergency operations: declared emergency event
    - Routine operation to prevent public health does not constitute emergency operation
    - Emergency support vehicle is not an emergency vehicle
  - Vehicle purchase means placing an order for immediate delivery and entering into a binding agreement
  - Manufacturing Mandate: **Clean Truck Rules (Approved)**
    - EPA granted waiver to CARB to enforce rules
  - Purchasing Mandate: **Clean Fleet Rules (Approved; OAL)**

Other states that have adopted the Clean Truck Regulations include: Oregon, Washington, New Jersey, New York, and Massachusetts

CARB ACF Exemptions

- **Each requires an application and substantial backup**
  - Backup Vehicle Exemption
  - Non-repairable Vehicles (accident or catastrophe)
  - Daily Use Exemption
  - ZEV infrastructure Delay Extension
  - ZEV Purchase Exemption List (Jan 2025)
  - Mutual Aid

CARB ACF Next Steps

- <u>Changes to Regulation: unknown at this time</u>
  - ACWA and League of California Cities are monitoring legislative bills but have not spearheaded any bills. Currently, working on establishing a communication channel with CARB.
    - AB1594: Read third time. Passed. Ordered to the Senate. 05/31/2023
      - *(2) Authorize a public agency utility to request that the public agency utility be allowed to determine whether a comparable zero-emission vehicle is available for purchase without regard to the model year of the vehicle being replaced and in consideration of daily usage capabilities and foreseeable emergency response and mutual aid assistance needs.*

- CARB staff believes they have given all the necessary exemptions

- CARB Chair does not want to review regulation prior to full implementation in 2028

SCV Water Compliance Options

- Timeline: January 2024

- Approximately 100 trucks will be affected by ACF

- Compliance Path:
  - Purchasing requirements (50% 2024; 100% 2027)
    - Most fleets will pick this option
  - Milestone would require:
    - 10% (2027), 25% (2030), 50% (2033), 75% (2036), 100% (2039)

- Additional Options
  - **Order trucks with gasoline truck replacements,** before January 2024
  - Buy SCV Water 5-10 years for technology to develop and infrastructure installation
    - Estimated savings $5-10 million over the next 10 years

Infrastructure Options

- **Consultants can be brought in at any point**
  - Compliance assessment
  - Exemptions submittals
  - Fleet and charging assessments
  - RFP design and assessment
  - Charging infrastructure design and construction
  - Charging as a service, charger operation, agency owned charging infrastructure
- **Phase 1: Short Term (with existing infrastructure 1-2 years)**
- Site assessment for each yard (Rio, GT, Pine, Rockefeller, Summit)
  - Installation of Level 2 chargers with existing infrastructure

Infrastructure Options

- **Phase 2: Long Term (new infrastructure to support zero emissions fleet 3-7 years)**
  - Fleet EV Suitability Assessment (telematics)
  - Charging Needs Assessment (telematics + site assessments)
  - Design of charging depots at agency facilities for Level 2 and DC fast chargers
  - Grant applications and requests for new Edison services
  - Emergency Preparedness (battery storage and load management)
  - RFP
  - Construction

Infrastructure Options: Mobile Charging
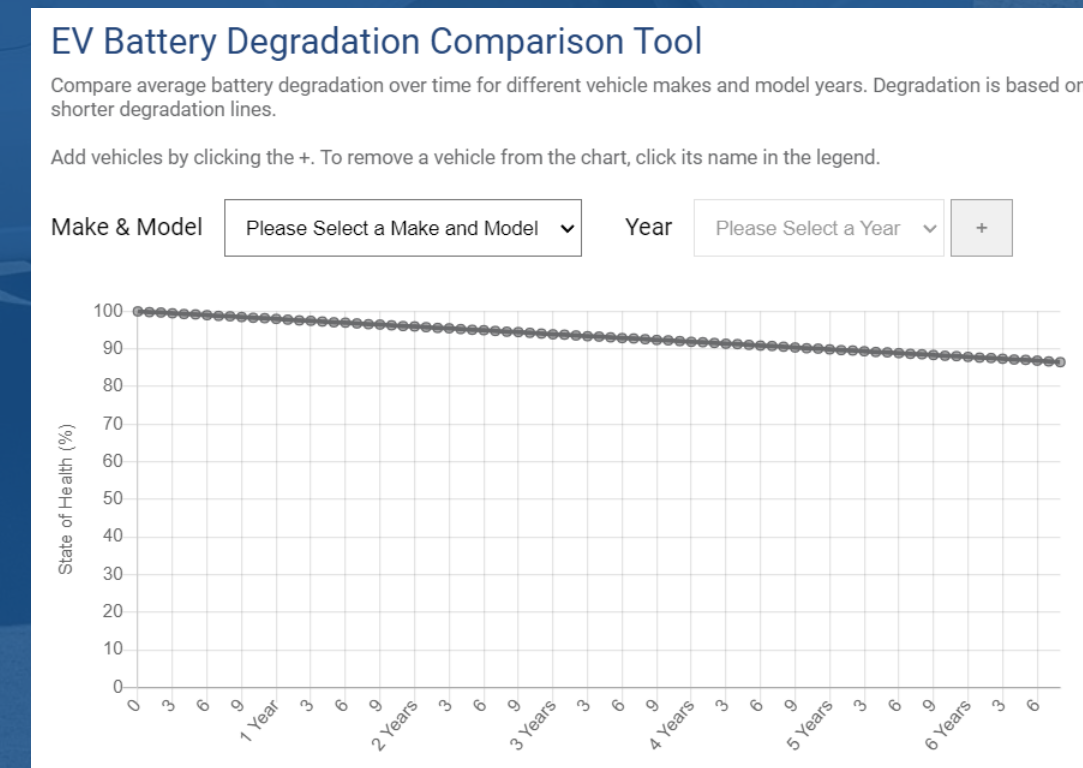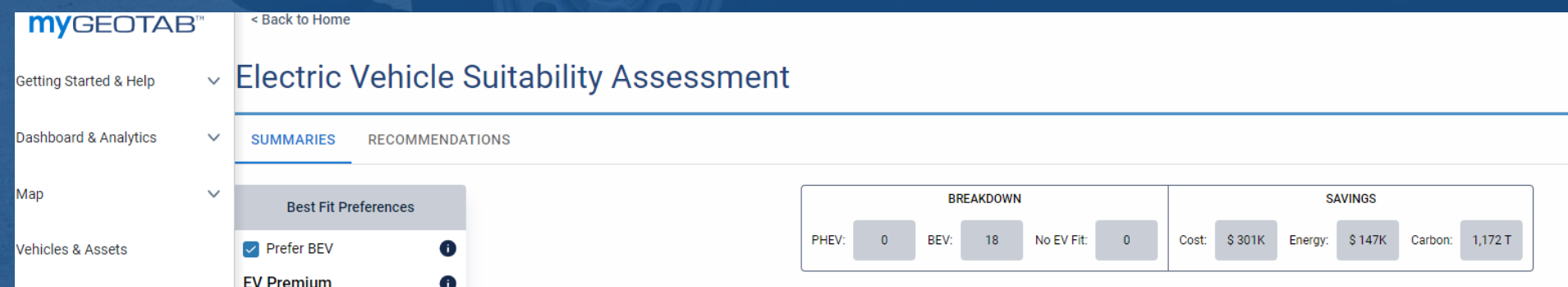
Mobile charging $80-500k

Charging as a service

SCV Water Possible Transition Timeline

- **EVS: high acquisition costs and low operating costs**
  - Goldilocks: too low, too high, just right (utilization)
- **1-5 years: low hanging fruit**
  - Passenger vehicles (sedans and SUVs) office pool vehicles, IT, supervisor vehicles
  - Pickups: Summit Circle and Rockefeller
- **4-7 years: semi-difficult**
  - Utility Trucks that travel less 50 miles per day or do not tow (Rio)
  - Water quality vans
- **7-10 years+: extremely difficult**
  - Utility trucks that tow
  - Crew trucks and large commercial vehicles (Golden Triangle and Pine)

How Telematics Data can be used

- **<u>Supporting documentation for exemptions</u>**
- Fleet EV Suitability Assessment (telematics): can help identify what vehicles can be transitioned
- Charging infrastructure design:
  - Predict charging demands with data on dwell locations, dwell times, driving patterns
  - What type of chargers? How many? How to manage chargers?
- Vehicle performance: battery health

EV Battery Degradation Comparison Tool

Compare average battery degradation over time for different vehicle makes and model years. Degradation is based on shorter degradation lines.

Add vehicles by clicking the +. To remove a vehicle from the chart, click its name in the legend.

Make & Model: Please Select a Make and Model   Year: Please Select a Year   [+]

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Electric Vehicle Suitability Assessment

Getting Started & Help
Dashboard & Analytics
Map
Vehicles & Assets

SUMMARIES   RECOMMENDATIONS

Best Fit Preferences

☑ Prefer BEV
EV Premium

BREAKDOWN			SAVINGS		
PHEV: 0	BEV: 18	No EV Fit: 0	Cost: $301K	Energy: $147K	Carbon: 1,172 T

Questions?