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MDB Consulting Engineers Comments on the Clean Transportation Investment Plan 2026 - 2027

Additional submitted attachment is included below.

MICHAEL D. BROWN CONSULTING ENGINEERS

May 19, 2026

To: Mabel Aceves

California Energy Commission Docket 26-ALT-01
1516 Ninth Street
Sacramento, CA 95814

RE: PUBLIC COMMENT ON THE DRAFT 2026-2027 CLEAN TRANSPORTATION PROGRAM INVESTMENT PLAN UPDATE

MDB Engineers appreciates the opportunity to provide public comments on the California Energy Commission's (CEC) Draft 2026-2027 Investment Plan Update for the Clean Transportation Program. Having been actively involved in California's biomass energy sector since 1976 - beginning with a CEC-funded study evaluating the conversion of bark beetle-infested forest waste into energy - I have watched the evolution of our state's energy policy for five decades. Having served as the Due Diligence Engineer for the California Pollution Control Financing Authority (CPCFA) and various commercial and investment banks underwriting many of the original biomass power plants built across California, I am deeply concerned by the current draft investment plan's lack of alignment between upstream fuel production and downstream infrastructure.

The Critical Imbalance: Infrastructure Without Dedicated Upstream Supply

An engineering and logistical review of the proposed Draft Investment Plan reveals a fundamental flaw: its near-exclusive focus on the *dispensing* of electricity for EV charging and hydrogen vehicle refueling. While expanding charging ports and dispensers is necessary, the framework fails to allocate funding for the localized *production* of electricity or hydrogen from renewable sources.

Both high-capacity EV fast-charging corridors and hydrogen fuel dispensing systems require immense, highly concentrated blocks of electrical power. In the absence of integrated, site-specific renewable generation, these facilities must rely entirely on California's centralized utility grid.

As an experienced engineer, I must emphasize that our grid infrastructure is already severely strained. This vulnerability is being rapidly accelerated by the exponential, massive power demands of newly constructed commercial data centers. Forcing thousands of new transport-related high-power connections onto an overtaxed grid without dedicated distributed renewable generation creates severe localized reliability risks and undermines the true lifecycle carbon reduction goals of the state.

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The Feedstock Flood and the Waste Management Emergency

California is currently facing a highly challenging organic waste disposal crisis. Over the past ten to fifteen years, the vast majority of the legacy biomass combustion power plants I helped finance have been decommissioned and permanently shut down. Concurrently, comprehensive bans on open field agricultural burning have fully gone into effect, entirely eliminating traditional disposal methods for orchard residuals.

Furthermore, high-hazard forest zones face an identical crisis, lacking commercial outlets for millions of tons of hazardous fuel loads cleared for wildfire mitigation. This massive accumulation of woody material represents a highly secure, weather-independent source of clean, baseload renewable power and direct hydrogen production.

Finally, recognizing the highly desirable Greenhouse Gas Reduction from the proper, non-landfill utilization of municipal biomass wastes, SB 1383 requires landfill diversion of green and food waste from landfill and procurement by all local jurisdictions of products – like Renewable Natural Gas (RNG) and power for EV charger use.

The engineering risks are already resolved Proven thermal and biochemical technologies exist today for the clean and highly efficient production of electricity from these biomass wastes without open-air emissions. Additionally, multiple advanced systems designed for direct biomass-to-hydrogen conversion are mature and ready for commercial-scale demonstration.

With recent shifts in Federal energy policy indicating a sharp decline in infrastructure and early-stage renewable funding from the U.S. Department of Energy (DOE), California cannot afford a policy vacuum. Decisive institutional leadership by the CEC is absolutely mandatory to bridge this commercialization gap.

Advanced Solutions in the Field: Real-World Proof of Concept

My recent consulting engineering projects and Capstone Engineering teaching at Cal Poly, have focused heavily on deploying advanced biomass-to-energy systems through gasification and anaerobic digestion (AD). These cutting-edge, clean-tech projects—many being developed with partial CEC grant funding - demonstrate precisely how localized waste can solve our transportation fuel needs:

1. **The OES San Bernardino BioDigester:** Showcasing how diversion and advanced organic processing can yield highly reliable renewable energy.
2. **The CGI Anaerobic Digestion Project:** Will produce Renewable Natural Gas (RNG) from municipal food and green waste utilizing an advanced microbial predigestion process that significantly increases methane output and project efficiency.
3. **The CGI Forest and Woody Waste Project (Grant ARV-23-001):** Validating the direct conversion of high-hazard forest residuals and agricultural waste directly into vehicle-grade electricity for EV fast-charging and high-purity hydrogen fuel. Phase 1 testing of these advanced platforms has successfully proven that we can generate clean, high-value transport fuels directly from localized waste streams without straining the utility grid.

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Technical Recommendations for the Final Investment Plan

To establish a resilient, self-sustaining zero-emission transportation ecosystem, MDB Engineers respectfully requests that the Commission implement the following modifications:

- **Dedicate Capital to Advanced Biomass-to-Electricity Infrastructure:** Allocate a meaningful portion of the annual $95 million Clean Transportation Program budget specifically for advanced, clean biomass-to-electricity projects. This will ensure charging networks can draw on independent, localized baseload power.
- **Repurpose Idle Hydrogen Capital for Local Production:** Capture unspent hydrogen refueling infrastructure allocations and pair them with a meaningful segment of the annual $95 million fund to commercialize direct biomass-to-hydrogen conversion technologies.
- **Remove Structural Penalties for On-Site Generation in Solicitations:** Reform the scoring architecture of future Grant Funding Opportunities (GFOs) to provide funding and preference for projects utilizing on-site renewable energy generation, The CEC must eliminate this structural barrier so that developers' building localized, grid-independent renewable production are rewarded rather than locked out.

Thank you for your historical commitment to California's energy independence, and for considering these technical recommendations to ensure our clean transportation infrastructure is backed by clean, localized fuel production and consideration of our comments.

Sincerely,

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