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<th>16-ALT-02</th>
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<td>2017-2018 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program</td>
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<td>Greenlining Comments on the 2017-2018 Investment Plan Update for the ARFVTP â€“ Draft Staff Report</td>
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<td>The Greenlining Institute/Joel Espino</td>
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Greenlining Comments Comments on the 2017-2018 Investment Plan Update for the ARFVTP â€“ Draft Staff Report

Additional submitted attachment is included below.
November 10, 2016

Commissioner Janea A. Scott  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

Re: Comments on the 2017-2018 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program – Draft Staff Report

Dear Commissioner Scott and ARFVTP Staff:

Thank you for the opportunity to provide comment on the 2017-2018 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program (“ARFVTP”) – Draft Staff Report (“Staff Report”). The Greenlining Institute (“Greenlining”) acknowledges the hard work staff put into this draft report. It provides an excellent summary and analysis of the state of alternative and renewable fuels and vehicles available in California. It also provides a detailed account of why the Energy Commission staff supports the funding levels proposed.

I. “Program Outreach and Inclusion”

Greenlining strongly supports the clear prioritization of diversity and inclusion within the ARFVTP in the “Program Outreach and Inclusion” section. The section is consistent with the requirements of Assembly Bill 865 (2015, Alejo) and encompasses the messaging and action steps needed to create a more diverse and inclusive clean energy economy. Prioritizing diversity and inclusion will help the Energy Commission form strong partnerships outside of the clean transportation sector and will help promote programs that better serve the transportation and economic needs of all Californians.

Greenlining thanks the Energy Commission’s use of scoring preferences for projects located in or benefitting disadvantaged communities, as defined by CalEnviroScreen 2.0. We are excited to see that about 40 percent of site-specific projects are benefitting disadvantaged communities. We recommend that the Energy Commission continue to explore ways it can target and prioritize investment of zero-emission technologies like battery electric and fuel cell technologies in disadvantaged and low-income communities who can benefit the most from the improved local air quality.

Greenlining would like to bring Assembly Bill 1550 (2016, Gomez) to the Energy Commission’s attention. This bill mandates that 25 percent of GGRF funds go to projects located in disadvantaged communities and an extra 10 percent benefit low-income households and low-income communities. The California Air Resources Board (CARB) will develop guidelines and
Greenlining, along with other equity and environmental justice groups, will provide input. We encourage the Energy Commission to complement this effort by identifying opportunities to target ARFVTP benefits to low-income households and low-income communities.

II. “Alternative Fuel Infrastructure – Electric Charging Infrastructure”

Greenlining supports the $17 million allocation for electric vehicle charging infrastructure. We acknowledge, however, that California needs a lot more public and private investment in EV charging infrastructure, especially in disadvantaged and low-income communities, to facilitate the transportation electrification needed to meet our air quality, climate, and equity goals. We appreciate the Energy Commission coordinating with and monitoring other EV infrastructure investments and planning such as the investor-owned utility pilots and proposals, the NRG EVgo settlement, and the Volkswagen settlement.

Low-income communities and communities of color disproportionately feel the impacts of vehicle pollution and can benefit the most from the clean air benefits of electric cars, trucks, and buses and from the cost-savings of owning an EV versus a gasoline-powered vehicle. As a result, Greenlining recommends that the Energy Commission explore ways it can increase EV access for low- and moderate-income Californians that align with its intent to fund projects not covered by the geographic area or scope of other programs. Working with the CARB staff and administrators of SB 1275 equity pilots might help identify EV charging infrastructure investment gaps that are limiting the impact SB 1275 equity programs can have in disadvantaged and low-income communities.1 Additionally, working with the Advanced Clean Transit rule staff at CARB might help as well. Formalizing this effort as an initiative or pilot program aimed at facilitating transportation electrification (e.g. EV ownership, EV carsharing, electric transit buses, electric microtransit options) in disadvantaged and low-income communities and setting aside funds for this approach will help mobilize stakeholders around this objective.

Greenlining also recommends that the Energy Commission look at the PAYS (pay as you save) financing model to help increase access to EV charging infrastructure, especially in disadvantaged and low-income communities and multi-unit dwellings.2 This model could also potentially help transit agencies purchase electric buses if they partner with willing investor-owned utilities. PAYS was referenced in the SB 350 Barriers study comments of many stakeholders.

III. Natural Gas Vehicles and Natural Gas Fueling Infrastructure

Greenlining has grave concerns for the environmental justice impacts of natural gas extraction and for the continued use of natural gas and other fossil fuels in our transportation sector. We are especially alarmed when you consider that nearly 90 percent of residents in California’s most

1 We recommend connecting with administrators of the EFMP Plus-Up pilot: Valley Clean Air Now (“Valley CAN”) and the South Coast Air Quality Management District. We also recommend connecting with the Community Housing Development Corporation in Richmond, which administers the low-income financing assistance pilot in the Bay Area.

2 Pay As You Save and PAYS are terms that describe a type of tariffed on-bill investment program developed by the Energy Efficiency Institute, Inc. (EEI). More info here: http://cleanenergyworks.org/blog/pays-financing/.
polluted regions are people of color, despite making up 60 percent of the state’s population. Emissions reductions from new diesel and natural gas vehicles will not be enough to meet California’s clean air standards and new diesel and natural gas emissions will continue to hurt low-income communities and communities of color the most. California needs to prioritize cleaner alternatives.

Transportation electrification is the fastest and most effective strategy for combating climate change and improving local air quality in low-income communities and communities of color. For example, the Union of Concerned Scientists examined the life cycle emissions (considered not only tailpipe emissions but also emissions from producing the fuel) of transit buses across engine and fuel types and found that battery electric buses have lower emissions than CNG buses. They found that global warming emissions from fuel cell electric buses are more than 50 percent lower than both compressed natural gas (CNG) or diesel buses. They also found that life cycle global warming emissions from battery electric buses are nearly 75 percent lower than both CNG and diesel buses. Moreover, “battery and fuel cell electric buses have lower life cycle NOx emissions than do diesel and CNG buses” even when you include CNG buses with engines certified to meet California’s voluntary low-NOx standards. Battery electric buses can have tremendous public health benefits in low-income and disadvantaged communities and can ensure California meets its air quality and climate goals.

Greenlining recommends that the Energy Commission reduce its funding for natural gas technology, especially in the transit bus sector, as the economic and technological viability of electric buses and trucks increases and reaches parity with natural gas technologies. We need contraction of this industry, not expansion.

IV. Workforce Development and Training and Diverse-Owned Business Contracting

Greenlining supports the $3.5 million to support alternative transportation workforce training and development. Greenlining supports and is excited to see efforts to increase interest in alternative transportation careers for high school students and those seeking career in technical jobs outside of traditional college pathways. Greenlining supports the emphasis on pre-apprenticeship programs as they are critical in helping prepare participants for the demands of apprenticeships.

Greenlining thanks the Energy Commission for its efforts in reaching out to and educating diverse-owned businesses about contracting opportunities. Greenlining recommends the Energy Commission reference the “SB 350 Clean Energy Jobs and Economic Opportunities Comments and Recommendations” we submitted on August 25, 2016 to explore ways to connect diverse-

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owned businesses and workers from underserved communities to economic opportunities within
the ARFVTP.\(^7\)

Greenlining takes this opportunity to re-introduce some of our recommendations expressed at the
August 25, 2016 “Staff Workshop for Workforce Training and Development Funding
Opportunities for Alternative Fuels” (see next section for more workforce development and
training recommendations):\(^8\)

- Increase access to skills development programs and initiatives (e.g. pre-apprenticeship
  programs, soft skills training, financial assistance)
- Incorporate wrap-around support services in skills development and employment
  programs (e.g. child care, transportation, housing, substance abuse counseling, physical
  health, financial stability, educational achievement, criminal record remediation, driver’s
  license restoration)
- Encourage targeted and local hiring on publicly funded projects

Greenlining recommends also incorporating, more explicitly, “High Road” workforce
development values in this funding category that focuses on a commitment to quality, quantity,
and access. We encourage using these questions in guiding this effort:

- How can you ensure clean transportation jobs in your area pay good wages, provide
  benefits, and provide well-articulated career ladders (quality)?
- Where are the opportunities that will go to a large enough scale to be meaningful
  (quantity)?
- And how can you ensure that those jobs are attainable for people with barriers to
  employment (access)?

To ensure the success of ARFVTP workforce investments and policies, Greenlining recommends
increasing transparency and workforce data collection. Within the workforce funding category,
there should be reporting on individual level data. Where possible, there should be reporting on
subcontractors and whether subcontractors used to carry out a solicitation qualify as a diverse-
owned business.

Some possible Jobs Metrics:

- Job quantity: number of workers employed/trained; hours per week; employment status
  (part-time/full-time, or percentage of full-time equivalency)
- Job quality: hourly wages, employer-provided benefits for hires, partners and dependents
  (medical and dental coverage, paid vacation and sick leave, retirement savings,
  transportation reimbursement, childcare assistance, paid training opportunities)

\(^7\) The Greenlining Institute, at: http://docketpublic.energy.ca.gov/PublicDocuments/16-OIR-02/TN212959_20160825T173803_Sekita_Grant_Comments_350_Recommendations_for_Jobs_Workforce_Tr.pdf
\(^8\) California Energy Commission, at http://www.energy.ca.gov/calendar/index.php?eID=2756
• Job access: worker demographics, including gender, race/ethnicity, workers with barriers to employment, geographic location (census tract of residency); project subject to project-labor agreement, targeted hiring policies, or community workforce agreement
• Job retention: length of time employed, retention rate
• Job classification: occupation, employee classification (employee, independent contractor, trainee, etc.), contractor classification (diverse-owned business, community based organization, etc.)
• Job trajectory: number and type of certifications or credentials awarded, number of job placements for trainees/interns, number of trainees enrolled in pre-apprenticeship or state-certified apprenticeship programs; existing workforce and training partnerships with training providers, workforce agencies or community-based organizations

In all ARFVTP investments, Greenlining encourages the Energy Commission to prioritize projects that encourage broader economic and health benefits for low-income communities of color, particularly disadvantaged communities impacted most significantly by poor air quality and poverty.

V. “Delivering Opportunity: How Electric Buses and Trucks Can Create Jobs and Improve Public Health in California”

Greenlining takes this opportunity to inform the Energy Commission of a report we recently published in partnership with the Union of Concerned Scientists.

California’s emerging market for electric buses and trucks provides a significant opportunity to improve public health in communities most affected by traffic-related pollution and to bring jobs to people who need them most. The report examines the state of electric bus and truck technology and its potential for reducing pollution from heavy-duty vehicles while creating job opportunities for underserved communities. The report also includes an appendix of some job profiles related to some emerging occupations in transportation electrification. Some recommendations are pulled out here for reference:

Workforce Training and Development:

• Support the development of and place a high priority on projects that have robust recruiting and hiring policies targeting underserved communities, provide high-quality jobs, have robust minority-owned business procurement goals (i.e., supplier diversity), and partner with or provide support to workforce development programs aimed at underserved communities.
• Invest in skills-development programs aimed at training members of underserved communities (particularly those with barriers to employment) to fill emerging

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9 Individuals with barriers to employment as defined in statute: AB 1270 (E. Garcia, 2015)
employment needs in the heavy-duty EV industry and related transportation-electrification fields.

- Track and report individual level data on the progress of efforts to train and employ members of underserved communities.
- Reference and use the US Employment Plan to evaluate and score proposals with the aim of encouraging commitments to creating good jobs and improving access for people historically excluded from manufacturing jobs.\(^{12}\)

Financial Incentives:

- Heavy-duty vehicles should be a high priority for air-quality funding, with further priority for directing such funding at communities most affected by heavy-duty vehicles—including those near ports, rail yards, and warehouses.
- Financial incentives should be scaled based on several factors, including the level of emission reductions achievable per vehicle, the long-term potential for widespread deployment within a specific heavy-duty application, and whether the vehicle will predominately operate in communities most affected by poverty and pollution.
- Cost-benefit analyses for vehicle purchases should account for the total cost of vehicle ownership rather than just the upfront costs.
- Provide technical assistance to small businesses and fleet managers to facilitate their adoption of EVs, which come with different operating considerations than do traditional vehicles.

Thank you for drafting another successful Staff Report and thank you for the opportunity to comment. We look forward to continuing the discussion and supporting the Energy Commission in its goal of creating an equitable ARFVTP program that works for all Californians.

Sincerely,

Joel Espino
Legal Counsel, Environmental Equity
The Greenlining Institute

\(^{12}\) The US Employment Plan was developed by a team of experts from LAANE, the Brookings Institution, the University of Southern California’s Program for Environmental and Regional Equity, and the University of Massachusetts at Amherst’s Political Economy Research Institute (JMA n.d.). For more information, visit http://jobstomoveamerica.org/resources/u-s-employmentplan-resources-2.