



## DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

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P.O. BOX 4025, SACRAMENTO, CALIFORNIA 95812

November 14, 2013

Commissioner Janea A. Scott  
California Energy Commission  
Dockets Office, MS-4  
Re: Docket No. 13-ALT-02  
1516 Ninth Street  
Sacramento, CA 95814-5512

California Energy Commission

**DOCKETED**  
**13-ALT-02**

TN 72342

NOV. 14 2013

Via Email: [docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)**Subject:** Comments to the draft 2014/2015 AB 118 Investment Plan, Docket No. 13-ALT-02

Dear Commissioner Scott:

Thank you for your leadership and your staff's quality work in preparing the 2014/2015 draft Investment Plan. CalRecycle appreciates the opportunity to collaborate with the California Energy Commission (CEC) on the AB 118 program, which furthers our common interest in transitioning from a dependence on petroleum-based fuels to a reliance on sustainable low carbon fuels. We commend the CEC for taking a balanced approach in developing the draft Investment Plan, continuing to provide support for biofuel production, and recognizing the exceptionally low carbon intensity (CI) of biomethane derived from High Solids Anaerobic Digestion.

However, we are concerned with the proposed decrease in funding for biofuel production in the 2014/2015 Investment Plan. Given the recognition of the low CI and the potential for additional in-state biofuel production, we recommend more, rather than less, investment in this category. Consistent with our comments at the November 4, 2013, Advisory Committee meeting, CalRecycle recommends restoring the allocation for low carbon biofuel production to at least \$23 million, the same funding level provided in the 2013/2014 Investment Plan. If possible, we recommend an additional increase in the funding for biofuel production above \$23 million. Further, CalRecycle recommends that subsequent biofuel solicitations issued to expend this funding should provide flexibility for competition among biofuel producers and avoid inclusion of fuel production capacity thresholds.

CalRecycle's interest in the 2014/2015 draft Investment Plan focuses on the use of pre-landfill organic materials as feedstocks for fuel production. Building in-state infrastructure to process these materials is a critical component of our effort to achieve AB 341's statewide policy goal that 75% of solid waste generated in California be source reduced, recycled, or composted by



the year 2020. Meeting the 75% recycling goal will increase the availability of organic waste feedstocks for the production of pre-landfill biomethane while resulting in significant greenhouse gas emission reductions. According to studies from the California Biomass Collaborative, this material has the potential to produce 300,000,000 gallons of gasoline equivalents per year.

Further AB 118 funding is critical to accelerate the development of additional pre-landfill biomethane production facilities that various companies are considering. These projects will provide a sustainable source of in-state low carbon fuel, create new jobs, and help achieve the State's 75% recycling and greenhouse gas emission reduction goals.

In addition to our primary recommendation regarding funding for the category, I also am including a one page attachment with two minor additional comments that I respectfully request be integrated into the final Investment Plan. Finally, I would like to reiterate our commitment to assisting your staff in implementing the Plan and collaborating to ensure that previously funded projects are successful. If you have any questions, please do not hesitate to contact me directly at (916) 341-6311 or Jacques Franco of my staff at (916) 341-6608 or [Jacques.Franco@CalRecycle.ca.gov](mailto:Jacques.Franco@CalRecycle.ca.gov).

Sincerely,



Howard Levenson, Ph.D.

Deputy Director, Materials Management and Local Assistance Division

Member, Alternative and Renewable Fuel and Vehicle Technology Program

Investment Plan Advisory Committee

Attachment



## Attachment: CalRecycle comments to the draft 2014-15 Investment Plan Update for the ARFVTP 11-1-2013

### CalRecycle Comment 1

Page 25, paragraph #2, CalRecycle respectfully requests modification of the text to include reference to the negative CI of biomethane derived from high solids AD. Suggested text is displayed below in **red**.

*"The GHG emissions from CNG and LNG trucks are roughly 15-25 percent and 10-20 percent below diesel trucks, respectively. However, these emissions can be significantly reduced with the introduction of biomethane, which possesses the lowest carbon intensity values established by the LCFS. CNG from landfill gas and dairy digester biogas has life-cycle carbon intensity values of 11.26 and 13.45 gCO<sub>2</sub>e/MJ, respectively; **while biomethane derived from high solids anaerobic digestion possesses a carbon intensity of negative 15.29 gCO<sub>2</sub>e/MJ**. As a result, natural gas trucks can reach GHG emissions equivalent to an electric truck by using 40 to 60 percent biogas content, or a fuel cell truck by using 25 to 40 percent biogas content. Biomethane and natural gas were responsible for roughly 12 percent of LCFS credits from 2011 to 2012."*

### CalRecycle Comment 2

CalRecycle requests the addition of a footnote to table 4 that lists the CI, or range of CI, for gasoline and biodiesel blends sold in California taking into account the blending limitations of the diesel and gasoline substitutes.

**Table 4: GHG Emission Pathways for Select ARFVT Program Biofuel Production Projects**

Fuel Type	Pathway Description	Estimated GHG Emission Reduction <sup>15</sup>	# of Projects	Range of Annual Capacity for Individual Projects (Diesel or Gasoline Gallon Equivalent)
Biomethane	Landfill gas	88%	1	3,400,000
Biomethane	Food, green, yard, and mixed municipal waste	115%	4	50,000 – 660,000
Diesel Substitutes	Waste oils (various)	60-88%	6	300,000 – 5,000,000
Gasoline Substitutes	Sweet sorghum	50%	1	Feasibility study
Gasoline Substitutes	Woodchips and switchgrass	67%	1	Feasibility study
Gasoline Substitutes	Sugar beets	80%	1	TBD

Source: California Energy Commission.