

**Comment 1 for Draft Initiatives for CARB's 2018-2021 Triennial Strategic Research Plan (draft-initiatives-ws) - 1st Workshop.**

First Name: Michael

Last Name: Rattner

Email Address: [mrattner@advancedmems.com](mailto:mrattner@advancedmems.com)

Affiliation: AdvancedMEMS LLC

Subject: Small Business Considerations

Comment:

Please see attached letter for public comment.

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/1-draft-initiatives-ws-W2lQZlNjB2wLUgZl.pdf>

Original File Name: 2018 CARB Triennial Plan Comment.pdf

Date and Time Comment Was Submitted: 2018-02-09 12:33:44

No Duplicates.

**Comment 2 for Draft Initiatives for CARB's 2018-2021 Triennial Strategic Research Plan (draft-initiatives-ws) - 1st Workshop.**

First Name: Andrew

Last Name: Campbell

Email Address: acampbell@berkeley.edu

Affiliation:

Subject: Energy Institute at Haas Comments on Triennial Plan

Comment:

Please see attached pdf.

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/2-draft-initiatives-ws-UTIHblY6BzkAY1U7.pdf>

Original File Name: Comments CARB Campbell 180209.pdf

Date and Time Comment Was Submitted: 2018-02-09 15:26:28

No Duplicates.

**Comment 3 for Draft Initiatives for CARB's 2018-2021 Triennial Strategic Research Plan (draft-initiatives-ws) - 1st Workshop.**

First Name: Shannon

Last Name: Harroun

Email Address: sharroun@placer.ca.gov

Affiliation: Placer County Air Pollution Control Dist

Subject: Comments on CARB 2018-2021 Triennial Strategic Research Plan

Comment:

Placer County Air Pollution Control District comments on CARB 2018-2021 Triennial Strategic Research Plan

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/3-draft-initiatives-ws-VDdQN1wvAjMKUwBy.pdf>

Original File Name: CARB Research Triennial Plan Comments.pdf

Date and Time Comment Was Submitted: 2018-02-09 16:05:00

No Duplicates.

## **Comment 4 for Draft Initiatives for CARB's 2018-2021 Triennial Strategic Research Plan (draft-initiatives-ws) - 1st Workshop.**

First Name: Ling

Last Name: Jin

Email Address: ljin@lbl.gov

Affiliation:

Subject: Comments on Climate and Environmental Justice initiatives

Comment:

### Climate

In the climate initiative, methane emissions from dairy farms are highlighted in the longer-term research focus. We are wondering if CARB would consider other methane sources such as landfills.

Integrated organic waste management can reduce emissions of short-lived climate forcers from both manure management and landfills, which, together account for ~50% of methane emissions in California. Research is needed in technology development (waste-to-energy, composting), upstream and downstream waste management, monitoring, and assessment.

### Health and Environmental Justice

Disparity in air quality between environmental justice (EJ) and non-EJ areas needs to be better understood. Separately mapping out emissions that influencing air quality in these areas provides geospatial information to identify and prioritize community and inter-community emission control strategies that most efficiently improve local air quality and reduce the inter-community disparities. Most current modeling approach for emissions-to-impact focuses on existing emissions and simulations are done source-by-source. A receptor-based approach is better suited as it links air quality at a given community simultaneously to all existing and potential emission locations (horizontal, vertical) and times. Such method is highly efficient for delineating influential source regions that the disadvantaged communities are sensitive to. The geospatial information of source importance can be used for evaluating impact of any existing sources or any potential sources and achieving both short and long-term effective strategies of improving public health.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2018-02-09 16:55:36

No Duplicates.

**Comment 5 for Draft Initiatives for CARB's 2018-2021 Triennial Strategic Research Plan (draft-initiatives-ws) - 1st Workshop.**

First Name: William  
Last Name: Knapp  
Email Address: wcknapp@bioh2gen.com  
Affiliation: BIO-H2-GEN INC.

Subject: "zero-carbon" sustainable hydrogen targeting ubiquitous Hydrogen Sulphide in wastewater

Comment:

See attached document.

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-draft-initiatives-ws-V2cBNwQ0V1tSNgRt.pdf>

Original File Name: 001 BIOH2GEN Pitch on a Sheet.pdf

Date and Time Comment Was Submitted: 2018-02-13 12:53:33

No Duplicates.

**There are no comments posted to Draft Initiatives for CARB's 2018-2021 Triennial Strategic Research Plan (draft-initiatives-ws) that were presented during the Workshop at this time.**