

DOCKETED	
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CALIFORNIA ENERGY COMMISSION

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Sacramento, California 95814

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CEC-70 (Revised 2/2021)

**IN THE MATTER OF:**

Request for Comments on Forthcoming Solicitation Regarding Research to Improve Characterization of Methane Emissions from California's Residential Sector

Docket No. 19-ERDD-01

NOTICE OF REMOTE-ACCESS WORKSHOP

RE: Forthcoming Solicitation Regarding Research to Improve Characterization of Methane Emissions from California's Residential Sector

Notice of Staff Workshop
May 13, 2021
10:00 a.m.
Remote Access Only

The California Energy Commission (CEC) will host a remote-access workshop to elicit stakeholder input regarding a forthcoming solicitation that will support research to improve characterization of methane emissions from California's residential sector.

The workshop will be held remotely, consistent with Executive Orders N-25-20 and N-29-20 and the recommendations from the California Department of Public Health to encourage physical distancing to slow the spread of COVID-19. The public is invited to participate in the workshop consistent with the direction in these executive orders. There will be opportunities for public comment. Instructions for remote participation via Zoom are below.

Agenda

CEC staff seek input from researchers, equity experts, investor-owned utilities (IOUs) and other stakeholders involved with California's emissions inventory, as well as building decarbonization work, to inform the scope of a research solicitation planned for release in the fourth quarter of 2021. The proposed solicitation will support research efforts to improve characterization of residential methane emissions associated with California homes. This research will contribute to the implementation of the Supplemental Budget (approved as part of the FY 2020-2021 budget) of the Natural Gas R&D Program 2019-2020 Funding Plan. The workshop will provide an overview of the background and goals for this solicitation, and include a discussion period in which participants are invited to comment on questions posed by staff (see [Appendix](#)).

Background

In 2018, a report from a CEC-funded study, *Natural Gas Methane Emissions from California Homes*, provided field measurements of methane leaks associated with 75 single family homes in California. Based on these field measurements, the researchers estimated that approximately 0.5 percent of natural gas consumed by California's residential sector is leaked to the atmosphere. The methane emissions from these residential leaks could account for approximately 15 percent of total inventoried methane emissions from the natural gas system. In November 2019, the California Air Resources Board (CARB) used these findings as a basis of including residential emissions of methane that occur behind the natural gas meter in its update of the state's greenhouse gas (GHG) inventory.

While the aforementioned CEC-funded study successfully developed and demonstrated a method for measuring methane emissions from single-family homes and provided an initial, empirically grounded estimate of residential methane emissions that occur behind the natural gas meter, it is limited due to a small sample size comprised exclusively of single-family homes and a focus on steady-state emissions. Additionally, the importance of transient emissions, particularly in the case of on-demand water heaters, has been noted by both the research team that led the CEC-funded study and researchers who have investigated methane emissions in California homes more recently.

Additional field measurements that characterize both transient and steady-state emissions and draw from a sample more representative of California's housing stock will provide an enhanced dataset to support CARB's inventory efforts. Additionally, improved characterization of methane emissions associated with California homes may help quantify GHG emissions reductions associated with building decarbonization.

Remote Attendance

The workshop may be accessed by clicking the Zoom link below or visiting [Zoom](https://join.zoom.us) at <https://join.zoom.us> and entering the ID and password for the workshop listed below. If you experience difficulties joining, you may contact Zoom at (888) 799-9666 ext. 2, or the Public Advisor's Office at publicadvisor@energy.ca.gov or (800) 822-6228.

Link to Workshop: [Research to Improve Characterization of Methane Emissions from California's Residential Sector](https://energy.zoom.us/j/96977239558?pwd=T1B5VGpDc0hQZloweWZ4KzF1TEt5Zz09) at

<https://energy.zoom.us/j/96977239558?pwd=T1B5VGpDc0hQZloweWZ4KzF1TEt5Zz09>

Workshop ID: 969 7723 9558

Workshop password: methane

Use the "raise hand feature" to indicate you want to speak and the event facilitator will indicate when your line is open and ready for you to make comment.

To Participate by Telephone, dial **(669) 219-2599** or **(888) 475-4499** (toll free). When prompted, enter the Meeting ID: **969 7723 9558**. To comment, dial *9 to "raise your hand" and *6 to mute/unmute your phone line.

Public Comment

Oral comments will be accepted at the end of the workshop. Comments may be limited to three minutes or less per speaker and one person per organization. If participating via Zoom's online platform, use the "raise hand" feature so the administrator can announce your name and unmute you. If you are participating by telephone, press *9 to "raise your hand" and *6 to mute/unmute.

Written comments must be submitted to the Docket Unit by 5:00 p.m. on May 27, 2021. Written and oral comments, attachments, and associated contact information (including address, phone number, and email address) will become part of the public record of this proceeding with access available via any internet search engine.

The CEC encourages use of its electronic commenting system. Visit the [e-commenting page](https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=19-ERDD-01) at <https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=19-ERDD-01> which links to the comment page for this docket. Enter your contact information and a comment title describing the subject of your comment(s). Comments may be included in the "Comment Text" box or attached as a downloadable, searchable document in Microsoft® Word or Adobe® Acrobat®. The maximum file size allowed is 10 MB.

Written comments may be submitted by email. Include docket number 19-ERDD-01 and "Research to Improve Characterization of Methane Emissions from California's Residential Sector" in the subject line and email to docket@energy.ca.gov.

A paper copy may be sent to:

California Energy Commission
Docket Unit, MS-4
Docket No. 19-ERDD-01
1516 Ninth Street
Sacramento, California 95814-5512

Public Advisor and Other CEC Contacts

The CEC's Public Advisor's Office provides the public with assistance in participating in CEC proceedings. For information on participation or to request interpreting services or reasonable accommodations reach out via email at publicadvisor@energy.ca.gov, by phone at (916) 654-4489, or toll free at (800) 822-6228. Requests for interpreting services and reasonable accommodations should be made at least five days in advance. The CEC will work diligently to accommodate all requests.

Direct media inquiries to mediaoffice@energy.ca.gov or (916) 654-4989.

Direct technical subject inquiries to Susan Wilhelm at susan.wilhelm@energy.ca.gov or (916) 776-0824.

For general inquiries regarding the [Staff Workshop](#), please contact [Susan Wilhelm](#) at susan.wilhelm@energy.ca.gov or (916) 776-0824.

Availability of Documents

Documents and presentations for this meeting will be available at docket number [19-ERDD-01](#) at <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-ERDD-01>.

When new information is posted, an email will be sent to those on the list serves provided at the bottom of this notice. Manage existing list serves or sign up for others at [CEC List Servers](#), <https://ww2.energy.ca.gov/listservers/index cms.html>.

Dated: [Day, Month Day, Year \(of signing\)](#), at Sacramento, California

Laurie ten Hope
Deputy Director, Energy Research and Development Division

List Servers: Natural Gas
Climate Change
Opportunity
Research
DCAG

Appendix

Discussion Questions

1. What ongoing or planned research efforts should this work coordinate with or leverage to help inform California's GHG emissions inventory and building decarbonization goals?
2. How should the study approach and sample design be structured to provide insights on the following?
 - a. Reducing uncertainty in GHG emissions inventory estimates of methane emissions from California's residential sector natural gas consumption
 - b. Cost-effectively targeting building decarbonization efforts in the residential sector
 - c. Quantifying GHG emission reductions associated with building decarbonization efforts
3. How could the proposed solicitation support interpretation of emissions uncertainty and appropriately inform decision-making under uncertainty?

References

California Air Resources Board (CARB) GHG Inventory Updates Documentation, 2019 Edition. Air Quality Planning and Science Division. August 2019. Available at: <https://ww2.arb.ca.gov/ghg-inventory-archive>

Fischer, Marc L., Wanyu Chan, Seongeun Jeong, and Zhimin Zhu (2018). Lawrence Berkeley National Laboratory. Natural Gas Methane Emissions from California Homes. California Energy Commission. Publication Number: CEC-500-2018-021.
<https://ww2.energy.ca.gov/2018publications/CEC-500-2018-021/CEC-500-2018-021.pdf>

Fischer, Marc L., Wanyu R. Chan, Woody Delp, Seongeun Jeong, Vi Rapp, and Zhimin Zhu (2018). *Environ. Sci. Technol.*, **42**, pp. 10205-10213.

Lebel, Eric D., Harmony S. Lu, Simone A. Speizer, Colin J. Finnegan, and Robert B. Jackson (2020). *Environ. Sci. Technol.*, **54**, pp. 5737-5745.

Merrin, Zachary and Paul W. Francisco (2019). *Environ Sci. Technol.* **53**, pp. 5473-5482.