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Document Title:	Follow up on the March 4 staff workshop on quantifying exposures to indoor air pollutants and HEET Working Group launch
Description:	This memo provides a summary of the workshop, an update on timing of the associated solicitation, and information regarding a CEC working group that addresses issues at the nexus of human health, equity, and California's energy transition
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This memo provides a summary of the workshop, an update on timing of the associated solicitation, and information regarding a CEC working group that addresses issues at the nexus of human health, equity, and California's energy transition.

Staff Workshop Follow Up: "Quantify Exposures to Indoor Air Pollutants in Multifamily Homes that Cook with Gas Stoves or Alternatives."

On March 4, 2022 California Energy Commission (CEC) Staff held a [workshop](#) to elicit feedback from researchers, policy makers, and other interested stakeholders to inform the structure and scope of a forthcoming solicitation that will quantify exposures to kitchen-generated air pollutants from cooking with gas and alternatives in multifamily homes.

Workshop Highlights:

At the March 4, 2022 workshop, staff previewed goals of a forthcoming solicitation associated with an initiative from the FY 2021-2022 funding plan of CEC's Gas R&D program. Specifically, staff provided an overview of the ambitious goals of that initiative:

1. Quantify actual human pollutant exposure from gas cooking appliances
2. Identify differences in potential health impacts of cooking-generated PM in MF homes that burn gas vs electricity
3. Provide an empirical basis for exposure assessment from a large sample of multifamily units

Additionally, the initiative recognizes the need to evaluate and determine the best tools and methods for measuring source pollutants in indoor environments, given the proliferation of low-cost instruments that can provide copious data (though with variable levels of quality control).

More than 80 people participated in the workshop. These participants included leading indoor air quality researchers, staff from other California agencies, and staff from California's Investor-Owned Utilities.

CEC staff appreciate extensive feedback from participants regarding a future solicitation in this space. For example, participants proposed that:

- Researchers should implement creative ways for tracking cooking behavior in a way that decreases the burden on the study participants
- Study design should:
 - Differentiate between gas, electric, & induction stoves
 - Consider various housing types
 - Consider ventilation & filtration,
 - Include homes that rely on natural ventilation rather than mechanical ventilation
 - Include homes that do not comply with current ASHRAE 62.2 standards

- Research scope should:
 - Consider indoor air pollutants beyond NO₂ and PM (e.g., acrolein, benzene);
 - Require measurements and exposure assessments on various timescales (e.g., 1 hour, 24 hours);
 - Include measurements in both summer and winter, as well as include a subset of measurements during wildfire events.

Anticipated Timing:

The release of the solicitation, “Quantify Exposures to Indoor Air Pollutants in Multifamily Homes that Cook with Gas Stoves or Alternatives”, has been postponed due to ongoing efforts by the CEC to ensure that the solicitation provides the highest impact in supporting energy policy and implementation that garners health benefits and addresses equity issues. Specifically, we seek to support research that advances quantitative exposure assessment in diverse households and communities across California. The CEC currently anticipates releasing this solicitation in 2023.

Health, Energy, Equity Transition (HEET) Working Group Launched on December 20th, 2022:

The CEC launched a working group on Healthy, Equitable, and Energy Transitions (HEET) on December 20th, 2022. The HEET Working Group is open to the public. It will provide a sustained forum for technical discussion regarding issues at the nexus of air quality, human health, and California’s clean energy transition. As the CEC looks to roll out nearly \$20 million in funding from EPIC 4 and Gas Research & Development program initiatives (including ongoing work), as well as recently awarded and anticipated agreements to support CEC's applied research at the nexus of air quality, health, & equity, this forum will help the CEC to meet its ambitious goals by:

- Providing an informal, collaborative space for exchange between CEC staff, researchers, and other stakeholders (including staff at CARB as well as CDPH);
- Helping staff shape air quality research solicitations and execute ongoing research for high impact.

By providing a forum for portfolio-wide discussion (completing grant-and solicitation-level efforts), the HEET Working Group will help the CEC staff shape and execute a portfolio that advances critical goals such as:

- Monetizing the impacts (e.g., air quality-related health benefits) of shifting to cleaner energy;
- Quantifying indoor-air pollution exposures and understanding how they vary by demographic and socioeconomic status;
- Quantifying impacts of energy transition, as well as distribution of benefits, concerning California’s under-resourced populations (e.g., low-income communities).

If you are interested in joining or learning more about the CEC's HEET Working Group, please see the [HEET Working Group webpage](https://www.energy.ca.gov/programs-and-topics/topics/research-and-development/healthy-equitable-energy-transition-heet) located at (<https://www.energy.ca.gov/programs-and-topics/topics/research-and-development/healthy-equitable-energy-transition-heet>).

Information related to the Group and presentation for the inaugural meeting is posted on this webpage.

We thank you for your interest in this critical area of research and hope that you will join us for future discussions at the HEET Working Group platform. We welcome hearing from you on the topics of discussion by email or phone.