

## Item 9: Quantifying Exposures to Indoor Air Pollutants in Multifamily Homes that Cook with Gas or Alternatives GFO-23-501

November 13, 2024 Business Meeting

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#### Indoor Air Quality

### Residential Building Electrification





#### Building Energy Efficiency Standards



2025 Building Energy Efficiency Standards

Source: CEC

Awardee	CEC funding	Match funding
Lawrence Berkeley National Laboratory	\$2,000,000	\$120,750
Berkeley Air Monitoring Group	\$1,999,984	\$2,130,004

# Item 9.a Lawrence Berkeley National Laboratory

- Focus on renters and justice communities in Bakersfield, Fresno, and San Francisco Bay Area
- Survey cooking practices in 500 diverse households
- Measurements:
  - 140 homes, including 60 apartments with mechanical ventilation
  - Track cooking, window use
  - PM<sub>2.5</sub>, NO<sub>2</sub>, CO, ultrafine particles (UFP)
  - In subset of homes measure: VOCs, UFP emissions from cooking appliance, cook's exposure.



Electrochemical NO<sub>2</sub> sensor and home IAQ monitor in child's bedroom

Source: LBNL



Temp/RH robustly detect cooktop burner use

Source: LBNL



- Exposure assessment in existing multifamily homes
- 300 low-income multifamily homes in Alameda and San Joaquin counties
- Pollutants: PM<sub>2.5</sub>, NO<sub>2</sub>, CO, Black Carbon, BTEX
- User-friendly, interactive dashboard tailored to the user needs





Source: Ava Community Energy



- Approve the two grant agreements
- Adopt staff's recommendation that these actions are exempt from CEQA