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# Panel I - Program Evaluation and Data on the Multifamily Market (11:30 – 12:30)

**Moderator:** Martha Brook, California Energy Commission

**Description:** Better collection, sharing, and aggregation of data are needed to track multifamily buildings, associated GHG reductions, and other benefits. This includes, incorporating building data-driven metrics into program design, consideration of non-energy benefits into analysis, and costs effectiveness requirements.

#### **Panelists:**

- Tami Rasmussen, Evergreen Economics
- Stephanie Chen, Greenlining Institute
- Meredith Milet, California Department of Public Health
- Mary Sutter, Grounded Research
- Nancy Sutley, Los Angeles Department of Water and Power



### **Panel I Discussion Questions**

- **1. Data availability and sharing:** What are the best existing sources of multifamily building data and energy-saving opportunities?
- 2. Getting information to designers and decision makers: How do you give designers and retrofitters access to the data and information needed to develop DER solutions for apartment buildings? How can tenants use the data available to them (mainly consumption data) to make informed choices about how to cost-effectively reduce their energy use and associated bills?
- **3. Benefits to customers:** How can we maximize benefits to customers in low-income and disadvantaged communities? What tools and data are available to target deployment? What tools are still needed?
- **4. Non-energy benefits:** Which non-energy benefits are most valuable to customers and building owners? Which ones are program administrators looking to track and analyze?
- **Metrics for progress**: Are data-driven metrics currently incorporated into multi-family program design? If so, are these the best metrics to track progress? If not, what else should be tracked?



# **Panel I Contacts**

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# Panel II - Innovative Technologies in Multifamily Building Programs (1:30 - 2:30)

**Moderator:** Mikhail Haramati, California Energy Commission

**Description:** Understanding energy innovation knowledge gaps to inform research strategies and actions, to encourage broader technology adoption in multifamily buildings.

#### **Panelists:**

- Andrew Brooks, Association for Energy Affordability
- Ram Narayanamurthy, Electric Power Research Institute
- Dave Brenner, Fresno Housing Authority
- Mauro Dresti, Southern California Edison
- Alice Stover, MCE Clean Energy



### **Panel II Discussion Questions**

- **Innovative technologies:** What are some of the innovative technologies that would be a good match for the low-income multi-family sector? What can be done to accelerate adoption of these? Are there differences between low-income customers and non-low-income to consider when deploying new technologies?
- **Scaling adoption:** Based on your experience, what are the barriers to broad adoption of innovative DERs (pre-commercial energy efficiency, DR, storage, solar, EV chargers) in low-income multi-family buildings? What have you seen that's worked to overcome some of these barriers?
- **3. Heat pumps:** Heat pumps are extremely promising, but face adoption issues due to high cost of skilled labor to install and potential for increased operating costs as a result of switching from gas to electric. What can be done to increase adoption of heat pumps in low-income multi-family?
- **4. EV Chargers:** How do we ensure that EV chargers are included in retrofits at low-income multifamily buildings? What are the unique barriers to building EV chargers in apartment buildings and what can be done to overcome them?
- **5. Golden carrot:** One of the main barriers is the lack of bandwidth for multi-family building owners. What does a delicious, golden carrot look like to them? What can be offered that would convince landlords/building owners to want to do a retrofit?



## Panel II Contacts

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