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# Panel 1: Overview of California Policies, Programs and Regulations Related to SB 1383 Responsibilities

- 1. How do you track the progress of biomethane/biogas/renewable gas development and use? How do you evaluate the need to continue, coordinate or re-configure government programs in the context of programs/activities conducted by other government agencies and private investment in projects?
- 2. What types of data are needed to monitor and maximize the development and use of biomethane/biogas/renewable gas and optimize government activities to achieve 40 percent reduction of short-lived climate pollutants (SLCP) by 2030?

### Panel 2: Potential to Develop Biomethane, Biogas and Renewable Gas to Produce Electricity and Transportation Fuels in California

- 1. How much growth of energy development and use from renewable gas, biogas and biomethane do you expect for each submarket (e.g., dairy and livestock, food waste and organic diversion, waste water treatment, landfill gas and agricultural/forestry and urban woody biomass residue)?
- 2. What key factors (i.e., incentives, technology advances, and business maturity) are required to be in place to achieve 2030 SLCP targets in California?
- 3. What are the prospects to use biomethane, biogas and renewable gas for the growth of electricity generation compared to transportation fuel?
- 4. Which factors are more subject to volatility or uncertainty and what actions are needed to mitigate vulnerabilities?
- 5. How do you see a market growth sequence or progress of steps evolving for each submarket and what government actions are needed at each step?
- 6. How soon would you expect substantial market growth for each submarket?

### Panel 3: Utility Strategies to Reduce Short-Lived Climate Pollutants

- 1. How does your utility plan to address the need to reduce short-lived climate pollutants?
- 2. What actions have you taken or plan to take to reassure that the natural gas system and pipelines are reliable, safe and minimize leakage?
- 3. How will the emergence and success in the development and use of biomethane, biogas and renewable gas affect the future direction and operation of your utility?
- 4. What steps could you take to enhance biomethane pipeline injection through lower costs, expedited construction times or other actions?
- 5. What efforts do you plan so disadvantaged communities can take advantage of the development of biogas, biomethane and renewable gas?

### Panel 4: Progress, Success, Lessons Learned From Existing Projects

- 1. How would you characterize the success of your project and key ingredients for success?
- 2. What is the potential to replicate your progress throughout the state?
- 3. What challenges might interrupt continuing successful operation or impede expansion or the development of additional projects for any of the following areas:
  - a. Technology development
  - b. Project location
  - c. Pipeline injection
  - d. Business model
  - e. Project financing
  - f. Institutional/regulatory
  - g. Demand and vehicle availability
  - h. Related infrastructure
- 4. How much and what type of government action (regulation, incentives, other actions) is needed to achieve the SB 1383 SLCP goals?

### Panel 5: Emerging Technologies and Market Opportunities

- 1. How would you characterize the promise of your fuel/technology and what steps are required to achieve commercial availability?
- 2. What challenges might interrupt development and commercialization of your fuel/technology for any of the following areas:
  - a. Technology development
  - b. Project location
  - c. Pipeline injection
  - d. Business model
  - e. Project financing
  - f. Institutional/regulatory
  - g. Demand and vehicle availability
  - h. Related infrastructure
- 3. What type of government action is required to support development and use of emerging fuels and technologies?
- 4. Can cost data be provided to the Energy Commission to support the cost-effectiveness and economic viability of your fuel/technology?

# Panel 6: Market Maturity, Business Models and Factors That Attract Private Project Financing

- 1. What is your view of the potential for growth and appetite for private investment in any of these submarket sectors for either power generation or transportation fuels in California?
- 2. What key ingredients are needed to stimulate and maintain private investment in these types of projects? What can government do to support, complement and accelerate achieving these key ingredients?
- 3. Is total capital investment needed to achieve the SB 1383 goals in the realm of possibility from private capital sources with government supporting actions?

#### Panel 7: Demand, Vehicle Fleets and Other Factors

- 1. What is needed to increase the number of vehicle product offerings and vehicle volume sales to achieve SB 1383 goals?
- 2. What do fleet owners/managers need to see to make commitments and purchase/lease vehicles that can use biogas, biomethane and renewable gas as a fuel?
- 3. Is there sufficient customer demand in California for electricity and transportation fuel produced from renewable gas, biogas and biomethane?
- 4. What roles do federal agencies and local governments play in evaluating and supporting the development and use of biogas, biomethane and renewable gas as a source of electricity or transportation fuel?
- 5. What actions do you recommend the State of California take to achieve the SB 1383 SLCP goals and account for the views of utilities, investors, electricity generators, fuel developers, host site owners, vehicle manufacturers, vehicle fleet owners, environmental justice and public interest organizations, and local governments?