



Workshop  
**Methane, Dairies and Livestock, and Renewable Natural Gas in California**  
 Tuesday, March 29, 2022  
 Agenda

Pacific Time <sup>1</sup>	Topic
9:00–9:15 am	<b>Session 1: Statutory Requirements for Dairy Methane Emissions Reductions</b> CARB Staff
9:15–10:20 am	<b>Session 2: Overview of Dairies in California</b> Dairy farm and dairy product trends in the United States and Calif. <i>William Hohenstein, Director, Office of Energy and Environmental Policy, Office of the Chief Economist, U.S. Department of Agriculture</i> Dairy operations and manure management in California <i>Amrith Gunasekara, Science Advisor to the Secretary, California Department of Food &amp; Agriculture</i> Environmental impacts of dairies <i>Deanne Meyer, Ph.D., Livestock Waste Management Specialist, University of California Davis</i> Environmental regulation on dairies <i>Ramon Norman, Senior Air Quality Engineer, San Joaquin Valley Air Pollution Control District</i> <i>Patrick Pulupa, Executive Officer, Central Valley Regional Water Quality Control Board Region 5</i> <i>Michael Washam, Assistant Director, Economic Development &amp; Planning Resource Management Agency, Tulare County</i>
10:20–10:45 am	<b>Session 3: Community Perspectives on Dairies</b>
10:45–11:10 am	<b>Session 4: Perspectives on the Future of Dairies in California</b> <i>Phoebe Seaton, Co-Founder and Co-Executive Director, Leadership Counsel for Justice &amp; Accountability</i> <i>Paul Sousa, Director of Regulatory and Environmental Affairs, Western United Dairies</i>
11:10–11:55 am	<b>Session 5: Overview of Dairy Methane Emissions Reduction Technologies</b> Enteric methane emissions reduction strategies <i>Alexander N. Hristov, Ph.D., P.A.S., Distinguished Professor of Dairy Nutrition, Department of Animal Science, Pennsylvania State University</i> Manure management methane emissions reduction strategies <i>Mark Stoermann, Chief Operating Officer, Newtrient LLC</i> Research efforts on dairy methane mitigation approaches CARB staff Compost application and pasture-based strategies <i>Jeanne Merrill, Policy Director, California Climate and Agriculture Network</i> Dairy and livestock product alternatives <i>Sabina Vyas, Senior Director, Impact Strategies, Plant Based Foods Association</i>

<sup>1</sup> All times except for the 9 am start time are approximate. We will do our best to keep on schedule, but deviation from these times may occur.

Pacific Time <sup>1</sup>	Topic
11:55 am–12:25 pm	<b>Public Comment Period</b>
12:25–1:00 pm	<b>Lunch</b>
1:00–1:50 pm	<p><b>Session 6: Dairy Digester Development and Installation</b></p> <p>Anaerobic digester basics  <i>Nick Elger, Program Manager, AgSTAR and Global Methane Initiative, U.S. Environmental Protection Agency</i></p> <p>Overview digester operatione at California dairy farms  <i>Neil Black, President, California Bioenergy LLC</i></p> <p>Overview of environmental protections for California digesters  <i>David De Groot, Civil Engineer, 4Creeks, Inc.</i></p> <p>Are the environmental protections for digesters enough?  <i>Brent Newell, Law Offices of Brent J. Newell</i></p>
1:50–2:35 pm	<p><b>Session 7: Dairy Methane Mitigation Funding and Economics</b></p> <p>Funding of dairy methane mitigation projects  <i>Sam Wade, Director of Public Policy, Coalition for Renewable Natural Gas</i></p> <p>“What's Worth More: A Cow's Milk or its Poop?”  <i>Aaron Smith, DeLoach Professor of Agricultural and Resource Economics, University of California Davis</i></p> <p>Perspectives on dairy management decisions  <i>Joey Airoso, Airoso Dairy</i>  <i>Diana Giacomini Hagan, Giacomini Dairy</i></p>
2:35–3:15 pm	<p><b>Session 8: Dairy and Livestock Greenhouse Gas Emissions Working Group and Subgroups</b></p> <p>Overview of Dairy and Livestock Workgroup and subgroups goals and process  <i>CARB staff</i></p> <p>Subgroup Findings:</p> <p>Fostering Markets for Non-Digester Projects  <i>J.P. Cativiela, Regulatory Affairs Director, Dairy Cares</i></p> <p>Fostering Markets for Digester Projects  <i>Michael Boccadoro, Executive Director, Dairy Cares</i></p> <p>Research Needs, Including Enteric Fermentation  <i>Mike FitzGibbon, Air Resources Supervisor II, Research Division, CARB</i></p>
3:15–3:35 pm	<p><b>Session 9: Overview of Low Carbon Fuel Standard Program and Dairy Pathways</b></p> <p><i>CARB staff</i></p>
3:35–4:00 pm	<p><b>Session 10: Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions Target</b></p> <p><i>CARB staff</i></p>
4:00–4:25 pm	<p><b>Session 11: Considerations for Methane Emissions Reduction Incentives and Regulation</b></p> <p><i>Michael Boccadoro, Executive Director, Dairy Cares</i>  <i>J Jordan, Policy Coordinator, Leadership Counsel for Justice &amp; Accountability</i></p>
4:25–4:55 pm	<b>Public Comment Period</b>
4:55–5:00 pm	<b>Close</b>