RENEWABLE NATURAL GAS SYMPOSIUM

RNG ADOPTION FROM LAB TO MARKET – ADVANCING TECHNOLOGICAL INNOVATION AND EFFICIENCY GAINS

The University of California, Riverside  CENTER FOR RENEWABLE NATURAL GAS
Bourns Technology Center  1200 Columbia Avenue  Riverside, CA  92507

May 17, 2017

8:00 – 8:30 AM Breakfast and Attendee Check In

8:30 – 8:40 AM Introductory Remarks: Matthew Barth, Director, College of Engineering - Center for Environmental Research and Technology (CE-CERT), University of California, Riverside

8:40 – 9:00 AM CRNG Overview: Arun Raju, Director, Center for Renewable Natural Gas (CRNG), University of California, Riverside

9:00 – 9:30 AM Decarbonizing the Pipeline
Keynote Presentation by George Minter, Regional Vice President, External Affairs and Environmental Strategy, SoCalGas

9:30 – 10:45 AM Panel Discussion 1 – Thermochemical RNG Production – Barriers & Opportunities

The panelists will discuss the major challenges that must be addressed to enable widespread RNG production & utilization through thermochemical pathways.

Moderated by: Arun Raju, Director, CRNG, University of California, Riverside

Panelists:
- Ron Kent, Advanced Technology Development Manager, SoCalGas
- Donald Taylor, Chief Executive Officer, Taylor Energy
- James Oyler, President, Genifuel Corporation
- Julia Levin, Executive Director, Bioenergy Association of California

10:45 – 11:15 AM Natural Gas in California; Challenges and Opportunities for Decarbonization

Keynote Presentation by Rob Oglesby, Executive Director, California Energy Commission

11:15 – 11:30 AM Break

11:30 – 12 PM Mitigating Short Lived Climate Pollutants - RNG’s Role

Keynote Presentation by Ryan McCarthy, Science, & Technology Policy Advisor, California Air Resources Board

12 – 12:30 PM Ribbon Cutting Ceremony

12:30 – 1:15 PM Lunch
1:15 – 2:15 PM **Panel Discussion 2 – Commercial Scale Power To Gas**

The panelists will discuss the need for commercial scale power to gas projects in California, the barriers to building plants and the long-term benefits.

*Moderated by: Jeff Reed, Director of Business Strategy and Advanced Technology, SoCalGas*

**Panelists:**
- **Keith Wipke**, Fuel Cell & Hydrogen Technologies Program Manager, National Renewable Energy Laboratory
- **Jack Brouwer**, Associate Professor, University of California, Irvine
- **Stephen Jones**, Managing Director, ITM Power

2:15 – 2:45 PM **Renewable Hydrogen – Nexus of Fuels and Power**

*Keynote Presentation by Keith Wipke, Fuel Cell & Hydrogen Technologies Program Manager, National Renewable Energy Laboratory*

2:45 – 3 PM Break

3 – 4 PM **Panel Discussion 3 – Challenges to Expediting Commercial RNG Production**

The panelists will discuss the major challenges to commercial RNG production including regulatory barriers, need for private and public investment, and technology demonstration.

*Moderated by: Johannes Escudero, Chief Executive Officer, Coalition for Renewable Natural Gas*

**Panelists:**
- **Evan Williams**, President, Cambrian Energy
- **Grant Zimmerman**, Chief Executive Officer, ampCNG
- **Harrison Clay**, Vice President Strategic Development, Global Environmental Products, British Petroleum

4 – 5:15 PM **Panel Discussion 4 – RNG Policy in California – Present & Future**

The panelists will discuss RNG related policy, impact of major policy initiatives, and key areas that must be addressed in the future.

*Moderated by: Cliff Gladstein, President, Gladstein Neandross & Associates*

**Panelists:**
- Fred Minassian, Assistant Deputy Executive Officer Technology Advancement Office, South Coast Air Quality Management District
- Johannes Escudero, Chief Executive Officer, Coalition for Renewable Natural Gas
- Paul Relis, Senior Vice President, CR&R
- Thomas Lawson, President, California Natural Gas Vehicle Coalition

5:15 – 5:30 PM **Closing Remarks: Michael Pazzani**, Vice Chancellor for Research and Economic Development, University of California, Riverside

5:30 PM **CE-CERT Tour**