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Innovative solutions for efficient production of biogas and e-fuels





































The Honorable Liane Randolph Chair, California Air Resources Board 1001 I St. Sacramento, CA 95814 Sacramento, California 95814

Re: Low Carbon Fuel Standard

Dear Chair Randolph:

We, the 76 undersigned clean fuel businesses and related organizations, write to emphasize our support for the Low Carbon Fuel Standard (LCFS). We stand ready to follow your leadership to address the dire threat of climate change. The LCFS drives reductions in greenhouse gases (GHG), supports a rapid phase out of petroleum, and bolsters a transition to electrification everywhere feasible. However, as knowledgeable partners in California's transportation decarbonization efforts, we must express concerns that misquided voices are delaying your vision and slowing billions of dollars of investment needed to implement the California Air Resources Board's (CARB's) 2022 Scoping Plan for Achieving Carbon Neutrality.

September 26, 2023

We are pleased that the just-released Standardized Regulatory Impact Assessment (SRIA) proposes to set more ambitious carbon intensity (CI) reduction targets for the system—as directed a year ago during the Scoping Plan drafting1—rather than delaying the program for unnecessary revisitation of core program concepts. However, we encourage CARB to go further by supporting the recent ICF study² which concluded that the target could be at least a 41-44% CI reduction by 2030. All clean fuels are currently delivering more clean air health benefits and GHG reductions than previously anticipated by CARB. This creates an opportunity to double down on this successful framework and accelerate progress simply by adopting more ambitious targets.

For example, the LCFS has driven a rapid shift toward renewable liquid fuels. Biomass-based diesels made up 46% of the fuel used in diesel vehicles in 2022. Renewable liquid substitutes for gasoline, diesel and jet are cleaner burning than their petroleum analogs, resulting in noticeable near-term improvements in both GHGs and air quality in California communities. **We do not support arbitrary caps on such fuels.**

Further, the immediate reduction of methane emissions is necessary to rapidly reduce the near-term impacts of climate change. The critical need to address methane was well stated in CARB's 2017 Short Lived Climate Pollutant Reduction Strategy and echoed by many other leading authorities. The concentration of methane in the atmosphere is increasing at an alarming rate.³ There is no more effective and immediate step we can be taking as a planet to address climate change now than to aggressively and rapidly reverse emissions of fugitive methane from all sectors, including society's organic waste streams through renewable natural gas (RNG) projects.

The simple fact is that many RNG projects in planning and construction across North America currently rely on LCFS revenues to be built and operated. It took an almost decade-long history of LCFS credits being awarded to RNG projects, clear recognition of the methane reduction benefits across a variety of feedstocks, and consistent positive statements from CARB leaders before investors began to seriously rely on this program to construct RNG projects. Any changes to this framework will undermine prior efforts to convince investors to make long-term capital deployment decisions based on LCFS credit value. If confidence is lost in California's LCFS it will also harm efforts in other states to follow California's leadership on smart near-term policies that couple organic waste methane reduction and clean fuel production. We do not support changes to the LCFS regulation that would require phase-out of avoided methane crediting without a suitable replacement policy.

Finally, zero emission vehicles (ZEV) are rapidly becoming a widespread reality due to the leadership of Governor Newsom's administration. We support this outcome and believe that both electric vehicles and hydrogen fuel cell vehicles will be dominant sources of long-run on-road decarbonization. As this transition occurs, biofuels will shift toward other end uses—such as aviation and marine applications—that do not yet have proven technically feasible zero emission options. The LCFS promotes ZEVs by incentivizing charging/H₂ infrastructure, vehicle deployment, and adoption of clean inputs to ZEV fuel production.

¹ https://www.gov.ca.gov/wp-content/uploads/2022/07/07.22.2022-Governors-Letter-to-CARB.pdf

² "Analyzing Future Low Carbon Fuel Targets in California; Initial Results for Accelerated Decarbonization, Central Case," June 2023, ICF Resources L.L.C.

³ See "Increase in atmospheric methane set another record during 2021", National Oceanic and Atmospheric Administration, Press Release, April 7, 2022. http://noaa.gov/news-release/increase-in-atmospheric-methane-setanother-record-during-2021

Because the LCFS is a successful model, the program has been embraced by many other jurisdictions.⁴ The program provided national leadership as a conceptual basis for the *45Z Clean Fuel Production Credit* in the US Inflation Reduction Act and has been adopted by the federal government of Canada. The transportation sector remains the largest contributor to GHGs in the US, but transport emissions are falling more quickly in California than in any other part of North America, due to LCFS incentives. Building on successful programs—that have demonstrated environmental and economic benefits—is the linchpin to continuing to achieve real-world targets.

The success of the LCFS is due to broad portfolio of clean fuels working together to achieve substantial emissions reductions. Unwinding these successful partnerships would strand billions of dollars of clean tech investment, delay transportation decarbonization, and extend the period where petroleum is the dominant fuel in California. The LCFS must remain fuel-neutral, driven by CARB's science-based analysis, capable of incentivizing real-world investment, and focused on performance-based GHG outcomes. Remaining true to these core concepts will ensure California leads the world in rapid transportation sector decarbonization.

Sincerely,

Rashi Akki, Chief Executive Officer, Ag-Grid Energy

Joe Ayala, Chief Operating Officer, Econward

Tom Bachman, PE, Vice President, Mead & Hunt

Ashley P. Beaty, Vice President of Policy and Partnerships, Bridge To Renewables, Inc.

Nejteh Der Bedrossian, Operations Manager, Nationwide Environmental Services

Neil Black, President, California Bioenergy LLC

Michael Boccadoro, Agricultural Energy Consumers Association

Dave Broihahn, PE, President, Unison Solutions Inc.

Todd Campbell, Vice President, Public Policy & Regulatory Affairs Clean Energy

Ivor Castelino, Managing Director, Corporate Development and Waste to Energy, Bloom Energy Corporation

Will Charlton, President, Digester Doc

Kurt Christensen, Vice President, Valkyrie Analytics, Inc.

Steve Compton, President, Sevana Bioenergy, LLC

Stefan Dehne, Sales Manager, EnviTec Biogas

Clay Detlefsen, Esq., Senior Vice President, Environmental and Regulatory Affairs & Staff Counsel, National Milk Producers Federation

⁴ There are established programs and active LCFS conversations in twelve US states currently.

David E. Fahrion, Chief Executive Officer, California Waste and Recycling Association

Jason Feldman, Chief Executive Officer, Green Era

Bernard C. Fenner, Chief Executive Officer, Ductor

Tom Ferencevic, Chief Executive Officer, Fitec Biogas Inc.

Andy Foster, President, Advanced Fuels, Aemetis, Inc.

Quentin Foster, Vice President of Policy and Government Affairs, H Cycle

Daniel J. Gage, President, NGVAmerica

Craig Gordon, Head of Global Policy & Regulatory Affairs, Mainspring Energy

Shashi Gorur, Proposal Manager, Paques Environmental Technologies, Inc.

Patrick Graney, Co-Founder, Nacelle

Thomas F. Gratz, Sales Manager U.S., Hitachi Zosen Inova U.S.A. LLC

Carlos Gutierrez, Executive Director, California Advanced Biofuels Alliance

Richard E. Hammond, Manager and Chief Operating Officer, Bio-Tronic Energy-CA, LLC

Mike Harrison, P.E., Engineering Manager, E.J. Harrison & Sons, Inc.,

Kent Hartwig, Director, State Government Affairs, Gevo

Derek Hundert, President, PlanET Biogas USA Inc.

David Kailbourne, CEO of these entities: REV Holdings, REV LNG LLC, REV H20, Marks RNG, Lincoln RNG, Renewable Operations Co.

Chloe Kelley, Northern Recycling, LLC and Napa Recycling and Waste Services

Lauren Lamb, Environmental Attribute Manager, BerQ RNG

James Lavelle, Chief Executive Officer, U.S, Renewable Energy Development Capital, Inc.

Robert Lems, Chief Executive Officer – North America, HOST Bioenergy Systems

Thibault Caille L'Etienne, Chief Transformation Officer, Prodeval

Brent Lilienthal, Chief Executive Officer, LF Bioenergy

Daryl Maas, Chief Executive Officer, Maas Energy Works, Inc.

Bruce DD MacRae, Vice President, UPS US Government Affairs

David Mann, Vice President, Regulatory and Governmental Affairs, Oberon Fuels

Tara May, Executive Vice President, Corporate Affairs, RD Offutt Company (Threemile Canyon Farms)

John McNamara, Vice President, CR&R, Inc. Environmental Services

Brett Nixon, Chief Commercial Officer and Mark McConnell, Vice President Business Development, Northern Biogas

Thomas Minter, Managing Director, BioticNRG Limited

Erik Neandross, President, Chief Executive Officer, Gladstein, Neandross & Associates

Graham Noyes, Executive Director, Low Carbon Fuels Coalition

Bryan Nudelbacher, Vice President of Business Development – RNG, US Energy

Philip O'Niel, Vice President, Business Development, Strategy, and M&A, DTE Vantage

Alex Oseguera, Director of Government Affairs, Waste Management, California, Hawaii, WM

Veronica Pardo, Regulatory Affairs Director, Resource Recovery Coalition of California

Nikolas Patentalakis, Global Marketing Director, WELLE Corporation (dba WELLE Biogas Solutions)

Brad Petersen, Executive Vice President, NLC Energy

Bob Powell, Founder & Chief Executive Officer, Brightmark

Ashley Remillard, Senior Vice President, Legal and Government Affairs, Hexagon Agility

Aidan Renaghan, Director, Renewable Project Development, Peaks Renewables and Summit Utilities

Nicole Rice, President, California Renewable Transportation Alliance

Yaniv Scherson, Chief Operating Officer, Anaergia

Angela Schwarz, Chief Executive Officer, Anew Climate

Deirdre Seling, Associate, SMART Policy Group

Patrick Serfass, Executive Director, American Biogas Council

Donna L. Schempp, President & COO, SJI Renewable Energy Ventures

Jay Skiersch, Vice President, Interra Global

Carrie Song, VP Renewable Road Transportation, Neste US, Inc.

Mark Stoermann, Chief Operating Officer, Newtrient LLC

Cecilie Engell Sørensen, General Manager, Biogasclean Americas Inc.

Chris Thomas, Vice President of Public Affairs, Divert, Inc.

Melissa VanOrnum, Vice President Marketing, DVO

Floyd Vergara, Esq., P.E., Director of State Governmental Affairs, Clean Fuels Alliance America

Sam Wade, Director of Public Policy, Coalition for Renewable Natural Gas

Benjamin Wilson, Executive Vice President EFI USA, LLC

Patrick Wood, Founder and General Manager, Ag Methane Advisors, LLC

Adam Wright, Co-Founder and CEO, Vespene Energy

Grant Zimmerman, Chief Executive Officer, Amp Americas

CC: Board Members, California Air Resources Board
The Honorable Steve Cliff, Executive Officer, California Air Resources Board
The Honorable Wade Crowfoot, Secretary, California Natural Resources Agency
The Honorable Yana Garcia, Secretary, California Environmental Protection Agency
The Honorable Karen Ross, Secretary, California Department of Food and Agriculture
The Honorable Dee Dee Myers, Director, GO-BIZ