

**Comment 1 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: Wendy

Last Name: Ring

Email Address: wring123@gmail.com

Affiliation: Climate 911

Subject: Comment on SLCP Workshop

Comment:

please see attached.

Attachment: [www.arb.ca.gov/lists/com-attach/1-sp22-slcp-ws-AXIAagNhUnFVDFU2.doc](http://www.arb.ca.gov/lists/com-attach/1-sp22-slcp-ws-AXIAagNhUnFVDFU2.doc)

Original File Name: SLCP\_Comment.doc

Date and Time Comment Was Submitted: 2021-09-15 20:10:09

No Duplicates.

**Comment 2 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Sally

Last Name: Newman

Email Address: [snewman@baaqmd.gov](mailto:snewman@baaqmd.gov)

Affiliation: Bay Area Air Quality Management District

Subject: Sulfuryl fluoride as a SLCP

Comment:

Thank you for this presentation and all of the staff work that has gone into it - a lot of details and a very nice summary of what is currently going on. The Bay Area Air Quality Management District would like learn whether you are going to consider some means for mitigation of emissions of another high GWP fluorinated gas, sulfuryl fluoride (SO<sub>2</sub>F<sub>2</sub>). Sulfuryl fluoride is not identified as an AB 32 gas, but it has a very high GWP (CARB uses a GWP (100-year horizon) of 4090). This compound is the dominant fumigant used for termite eradication. All applied gas is emitted within a few days of usage. Application is regulated by the Department of Pesticide Regulation as a neurotoxin, but its emissions are not regulated. Because of its very high GWP, its emissions must be reduced.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-09-17 15:05:45

No Duplicates.

**Comment 3 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Veronica

Last Name: Pardo

Email Address: veronica@resourcecoalition.org

Affiliation: Resource Recovery Coalition of CA

Subject: 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop

Comment:

Please see the attached comments from the Resource Recovery Coalition of CA.

Attachment: [www.arb.ca.gov/lists/com-attach/3-sp22-slcp-ws-V2VVYwQ3BGUAWQd0.pdf](http://www.arb.ca.gov/lists/com-attach/3-sp22-slcp-ws-V2VVYwQ3BGUAWQd0.pdf)

Original File Name: 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop\_Resource Coalition Final Comments.pdf

Date and Time Comment Was Submitted: 2021-09-20 15:54:02

No Duplicates.

**Comment 4 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: JuliAnne

Last Name: Thomas

Email Address: julianne.thomas@ravensr.com

Affiliation: Raven SR

Subject: Comments on SLCPs for Climate Change Scoping Plan

Comment:

Please accept our comments on Short-Lived Climate Pollutants for the next Climate Change Scoping Plan.

Attachment: [www.arb.ca.gov/lists/com-attach/4-sp22-slcp-ws-B2QFYIYIBzZXDIQ3.docx](http://www.arb.ca.gov/lists/com-attach/4-sp22-slcp-ws-B2QFYIYIBzZXDIQ3.docx)

Original File Name: CARB Cap-Trade Letter 9-17-21.docx

Date and Time Comment Was Submitted: 2021-09-21 07:56:27

No Duplicates.

**Comment 5 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Dylan  
Last Name: Jaff  
Email Address: dylan@caleec.com  
Affiliation: CR&R Environmental Services

Subject: CR&R Environmental Services - Scoping Plan Comments on September 8th Workshop  
Comment:

Please see attached comments.

Attachment: [www.arb.ca.gov/lists/com-attach/5-sp22-slcp-ws-VTZTJ1AjUV1RJAVm.pdf](http://www.arb.ca.gov/lists/com-attach/5-sp22-slcp-ws-VTZTJ1AjUV1RJAVm.pdf)

Original File Name: CRR\_Scoping Plan SLCP Letter 9.21.21.pdf

Date and Time Comment Was Submitted: 2021-09-21 12:45:58

No Duplicates.

**Comment 6 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Paul

Last Name: Sousa

Email Address: paul@wudairies.com

Affiliation: Western United Dairies

Subject: Western United Dairies comments

Comment:

Please see attached comment letter.

Attachment: [www.arb.ca.gov/lists/com-attach/6-sp22-slcp-ws-Wi1XJFE0VFgANAQ0.pdf](http://www.arb.ca.gov/lists/com-attach/6-sp22-slcp-ws-Wi1XJFE0VFgANAQ0.pdf)

Original File Name: WUD\_2022 Scoping Plan comments-final.pdf

Date and Time Comment Was Submitted: 2021-09-21 15:26:52

No Duplicates.

**Comment 7 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Staci  
Last Name: Heaton  
Email Address: sheaton@rcrcnet.org  
Affiliation: Rural County Representatives of CA

Subject: 2022 Scoping Plan Update -- SLCP  
Comment:

Attached please find RCRC's preliminary comments on the 2022 Scoping Plan Update--SLCP. Please contact me with any questions.

Attachment: [www.arb.ca.gov/lists/com-attach/7-sp22-slcp-ws-UmACNAEyAmMDWlQn.pdf](http://www.arb.ca.gov/lists/com-attach/7-sp22-slcp-ws-UmACNAEyAmMDWlQn.pdf)

Original File Name: 2022\_Scoping\_Plan\_Update\_SLCP\_Ltr\_to\_CARB\_09212021.pdf

Date and Time Comment Was Submitted: 2021-09-21 16:14:36

No Duplicates.

## **Comment 8 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Nicole  
Last Name: Collazo  
Email Address: nicole@vcapcd.org  
Affiliation: VCAPCD

Subject: Comments on '22 Scoping Plan- SLCP  
Comment:

Please accept our comments for this portion of the 2022 Scoping plan Update. Thank you.

- The 2022 Scoping Plan SLCP section should not only incorporate the August 2018 Paper "COMPOSTING IN CALIFORNIA Addressing Air Quality Permitting and Regulatory Issues for Expanding Infrastructure" co-written by CARB, CalRecycle, and CAPCOA", but expand on it, particularly providing much needed guidance on the permitting issues from air districts that will need to be addressed to comply with the state's ambitious SB 1383 organic waste diversion targets. The joint paper concluded with recommendations to advance potentially viable options (Section VIII) which included additional regional air quality modeling, landfill emissions reduction credits, essential public service designation, and future research opportunities. It would be ideal to provide such updates and continue the collaborative process within the goals and framework of the 2022 Scoping Plan Update. One other report since the last Scoping Plan Update is the CalRecycle August 2020 Progress Report "Analysis of the Progress Toward the SB 1383 Organic Waste Reduction Goals" which also stresses the existing permitting difficulties air district face for composting facilities in the wake of the fast-approaching SB 1383 implementation.

- Regarding SB 1383, the 2022 Scoping Plan Update should provide insight as to how air districts should treat a new or modified organic facility's emissions that have either been diverted away from landfill or organic disposal sites or result in a net decrease from other emissions sources, such as the overall decrease in transfer trips or VMTs, from a CEQA perspective of analyzing a project's emissions against a significance threshold. More new or expanded facilities will be needed to comply with SB 1383 targets and this needs to be addressed. The Plan should also include CEQA guidance for the control of odor emissions from such facilities and possible mitigation strategies.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-09-21 16:25:58

No Duplicates.



**Comment 9 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Shayne

Last Name: Petkiewicz

Email Address: shayne.petkiewicz@anaergia.com

Affiliation:

Subject: Comments on Short-Lived Climate Pollutants in the 2022 Climate Change Scoping Plan  
Comment:

Please see attached.

Attachment: [www.arb.ca.gov/lists/com-attach/9-sp22-slcp-ws-WzoFbQNjBzEHc1Uy.pdf](http://www.arb.ca.gov/lists/com-attach/9-sp22-slcp-ws-WzoFbQNjBzEHc1Uy.pdf)

Original File Name: Anaergia CARB SLCP 20210922.pdf

Date and Time Comment Was Submitted: 2021-09-22 06:42:17

No Duplicates.

**Comment 10 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Shayne

Last Name: Petkiewicz

Email Address: shayne.petkiewicz@anaergia.com

Affiliation:

Subject: Comments on Short-Lived Climate Pollutants in the 2022 Climate Change Scoping Plan  
Comment:

Please see attached.

Attachment: [www.arb.ca.gov/lists/com-attach/10-sp22-slcp-ws-BmdSOIExUWcAdAJI.pdf](http://www.arb.ca.gov/lists/com-attach/10-sp22-slcp-ws-BmdSOIExUWcAdAJI.pdf)

Original File Name: Anaergia CARB SLCP 20210922.pdf

Date and Time Comment Was Submitted: 2021-09-22 06:52:15

No Duplicates.

**Comment 11 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Charles

Last Name: Darensbourg

Email Address: CDARENSBOURG@dpw.lacounty.gov

Affiliation:

Subject: Comments on Short-Lived Climate Pollutants in the 2022 Climate Change Scoping Plan  
Comment:

Please see the attached letter dated September 22, 2021, from the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force to the California Air Resources Board regarding Comments on Short-Lived Climate Pollutants in the 2022 Climate Change Scoping Plan as presented on September 8, 2021.

Attachment: [www.arb.ca.gov/lists/com-attach/11-sp22-slcp-ws-Wi5QNwR2WWFWDwNl.pdf](http://www.arb.ca.gov/lists/com-attach/11-sp22-slcp-ws-Wi5QNwR2WWFWDwNl.pdf)

Original File Name: Task Force Comments on the 2022 Scoping Plan SLCP.pdf

Date and Time Comment Was Submitted: 2021-09-22 11:09:54

No Duplicates.

**Comment 12 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Julia

Last Name: Levin

Email Address: jlevin@bioenergyca.org

Affiliation: Bioenergy Association of California

Subject: BAC Comments on SLCPs in 2022 Scoping Plan

Comment:

BAC Comments on SLCPs in the 2022 Climate Change Scoping Plan

Attachment: [www.arb.ca.gov/lists/com-attach/12-sp22-slcp-ws-UDJSNVY0V1sFYAJt.pdf](http://www.arb.ca.gov/lists/com-attach/12-sp22-slcp-ws-UDJSNVY0V1sFYAJt.pdf)

Original File Name: BAC Comments on SLCPs for the 2022 Scoping Plan.pdf

Date and Time Comment Was Submitted: 2021-09-22 12:16:43

No Duplicates.

**Comment 13 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Sam

Last Name: Wade

Email Address: sam@rngcoalition.com

Affiliation: Coalition for Renewable Natural Gas

Subject: RNG Comments on SLCP Scoping Plan Workshops

Comment:

Please see our attached comments.

Attachment: [www.arb.ca.gov/lists/com-attach/13-sp22-slcp-ws-UGJRZlBhUTsBNQk7.pdf](http://www.arb.ca.gov/lists/com-attach/13-sp22-slcp-ws-UGJRZlBhUTsBNQk7.pdf)

Original File Name: 210922 CARB 2022 GHG Scoping Plan - SLCP Workshops - RNG Coalition Comments.pdf

Date and Time Comment Was Submitted: 2021-09-22 13:22:44

No Duplicates.

**Comment 14 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: William

Last Name: Zobel

Email Address: wzobel@californiahydrogen.org

Affiliation: California Hydrogen Business Council

Subject: 2022 CARB Scoping Plan

Comment:

CHBC Comments on the CARB 2022 Scoping Plan, RE: SLCPs

Attachment: [www.arb.ca.gov/lists/com-attach/14-sp22-slcp-ws-VTZVO1MwWGgCWwBj.pdf](http://www.arb.ca.gov/lists/com-attach/14-sp22-slcp-ws-VTZVO1MwWGgCWwBj.pdf)

Original File Name: CHBC Comments - CARB Scoping Plan - Short Lived Climate Pollutants Final.pdf

Date and Time Comment Was Submitted: 2021-09-22 14:02:32

No Duplicates.

**Comment 15 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: Staci

Last Name: Heaton

Email Address: sheaton@rcrcnet.org

Affiliation: Rural Counties ESJPA

Subject: 2022 Scoping Plan Update -- SLCP

Comment:

Preliminary comments from the Rural Counties Environmental Services  
Joint Powers Authority on the 2022 Scoping Plan Update -- SLCP.

Attachment: [www.arb.ca.gov/lists/com-attach/15-sp22-slcp-ws-VWcFMwQ3BWRQCVAj.pdf](http://www.arb.ca.gov/lists/com-attach/15-sp22-slcp-ws-VWcFMwQ3BWRQCVAj.pdf)

Original File Name: 2022\_Scoping\_Plan\_Update\_SLCP\_Ltr\_to\_CARB\_09212021.pdf

Date and Time Comment Was Submitted: 2021-09-22 14:08:29

No Duplicates.

**Comment 16 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: Staci

Last Name: Heaton

Email Address: sheaton@rcrcnet.org

Affiliation: Rural Counties ESJPA

Subject: 2022 Scoping Plan Update -- SLCP

Comment:

Preliminary comments from the Rural Counties Environmental Services  
Joint Powers Authority on the 2022 Scoping Plan Update -- SLCP.

Attachment: [www.arb.ca.gov/lists/com-attach/16-sp22-slcp-ws-VDdUMwZ1V2YAWQh7.pdf](http://www.arb.ca.gov/lists/com-attach/16-sp22-slcp-ws-VDdUMwZ1V2YAWQh7.pdf)

Original File Name: CARB Scoping Plan ESJPA Comment LTR 09212021.pdf

Date and Time Comment Was Submitted: 2021-09-22 14:08:29

No Duplicates.



**Comment 17 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Evan

Last Name: Edgar

Email Address: [evan@edgarinc.org](mailto:evan@edgarinc.org)

Affiliation: California Compost Coalition

Subject: Comments on Short-Lived Climate Pollutants in the 2022 Climate Change Scoping Plan  
Comment:

Please see attached letter.

Attachment: [www.arb.ca.gov/lists/com-attach/17-sp22-slcp-ws-WikFb1Q2BCdQCVIg.pdf](http://www.arb.ca.gov/lists/com-attach/17-sp22-slcp-ws-WikFb1Q2BCdQCVIg.pdf)

Original File Name: SLCP RNG Scoping comments September 22 2022.pdf

Date and Time Comment Was Submitted: 2021-09-22 14:47:39

No Duplicates.

**Comment 18 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Evan

Last Name: Edgar

Email Address: [evan@edgarinc.org](mailto:evan@edgarinc.org)

Affiliation: California Compost Coalition

Subject: Comments on Short-Lived Climate Pollutants in the 2022 Climate Change Scoping Plan  
Comment:

Please see attached letter.

Attachment: [www.arb.ca.gov/lists/com-attach/18-sp22-slcp-ws-WikAalc1VHcAWVAi.pdf](http://www.arb.ca.gov/lists/com-attach/18-sp22-slcp-ws-WikAalc1VHcAWVAi.pdf)

Original File Name: SLCP RNG Scoping comments September 22 2022.pdf

Date and Time Comment Was Submitted: 2021-09-22 14:47:39

No Duplicates.

## **Comment 19 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slep-ws) - 1st Workshop.**

First Name: James  
Last Name: McVaney  
Email Address: jim@carbonsinkllc.com  
Affiliation: Carbon Sink LLC

Subject: Comments in response to the 2022 Scoping Plan Update - Short-Lived Climate Pollutants Work  
Comment:

The Honorable Liane M. Randolph Chair, California Air Resources  
Board P.O. Box 2815  
Sacramento, CA 9584

Re: Comments of Carbon Sink LLC on the California Air Resources  
Board's 2022 Scoping Plan Workshop on September 8, 2021, on  
Short-Lived Climate Pollutants

Dear Chair Randolph:

On behalf of Carbon Sink LLC, a Maryland-based company committed to developing large-scale projects that will produce ultra-low carbon fuels and chemicals from carbon dioxide captured from the atmosphere and industrial processes, I am pleased to submit these comments in response to the

Requested Policy Change (summarized): grant parity to renewable fuels produced at facilities that capture CO<sub>2</sub> and recycle it into products that displace fossil fuels with those that sequester, or "landfill", CO<sub>2</sub> in geologic formations.

Justification (summarized): recycling CO<sub>2</sub> from biofuels plants into renewable, sustainable fuels and chemicals will directly displace fossil fuel use and its associated emissions. Carbon capture and sequestration stores about .88 tonnes of CO<sub>2</sub> for each tonne of CO<sub>2</sub> captured (CO<sub>2</sub> is emitted in the capture, liquefaction, transportation, and injection). By comparison, CO<sub>2</sub> captured from the same plant and recycled into fuel to replace bunker fuel in ships will result in a net of 1.0 to 1.9 tonnes of CO<sub>2</sub> from crude oil that will not be released into the atmosphere, and as much as 2.5 tonnes if the CO<sub>2</sub> is captured and used in the manufacture of materials.

At Carbon Sink we believe the best pathway to reducing greenhouse gas concentrations in the atmosphere is by finding productive, commercial uses for those gasses that can displace future fossil energy extraction, processing, and combustion. While government policies and incentives can create markets for low-carbon solutions, innovation and efficiency improvements will drive down the cost-curve for these solutions and make them both environmentally and economically sustainable. Carbon Sink's model is to take advantage of increasingly affordable electricity from wind energy systems to produce "green hydrogen" via electrolysis of water. The zero-carbon H<sub>2</sub> will be combined with biogenic CO<sub>2</sub> captured from existing ethanol plants in the U.S. Midwest to make

September 22, 2021

2022 Scoping Plan Update - Short-Lived Climate

Pollutants Workshop, held on September 8th 2021.  
Carbon Sink LLC 1521 N Greenbrier St, Arlington VA 22205 (800)  
583-5223

green methanol (eMethanol) which can be sold into the shipping sector to replace bunker fuel, to the railroads to displace diesel, to intra-coastal shipping and transportation to also displace diesel used in ferries, harbor tugs, barge tugs and other near-shore transportation, for use in direct-methanol fuel cells for transportation and power generation and for use in the materials sector, where it will be converted to building materials,

auto parts and other long-lived products that will serve to sequester the carbon that we initially extracted from the atmosphere.

As we establish our business, we will seek to expand into other sectors to capture and utilize CO<sub>2</sub> to produce eMethanol. The second-generation model will focus non-biogenic CO<sub>2</sub> from ammonia manufacturing, natural gas processing, and certain chemicals plants. The third-generation will use CO<sub>2</sub> from Direct Air Capture (DAC) plants as they become more economically viable. Imagine, a network of plants, some in remote, windy locations around the world, that produce eMethanol from the air.

About Methanol and eMethanol

Methanol is the simplest form of alcohol, with the chemical formula of CH<sub>3</sub>OH. It is the most "hydrogen-dense" liquid, with 4 hydrogen atoms to 1 carbon atom and 1 oxygen atom. It is miscible in water. Most methanol produced in the world today is from either natural gas or coal and is either used in the production of various materials like polymers, plastics, adhesives, and fibers, which are then used to make auto parts, electronic devices, plywood, and clothing, respectively. It is also blended with gasoline in Europe and China, sometimes used in methanol-powered engines, and increasingly as a replacement fuel in shipping.

eMethanol is chemically identical to conventional, aka "grey" methanol, but is produced using renewably produced hydrogen and captured carbon dioxide. It is known as "e"Methanol because it is a member of the "eFuels" family, a grouping of emerging fuels that are dependent upon utilization of renewable electricity.

Because it is a liquid at ambient temperatures and pressures, it can be shipped easily via truck or rail, and stored in tanks used for alcohol storage, or transported over dedicated pipelines. The Methanol Institute is a good source for information on the properties, market and uses of both methanol and eMethanol, which can be accessed at [www.Methanol.org](http://www.Methanol.org).

Carbon Sink Model and the Value to California

As indicated above, Carbon Sink will develop plants that will use CO<sub>2</sub> from existing ethanol plants to make eMethanol. Our plants will be co-located with ethanol production, which will allow us to optimize the operations of both facilities. As an example, our Carbon Sink LLC 1521 N Greenbrier St, Arlington VA 22205 (800) 583-5223

hydrogen and eMethanol production processes will produce excess heat that can be used to displace some natural gas use in the ethanol production process, lowering the carbon intensity of the ethanol.

However, the greatest value of our plants will be in the recycling of CO<sub>2</sub> from the ethanol fermentation process into a zero or near-zero carbon fuel. Currently, this CO<sub>2</sub> is vented back to the atmosphere, but our process will recycle into a product, eMethanol, that will displace fossil-derived fuels and chemicals. And while this CO<sub>2</sub> will return to the atmosphere if it is combusted, it will prevent the extraction, refining and combusting of crude oil and the associated release of carbon that was previously deep in the earth.

Currently, the California Low-Carbon Fuels Standard does not give credit for recycling CO<sub>2</sub>, although it does give emissions credits for sequestering CO<sub>2</sub> from the ethanol production process. While sequestering CO<sub>2</sub> from the ethanol production process will reduce GHG gasses in the atmosphere, it wastes valuable, pure CO<sub>2</sub> that could be used to displace petroleum use and result in greater reductions of atmospheric carbon dioxide.

Proposed Policy Change

In calculating the carbon intensity of a biofuel, such as ethanol, sold under the LCFS, CARB should give equal value for CO<sub>2</sub> captured and recycled into commercially saleable products that displace petroleum products, as is given to biofuels produced in plants that capture and sequester the associated CO<sub>2</sub> in geologic formations. In doing so, the biofuels from such plants should be able to realize the same carbon intensity reductions under the LCFS as biofuels produced at plants that sequester their CO<sub>2</sub> in geologic

formations.

Greenhouse gas reductions because of this proposed change Productive utilization of captured CO2 from industrial sources, whether biogenic or anthropogenic, will be the most effective solution for reducing carbon concentrations in the atmosphere because it can be self-sustaining. By making products we use every day from captured CO2 rather than from hydrocarbons extracted from the earth, we can turn things we currently view as contributors to climate change into solutions for addressing climate change. However, the technologies and processes for converting CO2 into products will not become a reality if we continue to give greater incentives for the sequestration of CO2 in the ground rather than encouraging its use, as is the effect of the current LCFS structure.

Under current LCFS rules, an ethanol plant that captures and sequesters its CO2 is given a reduction of about 25 points off its per-gallon carbon intensity (CI). However, a plant that Carbon Sink LLC 1521 N Greenbrier St, Arlington VA 22205 (800) 583-5223

captures its CO2 and uses it to make a product that is not sold into the California renewable fuels market receives no reduction in their CI, even though that CO2 is displacing fossil fuel use. If it is used in making building materials or other long-lived products it is not only displacing carbon from coal, crude oil or nature gas, but is also sequestered in those products, making carbon utilization even more beneficial to the climate than sequestration.

If CARB grants equal treatment to carbon utilization and sequestration it will spur innovative solutions for converting CO2 into low-carbon fuels and materials and allow biofuels plants that do not have geologic sequestration options to contribute to the solution.

Under the Carbon Sink model, we will produce zero-carbon eMethanol from the CO2 emitted from the fermentation process at ethanol plants in the US Midwest. Wind energy will be used to make green hydrogen and to combine the CO2 and H2 to make eMethanol. The eMethanol will likely be sold as a replacement for heavily pollution shipping fuel (No. 6 fuel oil, or bunker fuel) to shipping companies that are utilizing ships that are dual-fuel/methanol compatible, which is a growing number in the global fleet. Because of existing market forces, several global shipping companies are converting their fleet to methanol compatible ships to decarbonize their operations and, in turn, help their customers cut the carbon footprint of their supply chains. Fortunately, many consumer brand companies are responding to customer pressure to cut emissions, and this is translating to shipping companies taking material steps to compete in the low-carbon transportation market, including paying a premium for low-carbon fuels and signing long-term contracts.

In California, methanol is not a qualified blend-stock with gasoline but could be utilized in certain applications such as harbor operations like ferries, tugs, loading and warehouse vehicles, rail, power generation and potentially some fleet vehicles. Currently, these markets do not exist and growing them will be difficult due to the "chicken and egg" nature of the problem: does someone invest in capital equipment that runs on eMethanol before there is sufficient production of eMethanol? We believe that, because of the increasing availability of methanol-powered fuel cells, there will be growing options for carbon-neutral ferries and harbor vehicles, trains, and trucks in the coming years. Until then we will likely focus on decarbonizing the shipping industry and companies like Maersk, Stena, MSC, Oldendorff and others who are actively seeking eMethanol supplies as the primary substitute for petroleum-derived fuels.

If CARB does not change its current policy, favoring carbon capture and sequestration over carbon capture and use, producers of carbon-based products will be hampered by Carbon Sink LLC 1521 N Greenbrier St, Arlington VA 22205 (800) 583-5223

the availability of CO2. Accordingly, a change in the policy to provide CI score credits to ethanol plant owners for both sequestration and carbon capture and use will support the creation of a US production ecosystem whereby the CO2 our economy needs for our modern lives is increasingly from the atmosphere rather than from underground.

Sincerely,

James P McVane

Chief Commercial Officer, Head of Communications Carbon Sink LLC

(800) 583-5223

JIM@CarbonSinkLLC.com

www. CarbonSinkLLC.com

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583-5223

Attachment: [www.arb.ca.gov/lists/com-attach/19-sp22-slcp-ws-AGNQNwd0BzYCa1Q6.pdf](http://www.arb.ca.gov/lists/com-attach/19-sp22-slcp-ws-AGNQNwd0BzYCa1Q6.pdf)

Original File Name: Carbon Sink comments to CARB 20210922.pdf

Date and Time Comment Was Submitted: 2021-09-22 15:35:24

No Duplicates.

**Comment 20 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Michael

Last Name: Boccadoro

Email Address: mboccadoro@westcoastadvisors.com

Affiliation: Dairy Cares

Subject: Dairy Cares Comments on 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
Comment:

See attached comments

Attachment: [www.arb.ca.gov/lists/com-attach/21-sp22-slcp-ws-VyRXMIQ6UHMAbwRq.pdf](http://www.arb.ca.gov/lists/com-attach/21-sp22-slcp-ws-VyRXMIQ6UHMAbwRq.pdf)

Original File Name: Scoping Plan - SLCP comments.pdf

Date and Time Comment Was Submitted: 2021-09-22 16:02:28

No Duplicates.

**Comment 21 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: Christiana  
Last Name: Darlington  
Email Address: christiana@clereinc.net  
Affiliation: Placer APCD

Subject: comments on SLCP  
Comment:

Comments provided

Attachment: [www.arb.ca.gov/lists/com-attach/22-sp22-slcp-ws-VydXMlc3VnUEYQJm.pdf](http://www.arb.ca.gov/lists/com-attach/22-sp22-slcp-ws-VydXMlc3VnUEYQJm.pdf)

Original File Name: pcapcd\_slcp\_comments\_final final draft-ecw.pdf

Date and Time Comment Was Submitted: 2021-09-22 16:20:04

No Duplicates.



**Comment 22 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: Dani

Last Name: Diele

Email Address: dani@agcouncil.org

Affiliation: Agricultural Council of California

Subject: Ag Council Comments on 2022 Scoping Plan SLCP Workshop

Comment:

Please see comments attached.

Attachment: [www.arb.ca.gov/lists/com-attach/23-sp22-slcp-ws-UTBSM1MxUGxXJAJs.pdf](http://www.arb.ca.gov/lists/com-attach/23-sp22-slcp-ws-UTBSM1MxUGxXJAJs.pdf)

Original File Name: AgCouncilComments\_SLCPWorkshop.pdf

Date and Time Comment Was Submitted: 2021-09-22 16:21:27

No Duplicates.

**Comment 23 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Ryan

Last Name: Kenny

Email Address: ryan.kenny@cleanenergyfuels.com

Affiliation:

Subject: Coalition Comments re: Scoping Plan Update - SLCP Workshop

Comment:

Please find attached a coalition letter expressing comments which include the need for Short-Lived Climate Pollutant reductions to be the number one focus of the 2022 Scoping Plan Update. Thank you.

Attachment: [www.arb.ca.gov/lists/com-attach/24-sp22-slcp-ws-BnVTNlQ6WHsLZAln.pdf](http://www.arb.ca.gov/lists/com-attach/24-sp22-slcp-ws-BnVTNlQ6WHsLZAln.pdf)

Original File Name: Scoping Plan Update 2022 Coalition Letter FINAL.pdf

Date and Time Comment Was Submitted: 2021-09-22 16:21:44

No Duplicates.

**Comment 24 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Danielle

Last Name: Wright

Email Address: danielle.wright@nasrc.org

Affiliation: North American Sustainable Refrigeration

Subject: Comments on Short-Lived Climate Pollutants in the 2022 Climate Change Scoping Plan  
Comment:

Please see attached comments

Attachment: [www.arb.ca.gov/lists/com-attach/25-sp22-slcp-ws-AG5XMAByWXgEYQIW.pdf](http://www.arb.ca.gov/lists/com-attach/25-sp22-slcp-ws-AG5XMAByWXgEYQIW.pdf)

Original File Name: NASRC Comments on Short-Lived Climate Pollutants\_2022 Climate Change Scoping Plan.pdf

Date and Time Comment Was Submitted: 2021-09-22 16:38:10

No Duplicates.

**Comment 25 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Muriel  
Last Name: Strand  
Email Address: ecoengr@comcast.net  
Affiliation:

Subject: SLCP workshop comments  
Comment:

please see attached

Attachment: [www.arb.ca.gov/lists/com-attach/26-sp22-slcp-ws-B3RVPwFjV3RSCwZl.pdf](http://www.arb.ca.gov/lists/com-attach/26-sp22-slcp-ws-B3RVPwFjV3RSCwZl.pdf)

Original File Name: SLCP comments on sept 8 workshop.pdf

Date and Time Comment Was Submitted: 2021-09-22 16:50:38

No Duplicates.

**Comment 26 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Nicole

Last Name: Rice

Email Address: nicolerice@cngvc.org

Affiliation: California Natural Gas Vehicle Coalition

Subject: CNGVC Comment Letter on SLCPs

Comment:

The best way to reduce SLCPs in the transportation sector is to reduce diesel use. Diesel engines are a major source of black carbon and smog-forming pollution that are harmful to the environment and negatively affect public health. The Scoping Plan update must include a strategy that prioritizes the immediate displacement of HD diesel trucks with the cleanest technology commercially available - low-NOx HD trucks powered by RNG. Not only will this switch significantly reduce climate pollutants today, it also provides relief from criteria pollutants and air toxics like diesel particulate matter, nitrogen oxide, and ozone. Further, it provides the co-benefit of reducing methane emissions through the use of RNG.

Every year we see signs of our worsening climate crisis. Devastating wildfires, persistent droughts, unpredictable weather, and agricultural impacts all signal that the time is growing short to mitigate the permanent damage we have inflicted on our planet. Immediate substantial reductions in SLCPs, like black carbon, methane, and smog-forming pollution, are necessary to reverse this course. The ongoing climate crisis requires action today - not in the future - to prevent irreversible harm to the planet.

Attachment: [www.arb.ca.gov/lists/com-attach/27-sp22-slcp-ws-VjUAaFI0WXxXMgBf.pdf](http://www.arb.ca.gov/lists/com-attach/27-sp22-slcp-ws-VjUAaFI0WXxXMgBf.pdf)

Original File Name: CNGVC Comment Letter on SLCP Workshop 092221.pdf

Date and Time Comment Was Submitted: 2021-09-22 16:50:07

No Duplicates.

**Comment 27 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Mark  
Last Name: Nechodom  
Email Address: mnechodom@wspa.org  
Affiliation: Western States Petroleum Association

Subject: WSPA Comments on SLCP Sept 8 2021 Workshop  
Comment:

Please find attached a comment letter from the Western States Petroleum Association regarding the September 8, 2021 Scoping Plan workshop on Short Lived Climate Pollutants.  
Thank you,  
Mark Nechodom, PhD

Attachment: [www.arb.ca.gov/lists/com-attach/28-sp22-slcp-ws-ViECd1cmU2ECWwJx.pdf](http://www.arb.ca.gov/lists/com-attach/28-sp22-slcp-ws-ViECd1cmU2ECWwJx.pdf)

Original File Name: WSPA SLCP Methane Comment Letter Submitted 20210922 FINAL.pdf

Date and Time Comment Was Submitted: 2021-09-22 16:55:13

No Duplicates.

**Comment 28 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Shayda

Last Name: Azamian

Email Address: [sazamian@leadershipcounsel.org](mailto:sazamian@leadershipcounsel.org)

Affiliation: Leadership Counsel

Subject: Coalition Letter re Sept 9th Short Lived Climate Pollutants Workshop

Comment:

Please see the attached letter. Thank you!

Attachment: [www.arb.ca.gov/lists/com-attach/29-sp22-slcp-ws-AWJWP1Q0BzgKZVcj.pdf](http://www.arb.ca.gov/lists/com-attach/29-sp22-slcp-ws-AWJWP1Q0BzgKZVcj.pdf)

Original File Name: Coalition Letter re Sept 9th Short Lived Climate Pollutants Workshop.pdf

Date and Time Comment Was Submitted: 2021-09-22 17:23:22

No Duplicates.

**Comment 29 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Graham

Last Name: Noyes

Email Address: graham@noyeslawcorp.com

Affiliation: Noyes Law Corporation for Drylet, Inc.

Subject: Immediate Opportunity to Speed Methane Reductions in Dairy Sector

Comment:

Summary: Drylet, Inc. ("Drylet") appreciates this opportunity to provide comments on the California Air Resources Board's (CARB) 2022 Scoping Plan Update. I am writing to recommend that to respond to the urgent necessity of achieving short-lived climate pollutant ("SLCP") emission reductions, the California Air Resources Board ("CARB") should fully exercise its existing Low Carbon Fuel Standard ("LCFS") authority. In particular, CARB should exercise its discretion to review and confirm the beneficial impact of innovative technologies that enhance the performance of anaerobic digester facilities that have existing LCFS pathways. By exercising the discretion inherent to its LCFS authority, CARB can facilitate substantial additional reductions of SLCP emissions even before the 2022 Scoping Plan process is complete.

Thank you for the opportunity to participate in this proceeding. If there are any questions relating to this comment or problems regarding transmission, please contact me.

Best Regards,

Graham

Graham Noyes  
Noyes Law Corporation  
401 Spring Street, Suite 205  
Nevada City, CA 95959  
(530)264-7157 Direct  
graham@noyeslawcorp.com

Attachment: [www.arb.ca.gov/lists/com-attach/30-sp22-slcp-ws-UjYAdF0IWGdQMwdz.pdf](http://www.arb.ca.gov/lists/com-attach/30-sp22-slcp-ws-UjYAdF0IWGdQMwdz.pdf)

Original File Name: Drylet SLCP SP Comment 22 Sept 2021 FINAL PDF.pdf

Date and Time Comment Was Submitted: 2021-09-22 17:49:38

No Duplicates.



**Comment 30 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Graham

Last Name: Noyes

Email Address: graham@noyeslawcorp.com

Affiliation: Noyes Law Corp for Red Rock Biofuels

Subject: To Achieve Carbon Neutrality, CARB Must Include Wildfires in Scoping Plan  
Comment:

Summary: On behalf of Red Rock Biofuels LLC ("Red Rock"), I am writing to urge the California Air Resources Board ("CARB") to comprehensively address wildfires within the scope of the 2022 Scoping Plan. To do otherwise is to ignore the supreme existential threats that wildfire poses to California in terms of 1) threatening the lives and property of the People of California, 2) threatening the majestic lands, forests, and watersheds of the California, and 3) thwarting the goal of carbon neutrality established by Executive Order B-55-18. CARB is respected worldwide for being an agency willing to confront daunting challenges with clear-headed science, technology, innovation and policy. The 2022 Scoping Plan presents a critical time for CARB to bring these capabilities to the table. The inclusion of California wildfires within the Scoping Plan is the essential foundation on which California can build the necessary policy framework to reduce wildfire risk and short-lived climate pollutant ("SLCP") emissions from wildfires.

The full comment is attached. Thank you for the opportunity to comment on the Scoping Plan. Please contact me if there are any problems with the transmission or interest in receiving further input on this subject.

Best Regards,  
Graham

Graham Noyes  
Noyes Law Corporation  
401 Spring Street, Suite 205  
Nevada City, CA 95959  
www.fuelandcarbonlaw.com  
(530)264-7157 Direct  
graham@noyeslawcorp.com

Attachment: [www.arb.ca.gov/lists/com-attach/31-sp22-slcp-ws-V2VUYANdV3dWNQd3.pdf](http://www.arb.ca.gov/lists/com-attach/31-sp22-slcp-ws-V2VUYANdV3dWNQd3.pdf)

Original File Name: 22 Sept 2021 Red Rock Comment RE Scoping Plan SLCP signed.pdf

Date and Time Comment Was Submitted: 2021-09-22 18:53:41

No Duplicates.

**Comment 31 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) - 1st Workshop.**

First Name: Evelyn

Last Name: Loya

Email Address: eloya@socalgas.com

Affiliation: SoCalGas Company

Subject: SoCalGas Comments on 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
Comment:

Please find our comments attached.

Attachment: [www.arb.ca.gov/lists/com-attach/32-sp22-slcp-ws-UiFSOwNhADIBa1M0.pdf](http://www.arb.ca.gov/lists/com-attach/32-sp22-slcp-ws-UiFSOwNhADIBa1M0.pdf)

Original File Name: SoCalGas Comments on 2022 Scoping Plan SLCP Workshop.pdf

Date and Time Comment Was Submitted: 2021-09-22 19:44:09

No Duplicates.

**Comment 32 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: Aaron

Last Name: Daly

Email Address: aaron.daly@ratioinstitute.org

Affiliation: Ecology Actions Ratio Institute

Subject: Comments

Comment:

See attached.

Attachment: [www.arb.ca.gov/lists/com-attach/33-sp22-slcp-ws-WzYBaAd0VWNRCaVm.pdf](http://www.arb.ca.gov/lists/com-attach/33-sp22-slcp-ws-WzYBaAd0VWNRCaVm.pdf)

Original File Name: More comments.pdf

Date and Time Comment Was Submitted: 2021-09-23 08:22:01

No Duplicates.

**Comment 33 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: Graham

Last Name: Noyes

Email Address: graham@noyeslawcorp.com

Affiliation:

Subject: Comments

Comment:

See attached.

Attachment: [www.arb.ca.gov/lists/com-attach/34-sp22-slcp-ws-AGwHbgdlU2kEXVAz.pdf](http://www.arb.ca.gov/lists/com-attach/34-sp22-slcp-ws-AGwHbgdlU2kEXVAz.pdf)

Original File Name: Loci Controls SP SLCP Comment 22 Sept 2021.pdf

Date and Time Comment Was Submitted: 2021-09-23 09:28:11

No Duplicates.

**Comment 34 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: Cedric  
Last Name: Twight  
Email Address: CTwight@spi-ind.com  
Affiliation: Sierra Pacific Industries

Subject: Comments  
Comment:

See attached.

Attachment: [www.arb.ca.gov/lists/com-attach/35-sp22-slcp-ws-WikCdFI6BAhWM1c4.pdf](http://www.arb.ca.gov/lists/com-attach/35-sp22-slcp-ws-WikCdFI6BAhWM1c4.pdf)

Original File Name: SPI\_Comment\_Letter\_ShortLived Climate Pollutants.pdf

Date and Time Comment Was Submitted: 2021-09-23 09:34:57

No Duplicates.

**Comment 35 for 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop  
(sp22-slcp-ws) - 1st Workshop.**

First Name: Joshua C.

Last Name: Greene

Email Address: jcgreene@aosmith.com

Affiliation: A.O. Smith Corporation

Subject: Comments

Comment:

See attached.

Attachment: [www.arb.ca.gov/lists/com-attach/36-sp22-slcp-ws-UWBcagMsUDIBMgkn.pdf](http://www.arb.ca.gov/lists/com-attach/36-sp22-slcp-ws-UWBcagMsUDIBMgkn.pdf)

Original File Name: 10.15.2021 AOS Comments to SLCP Workshop.pdf

Date and Time Comment Was Submitted: 2021-10-18 08:16:19

No Duplicates.

**There are no comments posted to 2022 Scoping Plan Update - Short-Lived Climate Pollutants Workshop (sp22-slcp-ws) that were presented during the Workshop at this time.**