

## **Comment 1 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Robert

Last Name: Gary

Email Address: robert\_gary@sbcglobal.net

Affiliation:

Subject: Use of small r-134 cans

Comment:

its unclear if your proposal from 2008 to ban small cans is still in place. I'm a DIYer who uses small cans although unlike those in your report I own professional equipment. The solution to can loss in place today is to require self sealing cans. I hope the intention is to retain those. Your solution to require DIYers to have a full compliment of professional equipment provided by an autoparts store on loan is likely not serious. No companies are suggesting they will provide that and there are questions if the EPA would allow unlicensed individuals to charge from a large container.

Please do not get rid of the small bottles. I would be willing to get my EPA license if necessary but I cannot justify buying in 10# increments.

In your own analysis you estimated the cost for a current DIYer to repair his car to be around \$20 and the cost for just the diagnostic from the professional to be around \$200. I submit that that is an unfair burden.

-Robert M Gary

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-01 17:41:35

No Duplicates.

**Comment 2 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Steven

Last Name: Brink

Email Address: steveb@calforests.org

Affiliation: California Forestry Association

Subject: Comments on Forest Carbon and Methane

Comment:

Please see attached document

Attachment: [www.arb.ca.gov/lists/com-attach/3-slcpdraftstrategy-ws-WmtXZFJiWDtQZgM3.docx](http://www.arb.ca.gov/lists/com-attach/3-slcpdraftstrategy-ws-WmtXZFJiWDtQZgM3.docx)

Original File Name:

151004\_CFA\_response\_to\_Draft\_Climate\_Pollutant\_Reduction\_Strategy.docx

Date and Time Comment Was Submitted: 2015-10-04 16:17:07

No Duplicates.

### **Comment 3 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: peter

Last Name: palm

Email Address: PETE@TEAMWPD.COM

Affiliation:

Subject: the real cost

Comment:

When we take actions such as this we always forget the cost to the small business man. Imagine a mom and pop restaurant or c -store having to pay 200.00 an hour for refrigeration service because of all the new regs. New tools , new training, new specialty processes to implement for new refrigerants.

the end result will be they wont buy new stuff, and they wont use qualified service companies because they cant afford it.

we have seen a huge up tick in black market service companies in California, it is ten times higher then in any other state. these guys don't follow any rules and your goals are never reached.

please look at the entire picture when going down these roads.

why not go after all the unregulated grease and smoke coming out of in n out burger, and chains such as these, the pick up would be noticeable to everyone in a five mile radius...

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-13 12:56:11

No Duplicates.

**Comment 4 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: John A.

Last Name: Paoluccio PE

Email Address: info@CNFbiofuel.com

Affiliation: Inventive Resources, Inc.

Subject: Pilot plant TORREFICATION technology

Comment:

Attachment: [www.arb.ca.gov/lists/com-attach/5-slcpdraftstrategy-ws-UCMGaANtUXAEdghX.doc](http://www.arb.ca.gov/lists/com-attach/5-slcpdraftstrategy-ws-UCMGaANtUXAEdghX.doc)

Original File Name: Short -Lived Pollutants 10-16-15.doc

Date and Time Comment Was Submitted: 2015-10-16 10:17:15

No Duplicates.

## **Comment 5 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Robert  
Last Name: Helbing  
Email Address: bobhelbing@airtro.com  
Affiliation: HVAC Industry

Subject: Misguided Effort  
Comment:

The Air Resources Board, by targeting fluorinated refrigerants and methane, is attacking the two substances that have done the MOST to reduce the buildup of greenhouse gases. The switch from chlorinated refrigerants to fluorinated product, mandated by the Montreal Protocol, is perhaps the single largest cut made to date in greenhouse gas production, having reduced total equivalent carbon by some six billion tons. Wind and solar, by contrast, have cut greenhouse gases by less than a billion tons. Meanwhile, the switch from coal to methane for electricity generation is also saving us hundreds of millions of tons of carbon emissions. This "Draft Strategy" is attacking our most successful policies in reducing carbon equivalents, all in search of some unrealizable perfection of a zero-carbon economy.

California has the highest electricity rates west of the Hudson River. It has the highest gasoline prices anywhere in the USA. And it has the highest poverty rate in the country. Rising fuel prices affect the poorest of our residents the most, and the increasing demand that we build a carbon-free economy is driving the traditional stepping stone jobs like manufacturing out of our state. Why must every "improvement" turn into a greater burden on the backs of ordinary Californians?

<http://www.economist.com/news/briefing/21618680-our-guide-actions-have-done-most-slow-global-warming-deepest-cuts>

<http://www.economist.com/blogs/schumpeter/2012/05/americas-falling-carbon-dioxide-emissions>

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-17 09:01:03

No Duplicates.

**Comment 6 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jamie  
Last Name: Song  
Email Address: jsong@meca.org  
Affiliation:

Subject: MECA Comments on Draft Short-Lived Climate Pollutant Reduction Strategy  
Comment:

Please find attached the Manufacturers of Emission Controls Association's (MECA) public comments on the Draft Short-Lived Climate Pollutant Reduction Strategy.

Regards,  
Jamie Song

Attachment: [www.arb.ca.gov/lists/com-attach/8-slcpdraftstrategy-ws-AG1VNIU3WWsBWFQ3.pdf](http://www.arb.ca.gov/lists/com-attach/8-slcpdraftstrategy-ws-AG1VNIU3WWsBWFQ3.pdf)

Original File Name: MECA Comments on ARB Short-lived Climate Pollutants 101915.pdf

Date and Time Comment Was Submitted: 2015-10-19 08:36:41

No Duplicates.

## **Comment 7 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Larry

Last Name: Buckle

Email Address: Buckle@ies-eng.com

Affiliation: International Engineering Services, Inc.

Subject: Landfilling of Organic Waste

Comment:

International Engineering Services, Inc. fully supports the efforts of CARB to reduce short-lived climate pollutants. The following comments will address issues associated with methane generated from solid waste.

We fully support the diversion of 90% of organic waste from landfill disposal by 2025. To accomplish this a significant portion of this waste will need to go to anaerobic digestion (AD) for stabilization.

- Conventional composting will generate significant volumes of methane if volatile feedstocks are introduced. Food waste and similar volatile feedstock should be ban from windrow, static pile and other compost processes with the potential to produce VOC from volatile feedstock.
- Digestate produced from AD must not be disposed of in a landfill. Best management practice (BMP) must be utilized in collection, processing (cleaning and sized reduction) and digestion of feedstock to insure production of digestate appropriate for land application.
- Any AD digestate landfill disposed will be considered disposed organic waste.
- Wastewater treatment plant biosolids will be considered organic waste, and when disposed in a landfill will be considered disposed organic waste. This will also apply to biosolids used for landfill alternate daily cover.
- All wastewater treatment plants should anaerobically digest primary and secondary solids to reduce emission of VOC.
- Gasification of organic waste should be allowed after BMP capture of marketable materials.

Thank you for your solicitation of comments.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-19 14:26:42

No Duplicates.



**Comment 8 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Ronald  
Last Name: Shebik  
Email Address: ron.shebik@hussmann.com  
Affiliation: Hussmann Corporation

Subject: HFC's and High GWP Refrigerants  
Comment:

Please see attachment

Attachment: [www.arb.ca.gov/lists/com-attach/10-slcpdraftstrategy-ws-WzMHdAR2BSUEbwZn.doc](http://www.arb.ca.gov/lists/com-attach/10-slcpdraftstrategy-ws-WzMHdAR2BSUEbwZn.doc)

Original File Name: Hussmann Corporation Comments - CARB Draft Strategy October 2015.doc

Date and Time Comment Was Submitted: 2015-10-21 14:20:53

No Duplicates.

**Comment 9 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: John

Last Name: Dane

Email Address: john@crra.com

Affiliation: Calif Resource Recovery Association

Subject: CRRA Comments on Short-Lived Climate Pollutant Reduction Strategy

Comment:

File upload of letter attached.

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

Original File Name: CRRA Letter to ARB on Short-Lived Climate Pollutant Reduction S.pdf

Date and Time Comment Was Submitted: 2015-10-23 13:39:14

No Duplicates.

## **Comment 10 for Short-Lived Climate Pollutant Draft Strategy (slcdraftstrategy-ws) - 1st Workshop.**

First Name: Michael

Last Name: Gallagher

Email Address: mgallagher@wasocal.com

Affiliation: contractor; member ASHRAE & WHPA

Subject: comments

Comment:

Page 57, figure 8. Please note that commercial air conditioning and commercial refrigeration are apparently lumped in together. They are very different industries with significantly different historical treatment of refrigerants. Commercial grocery stores, for example, have historically had a much higher proportion of leaks and refrigerant usage than virtually any commercial air conditioning system. Similar comment applies to figure 9, page 59.

Page 58, section A, "progress to date". Please recognize that AB 32 is virtually unknown in the field. As an example, I am regularly trying to educate customers regarding quarterly refrigerant leak check requirements under AB 32, and have found that few end users are willing to spend the money for this. Another unknown and unenforced regulation.

Page 61, Incentive programs. The data noting more than 2,400 facilities using R-22 in the state is a joke. There are more than 2,400 facilities in Los Angeles county alone that use R-22. Please also recognize that commercial AC systems do not "use" refrigerant. Refrigerant is only lost in the event of mechanical failure, with for commercial AC equipment (unlike automotive AC equipment) is relatively uncommon. Finally, if you wish to move away from R-22 to an acceptable alternative, an incentive of some sort is probably a good idea.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-25 18:56:41

No Duplicates.

**Comment 11 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Justin

Last Name: Koscher

Email Address: justin\_koscher@americanchemistry.com

Affiliation: American Chemistry Council

Subject: ACC CPI SFC Comments on Draft SLCP Reduction Strategy

Comment:

Attached please find comments from the American Chemistry Council's  
Center for the Polyurethanes Industry and Spray Foam Coalition.

Thank you,  
Justin Koscher

Attachment: [www.arb.ca.gov/lists/com-attach/15-slcpdraftstrategy-ws-  
B2ZRNFAyBAhSN1cn.pdf](http://www.arb.ca.gov/lists/com-attach/15-slcpdraftstrategy-ws-B2ZRNFAyBAhSN1cn.pdf)

Original File Name: ACC CPI SFC Comments on Draft CARB SLCP Reduction Strategy  
FINAL 10.26.15.pdf

Date and Time Comment Was Submitted: 2015-10-26 10:49:38

No Duplicates.

## **Comment 12 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Chrisitna  
Last Name: Benz  
Email Address: christinabbenz@gmail.com  
Affiliation: Napa Group Sierra Club

Subject: Use updated models  
Comment:

I am very heartened by ARB's comprehensive and timely SLCP strategy and would like to see the following items included:

- 1) Use the IPCC's radiative forcing model to more accurately value SLCP emissions and potential mitigations. This model takes into account the effects of aerosols which are not accounted for in the Draft Strategy. See [https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5\\_Chapter08\\_FINAL.pdf](https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_Chapter08_FINAL.pdf)
- 2) Insure that methane leaks from oil and gas extraction and pipeline leaks are completely and correctly accounted for. See <http://news.cornell.edu/stories/2015/10/bridge-fuel-may-escalate-atmospheric-greenhouse-gas>
- 3) As stated in the strategy, "State policy is most effective with the support...of local efforts." To achieve this, require that local jurisdictions update or create Climate Action Plans that include SLCP emissions inventories using the updated metrics and reduction goals. The Napa County Climate Action Plan is in the process of being developed and we are requesting that our county incorporate ARB's accounting metrics and goals.

Thank you for your efforts in slowing global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-27 07:24:57

No Duplicates.

## **Comment 13 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Todd

Last Name: Shuman

Email Address: tshublu@yahoo.com

Affiliation: Analyst, Wasteful UnReasonable Use (WURU)

Subject: WURU Comments on CA ARB SLCP Strategy

Comment:

To CA ARB,

On behalf of Wasteful Unreasonable Use (WURU), I request that CA ARB use a yr2013 Intergovernmental Panel on Climate Change (IPCC) 20-year interval methane Global Warming Potential (GWP) constant for all of its methane-to-CO2 equivalency conversion calculations, as well as require the use of the most current IPCC 20-year interval methane GWP constant in all of its various programs (cap and trade [c&t], compliance offsets under c&t, greenhouse gas [GHG] inventories, existing compliance offset protocols under c&t, future compliance offset protocols that have been proposed for incorporation into c&t, pollution permits, etc.)

I request that CA ARB institute mandatory annual dairy manure and enteric fermentation methane emissions reduction targets of 25% by 2020, 50% by 2025, and 75% by 2030.

I make such requests for the following reasons: the IPCC (5th, 2013) concludes that at the 10-year timescale, the current global release of methane from all anthropogenic sources exceeds (slightly) all anthropogenic carbon dioxide emissions as an agent of global warming; that is, methane emissions are as significant as carbon dioxide emissions in driving the current rate of global warming. At the 20-year timescale, total global emissions of methane are equivalent to over 80% of global carbon dioxide emissions. (At the 100-year timescale, current global methane emissions are equivalent to slightly less than 30% of carbon dioxide emission.)

[Source: Intergovernmental Panel on Climate Change, Climate Change 2013: The Physical Science Basis, page 719, Figure 8.32, <https://www.ipcc.ch/report/ar5/wg1/>]

Because of the above information, all anthropogenic sources of methane emission need to be dramatically reduced as quickly as possible in order to decelerate further short-term global warming. Continued rapid global warming could trigger the onset of positive climate change feedbacks that might dramatically accelerate the warming of our planet. Since the two biggest sources of anthropogenic methane emissions in California are enteric fermentation occurring within the stomachs of livestock and anaerobic dairy manure lagoons, these two sources need to be strictly regulated under mandatory emission reduction provisions in

the near future.

Sincerely,

Todd Shuman, Senior Analyst, Wasteful Unreasonable Use,  
2260 Camilar Dr, Camarillo, CA 93010, 805.987.8203,  
tshublu@yahoo.com

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-27 12:21:36

No Duplicates.

**Comment 14 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jim  
Last Name: Wagoner  
Email Address: [jwagoner@bcaqmd.org](mailto:jwagoner@bcaqmd.org)  
Affiliation: Butte County AQMD

Subject: Comments from the BCAQMD Governing Board.  
Comment:

Please refer to the attached comments.

Attachment: [www.arb.ca.gov/lists/com-attach/19-slcpdraftstrategy-ws-VTgHb1A4VGRWOAZp.pdf](http://www.arb.ca.gov/lists/com-attach/19-slcpdraftstrategy-ws-VTgHb1A4VGRWOAZp.pdf)

Original File Name: MNichols.pdf

Date and Time Comment Was Submitted: 2015-10-27 13:51:42

No Duplicates.



**Comment 15 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Staci

Last Name: Heaton

Email Address: sheaton@rcrcnet.org

Affiliation: Rural County Representatives of CA

Subject: RCRC Comments on the Draft SLCP Reduction Strategy

Comment:

Attached please find RCRC's comments on the draft Short-Lived Climate Pollutant Reduction Strategy. Please contact me if you have any questions.

Attachment: [www.arb.ca.gov/lists/com-attach/20-slcpdraftstrategy-ws-VDBUIFU1BzJXJVMM.pdf](http://www.arb.ca.gov/lists/com-attach/20-slcpdraftstrategy-ws-VDBUIFU1BzJXJVMM.pdf)

Original File Name:

Draft\_Short\_Lived\_Climate\_Pollutant\_Strategy\_Ltr\_to\_ARB\_10272015.pdf

Date and Time Comment Was Submitted: 2015-10-28 08:37:32

No Duplicates.

**Comment 16 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Steve  
Last Name: Colome  
Email Address: scolome@pacbell.net  
Affiliation:

Subject: Near-term importance of focusing on methane source-reduction  
Comment:

It makes little sense to calculate the GWP of methane on a 100-year cycle since this gas (in contrast to CO<sub>2</sub>) does not remain in the atmosphere for 100 years.

Even a 20-year GWP of 80-120 does not make much sense given that we may need a strong short-term lever to control the progression of global warming.

With an approximate atmospheric half-life of 7 years and generally stated lifespan of 12 years, California should take account of the very non-linear GWP of methane. For example, see Figure 7 from the following source:

<http://www.eci.ox.ac.uk/research/energy/downloads/methaneuk/chapter02.pdf>

Let's comport the State's policies with the science.

Attachment: [www.arb.ca.gov/lists/com-attach/21-slcpcraftstrategy-ws-VzRWOFAwU3BXJVM2.pdf](http://www.arb.ca.gov/lists/com-attach/21-slcpcraftstrategy-ws-VzRWOFAwU3BXJVM2.pdf)

Original File Name: chapter02 Science of Methane.pdf

Date and Time Comment Was Submitted: 2015-10-28 10:10:58

No Duplicates.

**Comment 17 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jonathan  
Last Name: Melchi  
Email Address: [jmelchi@hardinet.org](mailto:jmelchi@hardinet.org)  
Affiliation: HARDI

Subject: Comments on Draft Short-Lived Climate Pollutant Reduction Strategy  
Comment:

Heating, Air-conditioning and Refrigeration Distributors  
International (HARDI) comments on the ARB's Draft Short-Lived  
Climate Pollutant Reduction Strategy

Attachment: [www.arb.ca.gov/lists/com-attach/22-slcpdraftstrategy-ws-  
BWRTJ1IxAAxXMgRr.docx](http://www.arb.ca.gov/lists/com-attach/22-slcpdraftstrategy-ws-BWRTJ1IxAAxXMgRr.docx)

Original File Name: ARB Comments.docx

Date and Time Comment Was Submitted: 2015-10-28 13:35:53

No Duplicates.

**Comment 18 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Doug  
Last Name: Reinke  
Email Address: dreinke@bluonenergy.com  
Affiliation:

Subject: Draft Short-Lived Climate Pollutant Reduction Strategy  
Comment:

Please see attached comments.

Attachment: [www.arb.ca.gov/lists/com-attach/23-slcpdraftstrategy-ws-VjdVIVY1UFwCZwFu.pdf](http://www.arb.ca.gov/lists/com-attach/23-slcpdraftstrategy-ws-VjdVIVY1UFwCZwFu.pdf)

Original File Name: ARB Comment Letter regarding Short-Lived Climate.pdf

Date and Time Comment Was Submitted: 2015-10-28 15:30:06

No Duplicates.

**Comment 19 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Robert

Last Name: Haw

Email Address: roberthaw2008@gmail.com

Affiliation:

Subject: SLCP mitigation

Comment:

I know that black carbon is being made in sufficient quantities to darken polar and mountain ice. Natural gas is mostly methane, and apparently the gas extraction and distribution network leaks (between 4-12% by volume, see <http://dx.doi.org/10.2147/EECT.S61539>). Since methane has a potent greenhouse warming potential, that leakage rate is unacceptable. So short-lived climate pollutants are a serious problem for preserving a livable world. CARB needs to take all necessary steps to reduce SLCPs to a level commensurate with a stable climate.

Thanks for trying to keep the world safe for my children!

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-28 20:42:00

No Duplicates.

**Comment 20 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Lin

Last Name: Griffith

Email Address: oak2acorns@yahoo.com

Affiliation:

Subject: Short-lived Climate Pollutant Reduction Strategy

Comment:

I am a retired teacher, not a scientist, but I attended a symposium on methane a few months ago and learned that we need to increase attention on and accelerate efforts to reduce methane emissions from the oil and gas sector as well as from the electricity sector.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-28 21:33:29

No Duplicates.

**Comment 21 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Michael  
Last Name: Werner  
Email Address: mww@ipac.caltech.edu  
Affiliation:

Subject: Methane Emissions  
Comment:

Methane is a very dangerous greenhouse gas, more potent than carbon dioxide, which can contribute significantly to global warming. Please do all you can to limit and reduce methane emissions associated with oil and gas production and utilization here in California.

Thank you very much.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 00:46:44

No Duplicates.

**Comment 22 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Felicio  
Last Name: Bander  
Email Address: feliciabander@gmail.com  
Affiliation: Ms.

Subject: Methane Emissions  
Comment:

I urge, in the strongest way possible, the Air Resources Board to limit methane emissions from all sources: gas drilling, infrastructure leakage, and livestock production. We now know that methane is an extremely potent greenhouse gas. Humanity needs the Air Resources Board to set strict standards in limiting emissions as the world faces the huge challenges of climate change.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 03:07:28

No Duplicates.



**Comment 23 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: jan  
Last Name: Freed  
Email Address: freed358@gmail.com  
Affiliation: Citizens Climate Lobby

Subject: Short lived pollutants; methane, etc.  
Comment:

Dear Ms./Sir,

Please do whatever is in your power to limit these dangerous pollutants.

Doing nothing is to drag us ever closer to the cliff of irreversible climate change!

I believe in government because the government is (ideally) we the people. And We must act ASAP and without dithering. Because, we the people are in deep do-do.

Jan Freed

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 03:49:02

No Duplicates.

**Comment 24 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Joleen

Last Name: Siebert

Email Address: jolsiebert@gmail.com

Affiliation:

Subject: Controlling methane emissions

Comment:

It is time for your agency to take steps to reduce greatly methane emissions in California. Especially here in the Central Valley, the health of our citizens is impacted by the pollution from the oil and gas sectors and the electricity sector when they allow the methane they produce to escape into the air. Do your job and cut methane emissions now.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 05:52:28

No Duplicates.

**Comment 25 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Steve

Last Name: Birdlebough

Email Address: affirm@friendshouse.org

Affiliation: Transportation & Land Use Coalition

Subject: Methane Emissions

Comment:

I support the effort to reduce methane and black carbon emissions.  
It seems to me that too little attention has been given to the  
disproportionate impacts these sources have on global warming.  
Agriculture shouldn't be exempt from such controls.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 07:05:33

No Duplicates.

## **Comment 26 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Arthur

Last Name: Boone

Email Address: arboone3@gmail.com

Affiliation: local Sierra Club chapter

Subject: Methane from landfills.

Comment:

There's been a fatal flaw in the measurement of methane coming out of landfills. Dr. Sally Brown at the University of Washington has demonstrated that most rotting food materials have made all their methane in the first six weeks after being discarded. The methane is long gone before those materials would be placed in a landfill, covered with daily cover, and have their methane monitored. Low methane emissions as monitored in a flux type system does not present a true picture of what has happened.

It's also true that methane collection systems are carefully run to avoid drawing air into the system that would create easily explosive mixtures. The analogy is trying to heat Buckingham Palace with one thermostat; a too simple control system for a complex environment.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 07:59:30

No Duplicates.

**Comment 27 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Mary Ann  
Last Name: Reynolds  
Email Address: mareynolds1@att.net  
Affiliation: Citizens Climate Lobby

Subject: Draft SLCP Strategy  
Comment:

I urge your agency to:(1) reduce and contain methane emissions in the San Joaquin Valley and (2) to strengthen your diesel emissions control program for trucks. I live in Merced and the air quality here worsens my allergies making it more difficult to breath easily.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 08:12:57

No Duplicates.

**Comment 28 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Kim F

Last Name: Floyd

Email Address: kimffloyd@fastmail.com

Affiliation:

Subject: Reduce methane and black carbon emissions

Comment:

Please take all possible actions to reduce methane emissions from all sources but especially oil and gas production and from electricity production. It is also critical to our health and well being that diesel black carbon emissions are drastically reduced in the transportation sector.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 08:53:18

No Duplicates.

**Comment 29 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Klara

Last Name: Skacanova

Email Address: klara.skacanova@shecco.com

Affiliation:

Subject: Comments on draft SLCP Strategy, with focus on HFCs

Comment:

shecco strongly supports Air Resources Board's plans to reduce F-gas emissions by 40% by 2030 in California. Comments on the draft Short-Lived Climate Pollutant Strategy reflect some of the key concerns for the natural refrigerant industry, especially, regarding the proposed HFC measures.

Attachment: [www.arb.ca.gov/lists/com-attach/34-slcpdraftstrategy-ws-WjlTOlQ4WGZSMQFv.zip](http://www.arb.ca.gov/lists/com-attach/34-slcpdraftstrategy-ws-WjlTOlQ4WGZSMQFv.zip)

Original File Name: Comments to draft SLCP Strategy.zip

Date and Time Comment Was Submitted: 2015-10-29 09:29:09

No Duplicates.

**Comment 30 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Victoria  
Last Name: Kirschenbaum  
Email Address: vjk1129@aol.com  
Affiliation:

Subject: in support of short-lived climate pollutant reduction  
Comment:

I strongly support CARB's plan to reduce methane and nitrous oxide emissions. Although they dissipate more quickly than CO<sub>2</sub>, these pollutants trap more heat. Tough regulations on the gas and oil industry are essential in our fight to slow global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 09:50:41

No Duplicates.



**Comment 31 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jack  
Last Name: Broadbent  
Email Address: jbbroadbent@baaqmd.gov  
Affiliation:

Subject: BAAQMD Comments re - ARB Draft SLCP Strategy  
Comment:

Attached is a copy of BAAQMD's Comments regarding ARB Draft SLCP Strategy. Thank you.

Attachment: [www.arb.ca.gov/lists/com-attach/36-slcpdraftstrategy-ws-AWBVIVQ3WFQFZ1Qm.pdf](http://www.arb.ca.gov/lists/com-attach/36-slcpdraftstrategy-ws-AWBVIVQ3WFQFZ1Qm.pdf)

Original File Name: ARB Draft Short-Lived Climate Pollutant (SLCP) Strategy 102915.pdf

Date and Time Comment Was Submitted: 2015-10-29 12:55:03

No Duplicates.

## **Comment 32 for Short-Lived Climate Pollutant Draft Strategy (slcpraftstrategy-ws) - 1st Workshop.**

First Name: Elisabeth

Last Name: Lamar

Email Address: elisabethlamar@hotmail.com

Affiliation:

Subject: #ACTONCLIMATE

Comment:

Please institute mandatory annual dairy manure and enteric fermentation methane emissions reduction targets. I recommend the following mandatory annual reduction targets be established: 25% by 2020, 50% by 2025, and 75% by 2030.

use a yr2013 Intergovernmental Panel on Climate Change (IPCC) 20-year interval methane Global Warming Potential (GWP) constant for all annual, short, and mid-term interval methane-to-CO2 equivalency conversion calculations.

Please require the use of the most current IPCC 20-year interval methane GWP constant in all of its various programs (cap and trade [c&t], compliance offsets under c&t, greenhouse gas [GHG] inventories, existing compliance offset protocols under c&t, future compliance offset protocols that have been proposed for incorporation into c&t, pollution permits, etc.) with regard to all annual, short, and mid-term interval calculations, analyses, and emission values.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 13:07:01

No Duplicates.

**Comment 33 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Patrick

Last Name: Wood

Email Address: patrick@agmethaneadvisors.com

Affiliation: Ag Methane Advisors

Subject: Incentives for Methane Reductions from Dairy Digesters

Comment:

Attached please find the comments from Ag Methane Advisors related to CARB's Short-lived Climate Pollutants Reduction Strategy. Thank you, Patrick

Attachment: [www.arb.ca.gov/lists/com-attach/38-slcpdraftstrategy-ws-BmcFZFY6UmRRIwVt.pdf](http://www.arb.ca.gov/lists/com-attach/38-slcpdraftstrategy-ws-BmcFZFY6UmRRIwVt.pdf)

Original File Name: AgMethane\_Comments Re\_2015 SLCP\_ReductionStrategy\_10.29.15.pdf

Date and Time Comment Was Submitted: 2015-10-29 12:59:19

No Duplicates.

**Comment 34 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Edward  
Last Name: Mainland  
Email Address: emainland@earthlink.net  
Affiliation: Sustainable Marin

Subject: CARB Needs Do More to Cut Oil and Gas Methane Emissions  
Comment:

It is high time CARB increased attention to reducing and containing methane emissions from the oil and industry. And that means especially reducing methane emissions from the electricity and transportation sectors. You have got to realize that ordinary citizens are concerned about carbon-impelled global climate disruption, and people are waking up to the fact that methane leakage is a significant factor in this disruption.

Please note: As the Volkswagen scandal has made clear, there has to be a stronger diesel emissions control program in order to lessen black carbon emissions from transportation. There has to be a real and effective program of methane reduction in agriculture, and that means in dairies and anaerobic digesters. CARB should recognize and act on the fact that most landfill gas-to-energy operations still allow more GHG emissions than they save. And the countless leaks of methane from the entire natural gas network of production, distribution and consumption -- we've all seen those photos of columns of methane rising from the leaky pipelines in our cities -- means that natural gas is as dirty carbon-wise as coal if leakage is reckoned, and California should not allow a single more gas-fired power plant. It has to renewables and efficiency and conservation from here on out.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 13:28:50

No Duplicates.

**Comment 35 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Veronica

Last Name: Pardo

Email Address: veronica@crrcnorth.org

Affiliation: California Refuse Recycling Council

Subject: CRRC Comments re: Draft Short-Lived Climate Pollutant Reduction Strategy

Comment:

Thank you for the opportunity to comment on the Draft Short-Lived  
Climate Pollutant Reduction Strategy.

Attachment: [www.arb.ca.gov/lists/com-attach/40-slcpdraftstrategy-ws-  
AWJdKVUmAzNSCw16.pdf](http://www.arb.ca.gov/lists/com-attach/40-slcpdraftstrategy-ws-AWJdKVUmAzNSCw16.pdf)

Original File Name: CRRC SLCP Comment Letter 10.29.15.pdf

Date and Time Comment Was Submitted: 2015-10-29 14:26:44

No Duplicates.

**Comment 36 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Liz

Last Name: Whiteley

Email Address: liz.whiteley@nasrc.org

Affiliation: North American Sustainable Refrigeration

Subject: NASRC Comments on Draft SLCP Reduction Strategy

Comment:

Please see attached comments. Thank you!

Attachment: [www.arb.ca.gov/lists/com-attach/41-slcpcraftstrategy-ws-UCNUPIIwAiEKaFMh.pdf](http://www.arb.ca.gov/lists/com-attach/41-slcpcraftstrategy-ws-UCNUPIIwAiEKaFMh.pdf)

Original File Name: SLCPDraftStrategy\_NASRCcomments\_10-29-15.pdf

Date and Time Comment Was Submitted: 2015-10-29 15:07:38

No Duplicates.

**Comment 37 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Genevieve

Last Name: Abedon

Email Address: genabedon@yahoo.com

Affiliation:

Subject: Draft Short-Lived Climate Pollutant Reduction Strategy

Comment:

You must include the toxic fumigant and fluorinated gas sulfuryl fluoride (SO<sub>2</sub>F<sub>2</sub>) in their strategy for reducing greenhouse gases. SO<sub>2</sub>F<sub>2</sub> has been identified as a significant driver of global warming and is increasingly used in California!

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 16:11:24

No Duplicates.

**Comment 38 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Marcela  
Last Name: Gutiérrez-Graudi  
Email Address: mar@azulproject.org  
Affiliation: Azul

Subject: Sulfuryl fluoride  
Comment:

Good afternoon,

I am writing to ask that you include sulfur dioxide in your list of greenhouse causing gases. My grandfather Adolfo, a bracero in the 1950-60's, suffered greatly and ultimately died from pesticide related health issues, and it is unconscionable and frankly, amoral, that decades later the State of California, after failing so many laborers, continues to take the easy road by ignoring the effects on the ozone and public health of a known pollutant we have known about for years.

My family has suffered enough from the state's negligence to accurately and comprehensively address industrial pollutants. Please stop the cycle by including sulfur dioxide in your greenhouse gas inventory, working with purposefully incomplete list of pollutants only harms those that can least afford it. Stop the environmental injustice.

Gracias,  
Marce Gutiérrez-Graudi

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 16:08:21

No Duplicates.



**Comment 39 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Ann  
Last Name: Lopez  
Email Address: AnnLopez7@gmail.com  
Affiliation: Center for Farmworker Families

Subject: SO2F2  
Comment:

Dear CARB,

You have known for six years that SO2F2 is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.

Your strategy must include a serious study of alternatives to this harmful pesticide.

California can't lead the world both in efforts to reduce SLCPs, and in global use of SO2F2. Which is it to be?

Dr. Ann López, Director  
Center for Farmworker Families

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 16:40:42

No Duplicates.

**Comment 40 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Joyce

Last Name: Dillard

Email Address: dillardjoyce@yahoo.com

Affiliation:

Subject: Comments ARB Reducing Short-Lived Climate Pollutants due 10.30.2015

Comment:

Attached.

Attachment: [www.arb.ca.gov/lists/com-attach/45-slcpdraftstrategy-ws-VTZXPgZqUW9XNABu.pdf](http://www.arb.ca.gov/lists/com-attach/45-slcpdraftstrategy-ws-VTZXPgZqUW9XNABu.pdf)

Original File Name: Comments ARB Reducing Short-Lived Climate Pollutants due 10.30.2015.pdf

Date and Time Comment Was Submitted: 2015-10-29 16:42:31

No Duplicates.

**Comment 41 for Short-Lived Climate Pollutant Draft Strategy  
(slcpraftstrategy-ws) - 1st Workshop.**

First Name: Jack  
Last Name: Milton  
Email Address: nospray@omsoft.com  
Affiliation: Univ. of California

Subject: Sulfuryl Fluoride  
Comment:

You have known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to your inventory of greenhouse gases. Your strategy must include a serious study of alternatives to this harmful pesticide. California can't lead the world both in efforts to reduce SLCPPs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 16:42:16

No Duplicates.

**Comment 42 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Sarah  
Last Name: Aird  
Email Address: sarah@pestidereform.org  
Affiliation: Californians for Pesticide Reform

Subject: Add action on SO2F2 to the strategy  
Comment:

On behalf of the 190+ member organizations of the statewide coalition Californians for Pesticide Reform, I wish to express the coalition's concern over the notable absence of any proposed action on the toxic fluorinated gas sulfuric fluoride.

Specifically, we are troubled by the dismissive relegation of this known GHG to a single paragraph on p.57 of the draft document. By CARB's own admission, it has been well known for six years that SO2F2 is a high GWP gas, and yet it has yet to be added to ARB's GHG inventory.

SO2F2 is now in increasing use as a replacement for the ozone-depleting pesticide methyl bromide, which is being phased out under the Montreal Protocol. California uses an astonishing 50% of global consumption of this health-harming fumigant. As the draft strategy document acknowledges, if it were correctly categorized as a GHG, it would singlehandedly increase California's total F-gas inventory by 25%.

It is simply not good enough to sweep this acknowledged GHG under the rug.

CPR calls on ARB to revise their draft to include a plan to phase out the use of this harmful pesticide, and to make a commitment to a serious study of alternatives.

Sincerely,

Sarah Aird  
Acting Executive Director, Californians for Pesticide Reform

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 16:24:43

No Duplicates.

**Comment 43 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Mike

Last Name: Levin

Email Address: mlevin@fce.com

Affiliation: FuelCell Energy, Inc.

Subject: COMMENTS OF FUELCELL ENERGY, INC. ON DRAFT SHORT-LIVED  
CLIMATE POLLUTANT REDUCTION STRATEG

Comment:

Attached please see the comments of FuelCell Energy, Inc. on the  
draft short-lived climate pollutant reduction strategy.

Attachment: [www.arb.ca.gov/lists/com-attach/48-slcpdraftstrategy-ws-  
VmRRZwY2UDYCKQc2.pdf](http://www.arb.ca.gov/lists/com-attach/48-slcpdraftstrategy-ws-VmRRZwY2UDYCKQc2.pdf)

Original File Name: 2015-10-29; FCE Short Lived Climate Pollutant Comments Final.pdf

Date and Time Comment Was Submitted: 2015-10-29 17:05:12

No Duplicates.

**Comment 44 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Robert  
Last Name: Lieber  
Email Address: liebtaub@sbcglobal.net  
Affiliation:

Subject: Green house gases and our air  
Comment:

California Air Resource Board your strategy for reducing greenhouse gases must include the toxic fumigant and fluorinated gas sulfur dioxide (SO<sub>2</sub>F<sub>2</sub>).

SO<sub>2</sub>F<sub>2</sub> has been identified as a significant driver of global warming and is increasingly used in California as a replacement for methyl bromide (being phased out globally for its ozone depleting properties).

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 17:45:36

No Duplicates.

**Comment 45 for Short-Lived Climate Pollutant Draft Strategy  
(slcpraftstrategy-ws) - 1st Workshop.**

First Name: Ginger

Last Name: Souders-Mason

Email Address: ginger@seajay.org

Affiliation:

Subject: Sulfuryl fluoride

Comment:

Sulfuryl fluoride is an extremely potent green-house gas that must be included in studies for it does cause climate problems. There are non-toxic alternatives that need study and support. The use of composting and the production of new soils has show itself to produce better produce without the need of fungal toxins. These toxic fluoride compounds have killed people and why go down that road that has been recognized for many years. Get with the future, please.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 18:20:23

No Duplicates.

## **Comment 46 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Susan  
Last Name: Anderson  
Email Address: susanjam@yahoo.com  
Affiliation:

Subject: Include SO<sub>2</sub>F<sub>2</sub> in your greenhouse gas reduction strategy  
Comment:

SO<sub>2</sub>F<sub>2</sub> has been identified as a significant driver of global warming and is increasingly used in California as a replacement for methyl bromide (being phased out globally for its ozone depleting properties).

It's a very potent greenhouse gas with high toxicity  
It builds up as residue on food and poses a threat to children  
It is in increasing use in California as a replacement pesticide for methyl bromide  
California uses an astonishing 50% of the global total - 3 million pounds in 2013, according to DPR  
If it were added to CARB's greenhouse gas inventory, it would increase California's F-gas total by 25%  
Yikes! That's bad... How can I help?

CARB now has a prime opportunity to raise the profile of the threat posed by SO<sub>2</sub>F<sub>2</sub> to climate change reduction efforts.

CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to your inventory of greenhouse gases.

CARB's strategy must include a serious study of alternatives to this harmful pesticide.

California can't lead the world both in efforts to reduce SLCPs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?

Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Thank you for your time and consideration of this critical issue.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 18:49:02

No Duplicates.





**Comment 47 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Susan

Last Name: Clark

Email Address: srclark@sbcglobal.net

Affiliation:

Subject: SO<sub>2</sub>F<sub>2</sub> must be included in your strategy to reduce greenhouse gases

Comment:

Your strategy for reducing greenhouse gases must include the toxic fumigant and fluorinated gas sulfur dioxide (SO<sub>2</sub>F<sub>2</sub>).

SO<sub>2</sub>F<sub>2</sub> has been identified as a significant driver of global warming and is increasingly used in California as a replacement for methyl bromide (being phased out globally for its ozone depleting properties).

You must include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in your carbon reduction strategy. Please do the right thing.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 19:40:28

No Duplicates.

## **Comment 48 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Mark

Last Name: Weller

Email Address: mark@pestidereform.org

Affiliation:

Subject: Include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in reduction strategy

Comment:

- CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.
- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCPs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 20:17:45

No Duplicates.

## **Comment 49 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Justin

Last Name: Matlow

Email Address: justinmatlow@hotmail.com

Affiliation:

Subject: Include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in reduction strategy

Comment:

- CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.
- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCPs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 20:43:31

No Duplicates.

## **Comment 50 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Melissa

Last Name: Dennis

Email Address: ms.mdennis@gmail.com

Affiliation: Public School Teacher

Subject: include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in reduction strategy

Comment:

- CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.
- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCPs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 20:59:12

No Duplicates.

## **Comment 51 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jeanne

Last Name: Turner

Email Address: jturner215@comcast.net

Affiliation:

Subject: Include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in reduction strategy

Comment:

- CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.
- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 21:02:18

No Duplicates.

## **Comment 52 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Sally

Last Name: Neas

Email Address: sallyneas@gmail.com

Affiliation:

Subject: Include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in reduction strategy

Comment:

- CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.
- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCPs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 21:35:23

No Duplicates.

## **Comment 53 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jim  
Last Name: Jung  
Email Address: jrj564@aol.com  
Affiliation:

Subject: Reducing short-lived climate pollutants strategy.  
Comment:

I strongly urge that the California Environmental Protection Agency' Air Resources Board adopt the following targets to improve the air quality of the San Joaquin Valley where I live and my family was raised.

3 basic requirements to any California Air Quality Plan:

- 1.) Mandatory annual dairy manure and enteric fermentation methane emissions reduction targets.25% by 2020, 50% by 2025, and 75% by 2030.
- 2.) Use a yr2013 Intergovernmental Panel on Climate Change (IPCC) 20-year interval methane Global Warming Potential (GWP) constant for all annual, short, and mid-term interval methane-to-CO2 equivalency conversion calculations.
- 3.) Require the use of the most current IPCC 20-year interval methane GWP constant in all of its various programs (cap and trade [c&t], compliance offsets under c&t, greenhouse gas [GHG] inventories, existing compliance offset protocols under c&t, future compliance offset protocols that have been proposed for incorporation into c&t, pollution permits, etc.) with regard to all annual, short, and mid-term interval calculations, analyses, and emission values.

The tighter we finally make air quality standards now, the sooner we make the San Joaquin Valley air that our families breath, healthier and foster better health, and fewer medical costs for the state of California and it's residents!

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-29 21:50:58

No Duplicates.



## **Comment 54 for Short-Lived Climate Pollutant Draft Strategy (slcpraftstrategy-ws) - 1st Workshop.**

First Name: Jim

Last Name: Stewart

Email Address: drjimstewart@gmail.com

Affiliation:

Subject: Research to include in regulating landfills

Comment:

Landfill Gas-to-Energy Projects May Release More Greenhouse Gases Than Flaring

Prepared by Jim R. Stewart, PhD, January 2013

When preparing regulations for landfills, published research shows there are 3.8 - 7.8 times more net GHG emissions from energy recovery projects compared to flaring.

See attached paper.

Summary of Policy Recommendations

In summary, to reduce global warming requires the following steps to be implemented immediately:

1. Use current GHG impact value of 33 (over 100 years) or 105 (over 20 years) for methane to calculate the impacts of methane emissions from landfills.
2. Divert all organics (except sewage sludge) from landfills to reduce uncollected emissions.
3. Either compost all organics or digest them in sealed processors that capture all methane.
4. Segregate remaining organics in landfills for the most effective and cost-efficient gas collection (always maintaining high suction).
5. Keep out all liquids from landfills (including not recirculating leachate) to reduce fugitive emissions.
6. Cap landfills with temporary covers over the working face to keep out rain and then install permanent synthetic covers and gas collection systems as soon as possible (within months is important). (The current 5-year NSPS requirement harms our environment and health.)
7. All captured methane should be burned in a flare, boiler or a high efficiency turbine, or used to replace natural gas for heating or fuel cells (after proper filtration to remove harmful gasses); internal combustion (IC) engines should not be used because of unburned methane releases.
8. Stop new landfill gas to energy projects and don't give "renewable energy" credits to landfill gas (unless capture rates over the entire landfill and destruction efficiencies are constantly monitored and demonstrated to be equal to those of a flare.) (The argument that credits should be given if gas

collection projects are installed earlier than local or NSPS requirements should not apply, since fugitive emissions have been found to be so large. The only way to eliminate these fugitive emissions is to eliminate organics from landfills, which would make landfill gas to energy projects uneconomic. Giving renewable energy credits to landfill gas allows it to undercut clean sources like wind and solar and, most importantly, puts source reduction, reuse, recycling, diversion, composting, and anaerobic digestion at a competitive disadvantage.)

Attachment: [www.arb.ca.gov/lists/com-attach/59-slcpdraftstrategy-ws-VTkHYF0yUGdQMAIg.pdf](http://www.arb.ca.gov/lists/com-attach/59-slcpdraftstrategy-ws-VTkHYF0yUGdQMAIg.pdf)

Original File Name: Landfill-gas-to-energyIncreasesGHG-Jan30,2013.pdf

Date and Time Comment Was Submitted: 2015-10-30 06:27:36

No Duplicates.

**Comment 55 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Debbie

Last Name: Reed

Email Address: [dreed@drdassociates.org](mailto:dreed@drdassociates.org)

Affiliation: C-AGG

Subject: C-AGG SLCP Draft Strategy Comments

Comment:

Thank you for the ability to submit the attached comments in response to the ARB SLCP Draft Strategy.

Regards,  
Debbie Reed, C-AGG

Attachment: [www.arb.ca.gov/lists/com-attach/60-slcpdraftstrategy-ws-BmVSeQBgU2cDYIAP.docx](http://www.arb.ca.gov/lists/com-attach/60-slcpdraftstrategy-ws-BmVSeQBgU2cDYIAP.docx)

Original File Name: C-AGG Final Comments ARB SLCP Draft Strategy 10-30-15.docx

Date and Time Comment Was Submitted: 2015-10-30 06:39:49

No Duplicates.

## **Comment 56 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Luana

Last Name: Conley

Email Address: luanaconley@gmail.com

Affiliation: Communities for Sustainable Monterey Cou

Subject: Include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in reduction strategy

Comment:

- CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.
- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming

It's a very potent greenhouse gas with high toxicity

It builds up as residue on food and poses a threat to children

It is in increasing use in California as a replacement pesticide for methyl bromide

California uses an astonishing 50% of the global total - 3 million pounds in 2013, according to DPR

If it were added to CARB's greenhouse gas inventory, it would increase California's F-gas total by 25%

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 07:36:47

No Duplicates.

## **Comment 57 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Marilynne  
Last Name: Manfredi  
Email Address: marilynnemanfre@gmail.com  
Affiliation:

Subject: CA ARB SLCPs Reduction Strategy  
Comment:

My concerns are focused on methane emissions in California and the rest of the world. All anthropogenic sources of methane emissions need to be drastically reduced as quickly as possible in order to cut the current rate of short-term global warming.

While you create the SLCP Reduction Strategy, I would like you to consider the following important areas:

1. Mandatory annual dairy manure and enteric fermentation methane emissions reduction targets. I recommend the following mandatory annual reduction targets be established: 25% by 2020, 50% by 2025, and 75% by 2030.
2. Use a yr2013 Intergovernmental Panel on Climate Change (IPCC) 20-year interval methane Global Warming Potential (GWP) constant for all annual, short, and mid-term interval methane-to-CO2 equivalency conversion calculations.
3. Require the use of the most current IPCC 20-year interval methane GWP constant in all of its various programs (cap and trade [c&t], compliance offsets under c&t, greenhouse gas [GHG] inventories, existing compliance offset protocols under c&t, future compliance offset protocols that have been proposed for incorporation into c&t, pollution permits, etc.) with regard to all annual, short, and mid-term interval calculations, analyses, and emission values.
- 4.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 07:53:45

No Duplicates.

**Comment 58 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Peter

Last Name: Williams

Email Address: peter@neweragroupinc.com

Affiliation: The New Era Group, Inc

Subject: SLCp Reduction Strategy

Comment:

New Era Group, Inc. expresses comments on F-Gas

Attachment: [www.arb.ca.gov/lists/com-attach/63-slcpdraftstrategy-ws-UzBSNVMgBzYCdwll.pdf](http://www.arb.ca.gov/lists/com-attach/63-slcpdraftstrategy-ws-UzBSNVMgBzYCdwll.pdf)

Original File Name: CARBSLCPNEG10-30-15.pdf

Date and Time Comment Was Submitted: 2015-10-30 08:37:23

No Duplicates.

**Comment 59 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Adam

Last Name: Kotin

Email Address: adam@calclimateag.org

Affiliation: California Climate & Agriculture Network

Subject: Diversified Strategies for Reducing Methane Emissions from Dairy Operations

Comment:

Please see attachment for comments of the California Climate & Agriculture Network on the draft Short-Lived Climate Pollutant Strategy. Thank you.

Attachment: [www.arb.ca.gov/lists/com-attach/64-slcpdraftstrategy-ws-B2NVO10qAzUDdwh7.pdf](http://www.arb.ca.gov/lists/com-attach/64-slcpdraftstrategy-ws-B2NVO10qAzUDdwh7.pdf)

Original File Name: Diversified Strategies for Methane in Dairies - Oct. 2015.pdf

Date and Time Comment Was Submitted: 2015-10-30 08:56:59

No Duplicates.

**Comment 60 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: T.

Last Name: Cassidy

Email Address: cassfr51@yahoo.com

Affiliation:

Subject: Methane and other SLCPs

Comment:

Please increase attention on and accelerate efforts to reduce methane emissions from the oil and gas sector and from the electricity sector.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 08:58:44

No Duplicates.



## **Comment 61 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Dale

Last Name: Hillard

Email Address: hillard@salinas.net

Affiliation:

Subject: Include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in reduction strategy

Comment:

- CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.
- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCPs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 09:00:40

No Duplicates.

**Comment 62 for Short-Lived Climate Pollutant Draft Strategy  
(slcpraftstrategy-ws) - 1st Workshop.**

First Name: Patty

Last Name: Baker

Email Address: patty@heartofthetao.com

Affiliation:

Subject: Short-Lived Climate Pollutant Reduction Strategy

Comment:

It is absolutely critical that the toxic fumigant & fluorinated gas sulfuryl fluoride pesticide (SO<sub>2</sub>F<sub>2</sub>) be included in the reduction strategy. It is a significant contributor of global warming. Please do not ignore this very important fact.

Thank you,  
Patty Baker  
Santa Cruz, CA

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 08:59:57

No Duplicates.

**Comment 63 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Nan

Last Name: Wishner

Email Address: nan@cal-ehi.org

Affiliation: CA Environmental Health Initiative

Subject: Including sulfur dioxide in GHG inventory & studying alternatives

Comment:

Please find attached a comment letter re: CARB's SLCP strategy.

Attachment: [www.arb.ca.gov/lists/com-attach/69-slcpdraftstrategy-ws-VyQGbwY1WWxWYgBs.pdf](http://www.arb.ca.gov/lists/com-attach/69-slcpdraftstrategy-ws-VyQGbwY1WWxWYgBs.pdf)

Original File Name: SO2F2letter.pdf

Date and Time Comment Was Submitted: 2015-10-30 09:03:15

No Duplicates.

**Comment 64 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Timothy

Last Name: O'Connor

Email Address: toconnor@edf.org

Affiliation: Environmental Defense Fund

Subject: SLCP comments from Env. Defense Fund

Comment:

Please see attached letter

Attachment: [www.arb.ca.gov/lists/com-attach/70-slcpcraftstrategy-ws-Wj8FZwZhVFhSNwdo.pdf](http://www.arb.ca.gov/lists/com-attach/70-slcpcraftstrategy-ws-Wj8FZwZhVFhSNwdo.pdf)

Original File Name: EDF Comments on SLCP Plan\_Oct 30 FINAL.pdf

Date and Time Comment Was Submitted: 2015-10-30 09:52:24

No Duplicates.

**Comment 65 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Tallula

Last Name: Preston

Email Address: tallula.preston@gmail.com

Affiliation:

Subject: Add SO<sub>2</sub>F<sub>2</sub> to CARB's SLCP reduction strategy!

Comment:

The strategy for reducing greenhouse gases must include the toxic fumigant and fluorinated gas sulfuranyl fluoride (SO<sub>2</sub>F<sub>2</sub>). Now is the time to include everything. Letting some of these compounds go unregulated brings down the effectiveness of the entire plan. Now is the chance.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 09:52:00

No Duplicates.

## **Comment 66 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Todd

Last Name: Shuman

Email Address: tshublu@yahoo.com

Affiliation: Analyst, Wasteful UnReasonable Use

Subject: Supplemental comments concerning CA ARB and SLCP Reduction Strategy

Comment:

These comments below supplement my previous oral and written comments that I have submitted concerning this process. What follows are my written comments based largely on my testimony at the CA ARB SLCP Reduction Draft Strategy, based upon oral comments submitted on October 14, 2015 in Diamond Bar, CA at the CA ARB SLCP Reduction Strategy Workshop.

1: CA ARB needs to align its methane GWP policy across all CA ARB policy spheres with recent legislative and executive recognition of the importance of considering 20-year interval methane GWP constants in evaluating methane's atmospheric heat-trapping impacts. This recognition has been recently enshrined into California state law, in AB 1496, Section 1(a).

2: Please specify in the EA very specifically why CA ARB is not, will not, and/or cannot use a 2013 IPCC (AR 5th) 20-yr interval methane GWP when preparing CA ARB-related GHG inventories and calculating other CO2 equivalencies related to other CA ARB programs (cap and trade, offsets, pollution permits, proposed ACR offset protocols, etc).

3: I request that CA ARB prepare and present an alternative statewide GHG inventory utilizing 2013 IPCC (AR5th) 10-year interval and 20-yr interval methane GWP constants side-by-side with a statewide GHG inventory utilizing the 2007 IPCC 100-yr methane GWP constant currently used by CA ARB.

4: Specify in the EA what barriers exist to incorporating enteric emissions from livestock into CA ARB programs (such as cap and trade), and why enteric emissions are not already incorporated into these programs.

5: The cap and trade program should include enteric emissions from dispersed livestock as a source of methane emission that must be significantly and rapidly reduced. Ranchers and smaller dairy owners who produce livestock in relatively dispersed locations should be required to purchase pollution permits and offset credits just like any other GHG emitter.

6: CA ARB should enact significant mandatory annual reduction targets for methane emissions associated with anaerobic manure lagoons and enteric emissions.

7: The annual methane emission reduction targets specified in the Draft Strategy for dairy manure should also be applied to enteric emissions (20 percent by 2020, 50 percent by 2025, and 75 percent by 2030), though these targets should be mandatory for both dairy manure and enteric fermentation. I recommend increasing the reduction target from 20 percent to 25 percent for yr 2020. I feel strongly that the CA ARB proposed annual emission reduction of only 5 methane-related MMTCO<sub>2e</sub> for dairy and livestock enteric fermentation (Table 6, page 43) by 2030 is embarrassingly low and ethically unacceptable.

8: Reliance upon weak, voluntary dairy industry methane reduction targets is grossly inadequate and ethically irresponsible, given the speed and scale with which global warming impacts are manifesting themselves. CA ARB needs to lead, not follow, concerning the matter of enteric emissions. CA ARB should be prodding the industry to fund necessary independent research in order to enable compliance with mandatory annual methane reduction targets of 25 percent by 2020, 50 percent by 2025 and 75 percent by 2030.

9: CA ARB should require the dairy and livestock industry to fund further independent research that explores the viability of methane gas bio-filtration/bioreactors at dairy and beef-product CAFOs, as well as feed/drink-accessible cow methane respirators. CA ARB should also require that independent research into other significant methane-reduction strategies be funded at significant levels by private industry. No public funding should be used for any of this research. No further Greenhouse Gas Reduction Fund (GGRF) resources should be allocated to subsidizing the dairy and livestock industries in any manner, due to the intrinsically anti-social and anti-ecological methane-emission-related consequences of these industries.

10: CA ARB should modify any American Carbon Registry offset protocols currently in use and up for consideration to incorporate either an updated 10-year interval or 20-year interval methane GWP constant. ACR protocols retain a very low, outdated 100-year interval methane GWP constant to preserve carbon credit fungibility over a 100-year period. It is irresponsible for CA ARB to concur with such narrow economic logic in the face of the disturbing climate change-related effects increasingly appearing on our rapidly-warming planet.

11: Mandatory carbon credit insurance should also be incorporated into the cost of any carbon offset credit sold to enable new scientific information to be rapidly reflected in updated and revised SLCP GWP constants.

11: Claims made by previous commenters concerning the

methane-related emission of grass-fed versus grain-fed livestock are questionable. Various claims and the research supporting such claims conflict within the scientific literature. It is not clear that enteric emissions from livestock on pasture are less than livestock enteric emissions from livestock in CAFOs.

Moreover, claims concerning the value of pasture-based dairy operation concerning soil carbon sequestration are especially questionable. Typically, the effective GHG impact of enteric emissions occurring on such operations have been discounted in the most frequently-cited studies by ignoring enteric emissions altogether or through the use of very low and outdated methane GWPs in the GHG-balancing methodologies of such studies.

Nonetheless, methane emissions from pasture-based operations will be less overall relative to CAFO dairy operations due to much smaller manure-related methane emissions and the smaller numbers of livestock that are typically involved. In this light, I concur with the C4RP&E June 10, 2015 comment: "Pasture-based systems stock fewer cows per acre than confinement systems, which reduces enteric emissions. 'The amount of methane emitted by animals is directly related to the number of animals, so that a more intensive farm will have higher emissions...'" Pasture-based dairy systems that involve low manure-related methane emissions and low numbers of livestock relative to current CAFO dairy systems are superior in terms of SLCP reduction value. In addition, water usage devoted to livestock and dairy production would also likely decline if pasture-based dairy systems become ascendant economically and the overall numbers of livestock in pasture-based systems remain cumulatively and substantially lower than in CAFO-based dairy systems.

Regardless, all livestock producers need to be treated like the operators of coal-fired electricity generation providers -- they need to be prodded into stopping the externalization of their private production-related environmental costs onto the broader societies and natural ecosystems on this planet.

Methane polluters should be taxed or fined for the methane pollution they generate, with the tax or fine based upon a methane-into-CO2-equivalency conversion algorithm that incorporates a 10-year interval methane GWP (at best) or a 20-year interval methane GWP (at worst).

Sincerely,

Todd Shuman, Senior Analyst, Wasteful UnReasonable Use (WURU),  
Camarillo, CA 805.987.8203, tshublu@yahoo.com

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 10:31:14

No Duplicates.



**Comment 67 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Carole

Last Name: Erickson

Email Address: cje8270@gmail.com

Affiliation: Californians for Pesticide Reform

Subject: Draft S-LCPRS

Comment:

\* CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.

- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 10:41:54

No Duplicates.

**Comment 68 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Patricia

Last Name: Alvarez

Email Address: oakiedokey@yahoo.com

Affiliation:

Subject: Include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in reduction strategy

Comment:

- CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.
- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCPs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Thank you,  
Patricia Alvarez

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 10:50:13

No Duplicates.

**Comment 69 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Patricia

Last Name: Ruppelt

Email Address: ruppner@yahoo.com

Affiliation:

Subject: include methyl bromide in considering California greenhouse gas

Comment:

- CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to their inventory of greenhouse gases.
- CARB's strategy must include a serious study of alternatives to this harmful pesticide.
- California can't lead the world both in efforts to reduce SLCs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?
- Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 10:55:29

No Duplicates.

**Comment 70 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Gary  
Last Name: Wolff  
Email Address: gwolff@stopwaste.org  
Affiliation:

Subject: Comments on Draft Short Lived Climate Pollutant Strategy  
Comment:

See comments in attached file.

Attachment: [www.arb.ca.gov/lists/com-attach/76-slcpdraftstrategy-ws-AHNTPQNtVncHdQdY.docx](http://www.arb.ca.gov/lists/com-attach/76-slcpdraftstrategy-ws-AHNTPQNtVncHdQdY.docx)

Original File Name: short lived climate pollutant strategy comments.docx

Date and Time Comment Was Submitted: 2015-10-30 11:20:35

No Duplicates.

**Comment 71 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Linda

Last Name: Novick

Email Address: lnovick@harvestpower.com

Affiliation: Harvest Power

Subject: SLCP Comments

Comment:

Thank you for the opportunity to submit these comments.  
We appreciate the hard work of the CARB staff.

Attachment: [www.arb.ca.gov/lists/com-attach/77-slcpdraftstrategy-ws-VT1RNgZ1VHEGZQJx.pdf](http://www.arb.ca.gov/lists/com-attach/77-slcpdraftstrategy-ws-VT1RNgZ1VHEGZQJx.pdf)

Original File Name: HarvestSLCPcomments10302015.pdf

Date and Time Comment Was Submitted: 2015-10-30 11:03:40

No Duplicates.

**Comment 72 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Joan  
Last Name: Cuadra  
Email Address: Joanwc@gmail.com  
Affiliation:

Subject: Reduction strategy  
Comment:

please include the fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in your reduction strategy.

Thank yiu

Joan cuadra

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 11:45:34

No Duplicates.

**Comment 73 for Short-Lived Climate Pollutant Draft Strategy  
(slcpraftstrategy-ws) - 1st Workshop.**

First Name: Angela  
Last Name: McEliece  
Email Address: amceliece@rcmdigesters.com  
Affiliation: RCM International LLC

Subject: Reducation of Methane Emission on Dairies  
Comment:

We would like to see inclusion of farms, USDA-NRCS and more local Ag Engineers during the development stages of this program. Dairy farms and Agricultural engineers will be the people who will be required to "roll up their sleeves", so to speak, and implement methane emission reduction projects. Building knowledge capacity among this group, as a soon as possible, will reduce the learning curve of any work-groups and aid in the development of practical, realistic and cost effect solutions and programs. Ag Engineers and Dairy farm owners have depth of knowledge and real world experience; their input needs to be heard now and not at the end of this process.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 11:38:44

No Duplicates.

**Comment 74 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Patricia

Last Name: Leavitt-Pagaling

Email Address: transitiontoorganics@gmail.com

Affiliation: Transition to Organics

Subject: Include fumigant pesticide SO<sub>2</sub>F<sub>2</sub> in your reduction strategy

Comment:

Apparently, CARB has known for six years that SO<sub>2</sub>F<sub>2</sub> is a potent greenhouse gas - it's time to add it to your inventory of greenhouse gases. Your strategy must include a serious study of alternatives to this harmful pesticide.

California can't lead the world both in efforts to reduce SLCPs, and in global use of SO<sub>2</sub>F<sub>2</sub>. Which is it to be?

Dow's preferred replacement for methyl bromide doesn't solve anything. Methyl bromide was phased out under the Montreal Protocol for its ozone depleting properties. Don't replace it with another driver of global warming.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 12:09:12

No Duplicates.



**Comment 75 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Brent

Last Name: Newell

Email Address: bnewell@crpe-ej.org

Affiliation: Center on Race, Poverty & the Environmen

Subject: Comments on Draft Short Lived Climate Pollutant Reduction Strategy

Comment:

Please see attached letter dated October 30, 2015.

Attachment: [www.arb.ca.gov/lists/com-attach/81-slcpcraftstrategy-ws-AjAANIVIVDIELAk4.pdf](http://www.arb.ca.gov/lists/com-attach/81-slcpcraftstrategy-ws-AjAANIVIVDIELAk4.pdf)

Original File Name: 2015.10.30 SB 605 Draft Plan comments FINAL.pdf

Date and Time Comment Was Submitted: 2015-10-30 12:28:11

No Duplicates.

## **Comment 76 for Short-Lived Climate Pollutant Draft Strategy (slcpraftstrategy-ws) - 1st Workshop.**

First Name: helen

Last Name: conly

Email Address: conlyhelen@gmail.com

Affiliation: CFROG Citizens for Responsible Oil & Gas

Subject: Lifespan of methane in atmosphere - community health

Comment:

Citizens for Responsible Oil & Gas, Ventura County  
www.cfrog.org

October 30, 2015

To the California Air Resources Board (CA ARB),

Citizens for Responsible Oil and Gas (CFROG) supports the adoption and widespread use of a more scientifically-defensible methane GWP value that is consistent with methane's expected lifespan in the atmosphere. Since methane does not remain in the atmosphere for 100 years, it is not reasonable for CA ARB to continue using a methane GWP based upon a 100-year interval. Even use of a 20-year methane GWP is questionable, given that methane has an approximate atmospheric half-life of 7 years and a generally stated lifespan of 12 years. CA ARB use of a 10-year interval methane GWP makes the most sense to us, as such use would comport CA ARB policy with the actual science concerning methane and provide California with a strong, short-term policy lever to control the progression of global warming. Such a policy lever may be essential in the near future to help prevent the onset of positive climate change feedbacks that might dramatically accelerate the warming of our planet.

In any case, CFROG believes strongly that polluters should be required to pay for the methane pollution they generate, based upon a methane-into-CO2-equivalency conversion algorithm that incorporates a 10-year interval methane GWP (at best) or a 20-year interval methane GWP (at worst). Whatever methane GWP constant is used should be based upon the most recent IPCC GWP values.

CFROG believes that these requests are reasonable and prudent for the following reasons.

1: Use of a 10-year methane GWP would promote a much more rapid reduction in annual methane emissions than continued use of a long-interval methane GWP. Annual methane emissions need to be reduced as quickly as possible if we are to slow down the rapid rate of planetary warming that is occurring. The IPCC (AR5th, 2013) has concluded that at the 10-year timescale, the current global release of methane from all anthropogenic sources will exceed (slightly) all anthropogenic carbon dioxide emissions as an agent of global warming; that is, methane emissions will be as significant as carbon dioxide emissions in driving the rate of

global warming in the near future. At the 20-year timescale, the IPCC notes that total global emissions of methane will be equivalent to over 80% of global carbon dioxide emissions. [Source: Intergovernmental Panel on Climate Change, Climate Change 2013: The Physical Science Basis, page 719, Figure 8.32, <https://www.ipcc.ch/report/ar5/wg1/>]

2: The rationale for using a short-interval methane GWP is provided within the CA ARB Draft SLCP Reduction Strategy document itself: "Climate change is no longer a problem to be defined simply in terms of a legacy we leave to our grandchildren or impacts in the year 2100. It is affecting us now, and will only accelerate in our lifetime. Due to the urgency of the issue, and the need to recognize the costs and benefits of addressing it immediately, we use 20-year GWPs in this report to quantify emissions of SLCPs." [See page ES-6.]

The rationale is also supported by recent actions taken by the California Legislature and Governor Brown. The State of California, in AB 1496, has now officially acknowledged the importance of considering the heat-trapping impacts of methane over a much-shorter timescale: "The people of the State of California do enact as follows: SECTION 1. The Legislature finds and declares all of the following: (a) Methane is . . . an extremely potent greenhouse gas, with 20 to 30 times the warming power of carbon dioxide over a 100-year period and more than 80 times over a 20-year period."

For these reasons, CFROG recommends that CA ARB adopt a yr2013 Intergovernmental Panel on Climate Change (IPCC) 10-year interval methane Global Warming Potential (GWP) constant for use in all annual, short, and mid-term interval methane-to-CO2 equivalency conversion calculations.

CFROG further requests that CA ARB require the use of the most current IPCC 10-year interval methane GWP constant in all of its various programs (cap and trade [c&t], compliance offsets under c&t, greenhouse gas [GHG] inventories, existing compliance offset protocols under c&t, future compliance offset protocols that have been proposed for incorporation into c&t, pollution permits, etc.) with regard to all annual, short, and mid-term interval calculations, analyses, and emission values.

CFROG repeats for the record: methane polluters should be taxed or fined for the methane pollution they generate, with the tax or fine based upon a methane-into-CO2-equivalency conversion algorithm that incorporates a 10-year interval methane GWP (at best) or a 20-year interval methane GWP (at worst).

Sincerely,

CFROG Board of Directors

John Brooks, Carol Holly, Helen Conly, Rain Perry, Todd Shuman  
Policy Advisors to CFROG

Steve Colome PhD, Leif Dautch LLP, Kevin & Theresa Hartigan,  
Richard Holly LLP,

Mary Ann O'Connor, Sarah Otterstrom PhD, Vickie Peters, Tomas  
Rebecchi,

Diane Underhill, C Tom Williams PhD

Attachment: [www.arb.ca.gov/lists/com-attach/82-slcpdraftstrategy-ws-WzhTNF0wADpVNV19.pdf](http://www.arb.ca.gov/lists/com-attach/82-slcpdraftstrategy-ws-WzhTNF0wADpVNV19.pdf)

Original File Name: California Air Resources BoardCFROG comments10302015.pdf

Date and Time Comment Was Submitted: 2015-10-30 12:24:53

No Duplicates.

**Comment 77 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jason

Last Name: Paquette

Email Address: [jpaquette@structuralconcepts.com](mailto:jpaquette@structuralconcepts.com)

Affiliation:

Subject: CARB Comments Draft Strategy SLCP

Comment:

Please see attached comments.

Attachment: [www.arb.ca.gov/lists/com-attach/83-slcpdraftstrategy-ws-AmFVMgR3VGUBWAZl.pdf](http://www.arb.ca.gov/lists/com-attach/83-slcpdraftstrategy-ws-AmFVMgR3VGUBWAZl.pdf)

Original File Name: CARB Comments Draft Strategy SLCP.pdf

Date and Time Comment Was Submitted: 2015-10-30 12:42:30

No Duplicates.

## **Comment 78 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Kevin

Last Name: Fay

Email Address: fay@alliancepolicy.org

Affiliation: Alliance for Responsible Atmospheric Pol

Subject: Alliance Comments on Draft Short-Lived Climate Pollutant (SLCP) Reduction Strategy  
Comment:

October 30, 2015

Mr. Richard Corey, Executive Officer  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

Re: Alliance Comments on Draft Short-Lived Climate Pollutant (SLCP)  
Reduction Strategy

Dear Mr. Corey,

The Alliance for Responsible Atmospheric Policy (Alliance) is an industry coalition organized in 1980 to address the issue of stratospheric ozone depletion. It is the leading voice of manufacturers, businesses and trade associations who make or use fluorinated gases for the global market. Today, Alliance member companies are leading the development of safe, efficient, next-generation, climate- and ozone-friendly technologies and applications. According to a recent study, the US fluorocarbon using and producing industries contribute more than \$158 billion annually in goods and services to the US economy, and provide employment to more than 700,000 individuals with an industry-wide payroll of more than \$32 billion. The Alliance represents companies across several sectors engaged in the development of economically and environmentally beneficial international and domestic policies regarding fluorinated gases. A list of members is attached.

The Alliance is proud of its extensive history of working in a constructive manner with the Air Resources Board (ARB), the US government and international bodies on the protection of stratospheric ozone and the mitigation of climate change. Having submitted comments in response to ARB's SLCP Reduction Strategy concept paper before and after meeting directly with ARB staff to exchange views on the reduction strategy, the Alliance is pleased to provide these considerations with regards to the draft strategy.

The Alliance commends ARB staff on its commitment to an effective process of stakeholder consultation. The Alliance appreciates the sincere engagement and information exchange with industry which has taken place, consistent with the provisions of SB 605.

The Alliance is generally supportive of efforts to reduce

high-global warming potential (GWP) HFCs. ARB's efforts, however, should also be considered in the context of their contribution to an effective global approach. The Alliance encourages ARB to ensure that its strategy chosen balances a focus on direct greenhouse gas emissions from refrigerants with the fact that the vast majority, possibly as much as 95 percent, of emissions related to HVAC is from the energy necessary to operate the equipment.

The Alliance welcomes the agreement it shares with ARB that the most effective means of reducing the future climate change contribution of HFCs should be global in nature. It also must do so in a manner that is orderly, and in a flexible fashion which allows companies to continue to fulfill consumers' need for products and technologies which are vital to public health, food safety, energy conservation, comfort and productivity. The Alliance agrees with ARB that national and international agreements provide the best way to reduce the supply of and emissions from the use of refrigerants with high GWPs. The US EPA has signaled its intent to take additional steps to address the use of HFCs, and a uniform federal standard is more desirable than a state-by-state effort. On that note, the Alliance encourages ARB to carefully consider whether to encourage local and regional regulation of HFCs as seen in the draft strategy. The benefit of a global solution is that it avoids a broad patchwork of sub-global policies, which could lead to inconsistent requirements between regions and added costs of compliance being passed to consumers.

The Alliance recognizes, however, that there is uncertainty over whether the Montreal Protocol will be amended to phase-down HFCs and, as a result, sub-global jurisdictions have begun to address HFCs in order to reduce emissions of high-GWP HFCs. The Alliance appreciates ARB's decision to allow international negotiations under the Montreal Protocol to play out this Fall before determining precisely how California can take actions to support and complement global efforts. The Alliance remains available to provide updates on the state of negotiations under the Protocol as helpful.

The Alliance notes ARB's interest in pursuing additional reductions beyond those which may be achieved under the Montreal Protocol. It is important that any such measures carefully and fully consider relevant environmental and economic impacts, including the challenge faced by a number of sectors in adopting lower-GWP alternatives.

The Alliance appreciates ARB's willingness to incorporate a potential phase-down in California's supply of HFCs which aligns with similar efforts in Australia, Canada, Europe and Japan. The Alliance remains available to serve as an informational resource in the design of such potential structures.

As indicated in the draft strategy, important progress on SLCPs has been made in the Climate and Clean Air Coalition (CCAC). Public and private sector coalition partners, including the Alliance, have developed innovative ways to address this element of the climate change challenge.

In line with ARB's emphasis on developing early voluntary actions to achieve earlier reductions, the Alliance is proud to have been central to the launch of two CCAC initiatives: the Global Food Cold Chain Council and the Global Refrigerant Management Initiative. These industry-led initiatives will reduce the unintended climate

change contribution of HFCs in the food cold chain and servicing sector consistent with the goals of the HFC amendment to the Montreal Protocol.

The Alliance appreciates ARB's recognition of the significant private sector commitments to reduce the climate change impact of HFCs which were made at the White House in September 2014. Many Alliance member companies participated in that important event and the Alliance is pleased to note that a follow-up event was convened by the White House earlier this month. At that event, Alliance member companies announced significant progress towards their 2014 commitments as well as new actions, including plans by the Alliance and other industry partners to develop a Reclaimed HFC Credit Bank.

Refrigerant management, including reclamation, will likely receive a great boost given that the US EPA, at the same White House event this month, announced that it issued a proposed rule as a response to the Alliance's January 2014 petition requesting that the provisions of Sec. 608 of the Clean Air Act be extended to HFCs. It remains the most viable strategy for near term emissions reductions. California must do more to minimize service and disposal emissions and enhance reclaim or reclaimed refrigerants.

The Alliance believes the reclamation of refrigerants can be a useful tool to reduce emissions while providing a source for the continued servicing of installed equipment. To that end, the Alliance appreciates that ARB's proposal to "prohibit the sale or distribution of refrigerants with very-high GWP values" may include an exemption for refrigerants certified to be reclaimed or recycled. This is a reasonable exemption that minimizes environmental costs while potentially creating economic value.

On incentive programs, the Alliance reiterates that the specific mechanism and cost implications must be carefully considered as well as the impact on energy efficiency of low GWP alternatives that might be incentivized. The Alliance encourages ARB to explore incentives for using low-GWP refrigerants which benefit all sectors in lieu of fees based on usage of certain refrigerants.

On potential bans on the use of high-GWP refrigerants, the Alliance reiterates that companies will comment individually on the feasibility of sector-based controls since diverse views exist among Alliance members regarding such measures. Again, the Alliance believes that if ARB moves forward with sector controls, those controls must incorporate the necessary flexibility to enable compliance, avoid the imposition of significant implementation costs and allow consumers to transition to alternative technologies with net-equal or improved energy efficiency. On that note, the Alliance appreciates that ARB notes the connection between energy efficiency and refrigerant choice in appliances and HVACR systems. It is also important to recognize that manufacturers will need alternatives available which allow them to meet increasingly stringent energy efficiency standards.

For any potential HFC controls, the Alliance encourages the Board to take into account the timelines necessary for changes to any relevant codes and standards, including the model building, fire, mechanical and residential codes used in California after adoption.

This important factor has often been a secondary concern for policymakers attempting to address HFCs, but is key to implementing a successful transition from high-GWP HFCs. Technology reviews



must look both at the state of technology as well as what is allowed under the above mentioned codes for commercial and residential properties.

The Alliance would like to emphasize its concern regarding the use of both 20-year and 100-year GWPs in the draft strategy. Although ARB states in the draft strategy that 20-year GWPs "better [capture] the importance of the SCLPs and give a better perspective on the speed at which SLCP emission controls will impact the atmosphere relative to CO2 emission controls," the Alliance notes that consistency in this respect can promote common understanding and consensus-building with affected stakeholders. From a comparative perspective, the 100 year time horizon has been successfully relied upon in both the Montreal Protocol and UN Framework Convention on Climate Change for consistency of decision-making and should continue to be utilized.

As far as suggestions for future information gathering, the Alliance continues to encourage ARB to develop graphic projections which explain the concern that an amendment alone would be insufficient to address emissions from the installed base. Additionally, the Alliance continues to encourage ARB to graphically communicate what emissions reductions can be achieved with each sector proposed for the draft strategy.

Although ARB seeks to harmonize its HFC phase-down with the North American amendment (NAA) proposal in the Montreal Protocol, ARB's phase-down is emissions-based and the proposed NAA is consumption based. The Alliance continues to encourage ARB to resolve this disparity and communicate how ARB has done so.

The Alliance very much looks forward to ARB's proposed strategy and draft Environmental Analysis and continuing to be a resource for ARB staff as it advances these important policies. As a final suggestion, the Alliance reiterates that any policy measure should be assessed based on the following factors:

- Technical feasibility,
- Ease of implementation,
- Ease of enforcement, and
- Anticipated
  - o Environmental Impacts, and
  - o Economic Impacts on Consumers, Small businesses (including contractors, distributors, and retailers), and Industry

While the Alliance supports concerted global action to avoid significant future growth in the greenhouse gas emissions associated with the use of HFCs in their various applications, it is important that those emissions are avoided in a manner that ensures industry is able to continue to deliver critical societal and lifecycle climate benefits provided by their products. ARB's actions to control HFCs should be carefully pursued and incorporate the important considerations we have cited above.

The Alliance remains available to assist ARB staff as it develops its proposed strategy. The Alliance appreciates the opportunity to provide input on ARB's draft strategy and looks forward to working with the agency in a constructive manner to achieve and implement an environmentally beneficial, safety enhancing, and economically viable strategy.

Sincerely,

Kevin Fay  
Executive Director  
Alliance for Responsible Atmospheric Policy

Attachment: [www.arb.ca.gov/lists/com-attach/84-slcpdraftstrategy-ws-VjdRO1Q5AjhRNgt.pdf](http://www.arb.ca.gov/lists/com-attach/84-slcpdraftstrategy-ws-VjdRO1Q5AjhRNgt.pdf)

Original File Name: Alliance Members.pdf

Date and Time Comment Was Submitted: 2015-10-30 12:46:41

No Duplicates.

**Comment 79 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Claire  
Last Name: Broome  
Email Address: cvbroome@gmail.com  
Affiliation:

Subject: SLCPRS -- utmost urgency  
Comment:

Dear CARB,

I am writing as a citizen and taxpayer in California; also as a Professor of Public Health and scientist; to congratulate you on putting a priority on SLCP reduction. Addressing the critical role that methane and black carbon play in near term warming is essential to urgently needed solutions.

Please consider the following points:

- 1) All CARB strategies should have rigorous measurement and accountability built in, so that CARB can document the impact of its strategies, and adjust as appropriate.
- 2) Increase attention on and accelerate efforts to reduce methane emissions from the oil and gas sector and from the electricity sector. Accurate accounting and control of methane from the entire lifecycle of "natural" gas --production, distribution, and combustion-- is essential. Gas is neither "cheap" nor clean when accurate measurements of methane release are included.
- 3) the agency should strengthen its diesel emissions control program to reduce the black carbon emissions from the transportation sector.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 12:55:55

No Duplicates.

**Comment 80 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Linda K.

Last Name: Phillips, Ph.D.

Email Address: lindaphillips@calalum.org

Affiliation:

Subject: Please include sulfuranyl fluoride among regulated SLCPs

Comment:

Thank you for your proposal to reduce emissions of short-lived climate pollutants, including fluorinated gases. This is critically important.

However, I understand that one fluorinated gas is not included: sulfuranyl fluoride.

Several years ago, my home was fumigated with Vikane. No alternative seemed to be available; sulfuranyl fluoride replaced methyl bromide, which had been banned, at least partly because it is a greenhouse gas. Yet this may be a case of unintended consequences, because sulfuranyl fluoride is also a climate pollutant.

Please include sulfuranyl fluoride to the SLCPs that must be reduced in our atmosphere. Either it should be banned from activities where it is emitted, or stringent measures must be required to recapture it and prevent its release to the atmosphere.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 12:45:48

No Duplicates.

## **Comment 81 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Andrew  
Last Name: Christie  
Email Address: achris63@hotmail.com  
Affiliation:

Subject: methane emission reduction  
Comment:

In addition to accelerating efforts to reduce methane emissions from the oil, gas and electricity sectors, CAARB should act on the finding by the Intergovernmental Panel on Climate Change that methane from anthropogenic sources will exceed anthropogenic carbon dioxide emissions over the next decade.

In view of this fact and its implications, CAARB should include in the Short-Lived Climate Pollutant Reduction Strategy dairy manure and enteric fermentation methane emissions reduction targets of 25% by 2020, 50% by 2025, and 75% by 2030.

The 2013 IPCC 20-year interval Global Warming Potential (GWP) constant for methane should be used for all annual, short, and mid-term interval methane-to-CO2 equivalency conversion calculations.

CAARB should incorporate the IPCC 20-year interval methane GWP constant in calculations, analyses and emission values for all its programs, including cap and trade, compliance offsets, greenhouse gas inventories, current and proposed compliance offset protocols for cap & trade, and pollution permits.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 13:07:19

No Duplicates.

**Comment 82 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Matthew

Last Name: Evans

Email Address: MEvans@SmithBucklin.com

Affiliation:

Subject: Comments From the North American Association of Food Equipment Manufacturers

Comment:

Please see attached comments.

Attachment: [www.arb.ca.gov/lists/com-attach/88-slcpldraftstrategy-ws-AG5XMAFmWG4FblcI.pdf](http://www.arb.ca.gov/lists/com-attach/88-slcpldraftstrategy-ws-AG5XMAFmWG4FblcI.pdf)

Original File Name: NAFEM Comments- CARB DRAFT SLCP Reduction Strategy - NAFEM.pdf

Date and Time Comment Was Submitted: 2015-10-30 13:17:03

No Duplicates.

**Comment 83 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Eric  
Last Name: Potashner  
Email Address: [epotashner@recology.com](mailto:epotashner@recology.com)  
Affiliation: Recology

Subject: Recology Comments on the Proposed Short-Lived Climate Pollutant Reduction Strategy  
Comment:

Please see attached comment letter.

Attachment: [www.arb.ca.gov/lists/com-attach/89-slcpdraftstrategy-ws-UCIGZQZkUm5WPAZp.pdf](http://www.arb.ca.gov/lists/com-attach/89-slcpdraftstrategy-ws-UCIGZQZkUm5WPAZp.pdf)

Original File Name: Recology CARB Comment Letter - October 30, 2015.pdf

Date and Time Comment Was Submitted: 2015-10-30 13:28:55

No Duplicates.

**Comment 84 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Stephen  
Last Name: Schaefer  
Email Address: stschaefer@hoshizaki.com  
Affiliation: Hoshizaki America

Subject: comments on reduction strategy  
Comment:

Attached are comments from Hoshizaki America on how Commercial Ice Makers will be negatively affected by the current strategy. Please look at all refrigeration equipment and hear from stakeholders on what is technologically feasible and economically available for use in the market now and when changes will be available.

Attachment: [www.arb.ca.gov/lists/com-attach/90-slcpdraftstrategy-ws-WzhWMVEiWWhSCwhr.doc](http://www.arb.ca.gov/lists/com-attach/90-slcpdraftstrategy-ws-WzhWMVEiWWhSCwhr.doc)

Original File Name: carb\_comments\_103015.doc

Date and Time Comment Was Submitted: 2015-10-30 13:36:45

No Duplicates.



**Comment 85 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jessica

Last Name: Olson

Email Address: olsonj@ayreslawgroup.com

Affiliation:

Subject: Honeywell Comments on ARB Draft Strategy

Comment:

Please see attached comment letter.

Attachment: [www.arb.ca.gov/lists/com-attach/92-slcpdraftstrategy-ws-Bm4BaFc4VFgLbgVq.pdf](http://www.arb.ca.gov/lists/com-attach/92-slcpdraftstrategy-ws-Bm4BaFc4VFgLbgVq.pdf)

Original File Name: HON Comments on ARB draft strategy.pdf

Date and Time Comment Was Submitted: 2015-10-30 13:45:15

No Duplicates.

**Comment 86 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Evan

Last Name: Edgar

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

Affiliation: California Compost Coalition

Subject: Support 90% diversion by 2025 with The Plan before the Ban

Comment:

Edgar & Associates represent the California Compost Coalition, and is the engineer for many private independent compost and recycling companies statewide. The compost industry supports the Draft Strategies in the SLCP Paper and is poised to assist in developing over 100 facilities over the five years to reach the 2020 goal, and another 100 facilities by 2025 to reach the 2025 goal.

The projected result of this diversion strategy to effectively eliminate 90% of the organics by 2025 is over 8 million tons in 2020 and 14.5 million tons in 2025, and when measured in avoided metric tons of carbon dioxide (MTCO<sub>2e</sub>) is 4.3 million MTCO<sub>2e</sub> by 2020 and 7.8 million MTCO<sub>2e</sub> by 2025.

Support CalRecycle request for \$100,000 per year for 5 years.

Attachment: [www.arb.ca.gov/lists/com-attach/93-slcpdraftstrategy-ws-AHNWPARMVHcLUIUw.pdf](http://www.arb.ca.gov/lists/com-attach/93-slcpdraftstrategy-ws-AHNWPARMVHcLUIUw.pdf)

Original File Name: SLCP Edgar White Paper - Submitted 10-29-15.pdf

Date and Time Comment Was Submitted: 2015-10-30 14:06:18

No Duplicates.

**Comment 87 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Maureen  
Last Name: Beatty  
Email Address: mbeatty@refrigerants.com  
Affiliation: National Refrigeratns, Inc.

Subject: Comments on the Comments Draft Short-Lived Climate Pollutant Reduction Strategy  
Comment:

Good afternoon, Please find attached National Refrigerants, Inc.'s  
comments on the SLCP strategy.

Thank you and have a nice weekend!

Attachment: [www.arb.ca.gov/lists/com-attach/94-slcpdraftstrategy-ws-  
BWtVIVM7WVUFYFM8.pdf](http://www.arb.ca.gov/lists/com-attach/94-slcpdraftstrategy-ws-BWtVIVM7WVUFYFM8.pdf)

Original File Name: NRI Comments- ARB SLCP Strategy.pdf

Date and Time Comment Was Submitted: 2015-10-30 14:05:26

No Duplicates.

**Comment 88 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Joe

Last Name: McLaughlin

Email Address: jojomclaughlin@yahoo.com

Affiliation:

Subject: Attacking short lived Green House Gases

Comment:

As part of a comprehensive campaign to address global warming the immediate reduction of short-lived green house gases is a priority action. Reducing these high impact but short-lived gases brings both immediate and long term reductions that move us toward addressing our climate warming production of all green house gases.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 14:06:26

No Duplicates.

**Comment 89 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Arjun  
Last Name: Patney  
Email Address: arjun.patney@winrock.org  
Affiliation: American Carbon Registry

Subject: Comments on Draft SLCP Strategy  
Comment:

Thank you for the opportunity to submit comments. Please see attached.

Kind regards,  
Arjun Patney  
Policy Director  
American Carbon Registry

Attachment: [www.arb.ca.gov/lists/com-attach/96-slcpdraftstrategy-ws-UTAGYwBzWVUAZQNs.pdf](http://www.arb.ca.gov/lists/com-attach/96-slcpdraftstrategy-ws-UTAGYwBzWVUAZQNs.pdf)

Original File Name: ACR comments to ARB on SLCP Strategy Oct 2015.pdf

Date and Time Comment Was Submitted: 2015-10-30 14:14:15

No Duplicates.

**Comment 90 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Emily

Last Name: Davis

Email Address: edavis@nrdc.org

Affiliation: Natural Resources Defense Council

Subject: NRDC and IGSD comments on Draft Short-Lived Climate Pollutant Reduction Strategy  
Comment:

To Whom It May Concern:

Please find attached NRDC and IGSD's comments on CARB's Draft Short-Lived Climate Pollutant Reduction Strategy. We appreciate the opportunity to comment.

Please feel free to contact us with any questions or for additional information.

Thank you,  
Emily Davis

Attachment: [www.arb.ca.gov/lists/com-attach/97-slcpdraftstrategy-ws-UD5cKFYzADABWFax.pdf](http://www.arb.ca.gov/lists/com-attach/97-slcpdraftstrategy-ws-UD5cKFYzADABWFax.pdf)

Original File Name: NRDC and IGSD Comments CARB SLCP.pdf

Date and Time Comment Was Submitted: 2015-10-30 14:09:20

No Duplicates.

**Comment 91 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Bonnie

Last Name: Grey

Email Address: greybonnie2002@yahoo.com

Affiliation:

Subject: SO2F2

Comment:

I am opposed to any fumigation activity that contributes to  
greenhouse gases. Other alternatives exist.

Thank you,  
Bonnie Grey

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 14:24:16

No Duplicates.

**Comment 92 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Helen

Last Name: Walter-Terrinoni

Email Address: helen.a.walter-terrinoni@chemours.com

Affiliation: The Chemours Company

Subject: Chemours comments on the CARB Short-lived Climate Pollutant Reduction Strategy

Comment:

Chemours comments on the CARB Short-lived Climate Pollutant  
Reduction Strategy

Attachment: [www.arb.ca.gov/lists/com-attach/99-slcpdraftstrategy-ws-UTJVO1UxAz1QOVMM.pdf](http://www.arb.ca.gov/lists/com-attach/99-slcpdraftstrategy-ws-UTJVO1UxAz1QOVMM.pdf)

Original File Name: Chemours comments on the CARB Short Lived Climate Pollutant Draft Strategy.pdf

Date and Time Comment Was Submitted: 2015-10-30 14:27:54

No Duplicates.



## **Comment 93 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Sarah

Last Name: Aird

Email Address: sarah@pestidereform.org

Affiliation: Californians for Pesticide Reform

Subject: Add action on SO2F2 to the draft strategy - REVISED COMMENT

Comment:

On behalf of the 190+ member organizations of the statewide coalition Californians for Pesticide Reform, I wish to express the coalition's concern over the notable absence of any proposed action on the toxic fluorinated gas sulfuranyl fluoride.

Specifically, we are troubled by the dismissive relegation of this known GHG to a single paragraph on p.57 of the draft document. By CARB's own admission, it has been well known for six years that SO2F2 is a high GWP gas, and yet it has yet to be added to ARB's GHG inventory.

SO2F2 is now in increasing use as a replacement for the ozone-depleting pesticide methyl bromide, which is being phased out under the Montreal Protocol. California uses an astonishing 50% of global consumption of this health-harming fumigant. As the draft strategy document acknowledges, if it were correctly categorized as a GHG, it would singlehandedly increase California's total F-gas inventory by 25%.

It is simply not good enough to sweep this acknowledged GHG under the rug.

CPR calls on ARB to revise their draft strategy to include a plan to phase out the use of this harmful pesticide, and to make a commitment to a serious study of alternatives.

Sincerely,

Sarah Aird

Acting Executive Director, Californians for Pesticide Reform

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 14:25:25

No Duplicates.

## **Comment 94 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jim

Last Name: Stewart

Email Address: drjimstewart@gmail.com

Affiliation: Retired Professor of Physics

Subject: ARB Must Consider Radiative Forcing of Tropospheric Ozone and Black Carbon

Comment:

ARB Must Consider Radiative Forcing of Tropospheric Ozone and Black Carbon

Comments on California Air Resources Board Draft

Short-Lived Climate Pollutant Reduction Strategy by Jim Stewart,  
PhD, DrJimStewart@gmail.com, 213-820-4345

ARB staff is well aware the Earth's climate is determined by the planetary radiation balance, which is the balance between energy entering at the top of the atmosphere as sunlight and that leaving the atmosphere as reflected light and heat back to space. The departure from the pre-industrial equilibrium is referred to as radiative forcing, which is expressed in W/m<sup>2</sup>. The Integrated Assessment of Black Carbon and Tropospheric Ozone by UNEP and WMO in 2011 reports the dramatic impact of black carbon (BC) and tropospheric ozone (O<sub>3</sub>) on global warming: the best estimate (in 2010) for BC is 0.6 W/m<sup>2</sup> and for O<sub>3</sub> is 0.35 W/m<sup>2</sup>, which together nearly equal the then radiative forcing for CO<sub>2</sub> of about 1.5 W/m<sup>2</sup>.  
Tropospheric Ozone

The UNEP report states, "The increase of tropospheric ozone (O<sub>3</sub>) in the past 100 years has made it one of the most important contributors to human-induced global warming, together with CO<sub>2</sub>, CH<sub>4</sub> and BC. Even though its globally averaged tropospheric human-derived concentration is about 10,000 times smaller than that of CO<sub>2</sub>, O<sub>3</sub>'s current global radiative forcing is about one-sixth to one-third that of CO<sub>2</sub>." "Ozone is not an emitted pollutant and thus for control purposes it is appropriate to attribute the radiative forcing for O<sub>3</sub> to the precursor emissions of methane (CH<sub>4</sub>), carbon monoxide (CO), non-methane volatile organic compounds (NMVOCs) and nitrogen oxides (NO<sub>x</sub>)."

At the October 14 ARB workshop, Ryan McCarthy of the ARB staff asserted that tropospheric ozone was nearly all caused by methane, so the ARB would not consider it as a separate SLCP. However, the UNEP report states, "Two-thirds of the O<sub>3</sub> radiative forcing to date may be attributed to the increase in atmospheric CH<sub>4</sub> over the last century." This implies that the other components contribute about a third, and thus should be considered by ARB as separate SLCPs. The ARB SLCP draft report uses GWP-20 values (which is to be commended -- in contrast to the outmoded GWP-100 values used by ARB in other reports and cap-and-trade calculations). However, the UNEP report states, "It is not possible to calculate GWPs or GTPs for O<sub>3</sub> since it is not emitted directly. Instead these metrics can be calculated for emissions of O<sub>3</sub> precursor species. These species often have an impact on radiative forcing agents other than O<sub>3</sub> and their climate metrics need to take these into account (e.g. Collins et al., 2002; Shindell et al., 2009 )."

The resulting implication is that CO, VOCs and NO<sub>x</sub> should all be

considered as GHGs for the AB 32 Scoping Plan, cap-and-trade, etc. Thus ARB should bring CO, VOCs and NOx under the cap and use Greenhouse Gas Reduction Funds (GGRF) to pay for their reductions. If ARB does not do this, the ARB Environmental Assessment (EA) must explain why not.

The complexity of methane's effects is illustrated by Figure 3.14 from the UNEP report. But the important thing to note is that the RF of methane is about 1 W/m<sup>2</sup>, almost as much as carbon dioxide.

"Figure 3.14. Global mean pre-industrial to present-day RF by emitted species from AR4 and Shindell et al., 2009. Numerical values next to each bar give total forcing summed over all the effects included in the calculations. Aerosol indirect effects are not included, nor are interactions with ecosystems."

Black Carbon

The UNEP report states, "Even though the globally averaged ground-level concentration of black carbon (BC) is presently about 0.1 micrograms/m<sup>3</sup> (Chapter 3), compared to about 200 milligrams/m<sup>3</sup> of anthropogenic CO<sub>2</sub>, its instantaneous radiative forcing due to absorption alone may be about half that of anthropogenic CO<sub>2</sub>."

"Globally averaged net forcing is likely to be positive and in the range 0.0 to 1.0 W/m<sup>2</sup>, with a best estimate of 0.6 W/m<sup>2</sup> (values include the enhanced efficacy of BC forcing due to snow and ice darkening)."

Thus all sources of black carbon (see list in the next figure) are contributing to global warming and need to be considered by ARB as GHGs for the AB 32 Scoping Plan, cap-and-trade, etc. Thus ARB should strictly regulate them, or bring them under the cap and use Greenhouse Gas Reduction Funds to pay for their reductions. If ARB does not do this, the Environmental Assessment (EA) must explain why not.

What is particularly appalling about the ARB Draft Short-Lived Climate Pollutant Reduction Strategy is that no reductions are scheduled for off-road vehicles by 2030. Thus off-road vehicles will continue to be a major contributor to GHGs as well as to health impacts. If ARB strategy does not include off-road vehicles, the Environmental Assessment (EA) must explain why not.

Impacts: Impacts of black carbon and tropospheric ozone are huge. A few of the ones mentioned in the UNEP report include:

1. Temperature Rise: "The equilibrium warming that would result from changes in burdens of black carbon (BC) and tropospheric ozone (O<sub>3</sub>) from pre-industrial to 2005 is estimated at 0.0 to 0.8°C for BC and 0.1 to 0.4°C for O<sub>3</sub> as a global average, with larger contributions in the northern hemisphere mid-latitudes. For comparison, the equilibrium warming for the observed increase in carbon dioxide (CO<sub>2</sub>) over the same time period is about 1.3°C."

2. Health Impacts: "Globally, premature deaths associated with O<sub>3</sub> exposure are valued at US\$400 billion."

3. Decreased Crop Yields: "Limited evidence suggests that crop yields will be significantly affected by changes in regional climate that are likely to be enhanced in areas with high BC and O<sub>3</sub> pollution. Surface warming due to O<sub>3</sub> acting as a greenhouse gas and BC will affect temperatures, cloudiness, rainfall amounts and patterns, and river flow, the latter through BC impacts on glacier melting and evaporation; all of these factors will impact agricultural production. Additionally, changes in the amount and quality of photosynthetically active radiation caused by BC and aerosols may also affect crop yields."

4. Global Ecosystems: "Changes in global ecosystem net primary

productivity caused by an increase in O3 damage will have a substantial impact on carbon sequestration in ecosystems and hence on radiative forcing. A global modelling study has shown that reduction in carbon sequestration caused by O3 impacts on vegetation could double the effective radiative forcing attributable to tropospheric O3 under a future 2100 SRES A2 scenario.

#### Near-term Climate Protection Benefits from Controlling Short-Lived Climate Forcers

The chart below sums up the climate benefits of controlling CH4 and black carbon: even with no CO2 control measures, the 2040 temperature rise is limited to 1.4°C, compared to 1.8°C for only CO2 measures. The implication of this chart for ARB is that they need to switch immediately from their current emphasis on CO2 measures (almost all GGRF funds go toward reducing CO2) to a balance, perhaps 50-50. If ARB does not do this, the Environmental Assessment (EA) must explain why not.

This report also has extensive data on the health benefits from controlling Short-Lived Climate Forcers.

Attachment: [www.arb.ca.gov/lists/com-attach/101-slcpdraftstrategy-ws-WjRdPgjBTJXPFI9.doc](http://www.arb.ca.gov/lists/com-attach/101-slcpdraftstrategy-ws-WjRdPgjBTJXPFI9.doc)

Original File Name: NeedMoreEmphasisOnBlackCarbon,Ozone-Stewart.doc

Date and Time Comment Was Submitted: 2015-10-30 14:28:29

No Duplicates.

**Comment 95 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Daryl  
Last Name: Gale  
Email Address: turtleperson@earthlink.net  
Affiliation:

Subject: Short lived climate pollutants  
Comment:

I am very concerned about methane and nitrous oxides!

These pollutants are highly toxic, promote all sorts of health effects and trap other pollutants and contribute to the drought and higher temperatures we are suffering with here in Southern California.

With the oil industry and most utilities dragging their feet and saying its too expensive to mitigate pollution, it is showing once again how little they care for the air and people of California!

Please develop and enforce stricter regulations.

Daryl  
Los Angeles

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 14:23:16

No Duplicates.

**Comment 96 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jack  
Last Name: Ames  
Email Address: amesjack000@gmail.com  
Affiliation: retired biologist

Subject: Fumigant SO<sub>2</sub>F<sub>2</sub>  
Comment:

Dear people,  
I am adamantly against the use of any potent greenhouse gas  
fumigant. When are farmers going to learn to get along with the  
world.  
Jack Ames

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 14:27:31

No Duplicates.

**Comment 97 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Rich

Last Name: Rosen

Email Address: rrosen@uri.com

Affiliation: United Refrigeration, Inc.

Subject: Comments on Draft SLCP Reduction Strategy

Comment:

Please find attached URI's comments on the reduction strategy.  
Thank you.

Attachment: [www.arb.ca.gov/lists/com-attach/104-slcpcraftstrategy-ws-UTBUIAZIWFRVIARo.pdf](http://www.arb.ca.gov/lists/com-attach/104-slcpcraftstrategy-ws-UTBUIAZIWFRVIARo.pdf)

Original File Name: ARB SLCP Strategy-URI.pdf

Date and Time Comment Was Submitted: 2015-10-30 14:37:20

No Duplicates.



## **Comment 98 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Gary

Last Name: Parker

Email Address: gparker@rsd.net

Affiliation: Refrigeration Supplies Distributor

Subject: F-Gas Mitigation Strategy

Comment:

Thanks to everyone that participated in the SLCP-Public Workshops. As a Refrigeration and Air Conditioning distributor we work very closely with facility operators and mechanical contractors. Over the last decade I have conducted hundreds of educational meetings talking about the HCFC phase out and the importance of moving to (Non-ODP) HFC refrigerants. Although there has been some pushback, the industry as a whole has embraced this change and work is being done on a daily basis to achieve this goal.

The sheer number of facilities that this affects, the technical man power required and the cost associated with a refrigerant retrofit has required companies to adopt a gradual conversion programs, with 2020 being the target date for completion.

When HFC's were first identifies as having High GWP, some companies simply stopped their retrofit efforts. Clearly making a change now with yet another change on the horizon had many concerned; should they to stay the course, convert their facilities to new unfamiliar and costly technology or wait for yet another retrofit solution?

As I am sure you are aware, all of these scenarios are being played out.

With respect to HFC's in general; I am not trying to argue the science, but one area I question in your presentation was the impact our industry has on the HFC usage as whole. Prior to 2010, the majority of HFC's, particularly R134A were used in Foams, Aerosols and Automotive AC. Now that most of those industries have been or are being converted to other materials, AC-Refrigeration is the predominant share, of what remains. You also indicated that HFC use in the AC-Ref sector was on the rise. With the HCFC conversion still underway, that would only make sense.

Our industry has proven that we will work to comply with whatever is legislated. Beyond the retrofit activity, system designs and service practices have lowered both the refrigerant charge and the service leak rates. I don't have statistics, but it seems we have been able to make progress with minimal economic impact.

There are arguments both pro and con on the direction our industry should go. Natural refrigerants like Co2 are certainly viable, but there is some question whether energy efficiency, and by extension water consumption would be negatively affected in high ambient (+95F) Climates. Even if they are able to make an energy neutral design, the initial cost of these systems in well over \$1,000,000 per location so a rapid move by even the most well-funded Supermarket chains would be difficult at best.

In Europe they are moving in part to self-contained refrigeration cases using natural refrigerants including hydrocarbons. All of these fixtures would need to be water cooled, which given our

current state, could present an additional challenge. Also, the adoption of Hydrocarbon refrigerants like Propane or Butane, are strictly limited by UL and the municipal fire and building codes. So, despite their popularity in EU, they would not be easily adopted in the US.

With Respect to HFO technology; Unlike the Foams, Aerosols and Automotive industries the development of HFO refrigerants was not considered a priority until the recent move to retire HFC's . These products are just now becoming commercially available and although they have slightly higher GWP values than naturals, they perform well in existing system with, in some cases improved energy efficiency. Keep in mind that pure HFO's have lower GWP values than even CO2 (based on ICCP -5 data). The limiting factor is their A2L flammability level. These are much lower than those A3-hydrocarbons, but still prohibited by current codes. The coordination of the various regulatory agencies should really be considered before a decision is made.

To summarize; Moving from a gradual HCFC to HFC conversion protocol to a rapid HFC to ???, conversion is likely to have far reaching consequences. I would encourage you to review the timelines that you have outlined and consider a more gradual conversion goal. It would be a shame to jump to a new technology that would not only require significant investment but could ultimately, require more energy and result in a higher TEWI (total equivalent warming impact).

Thank you

Gary Parker  
Refrigerants Product Manager  
Refrigeration Supplies Distributor  
gparker@rsd.net

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 14:52:01

No Duplicates.

**Comment 99 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Christiana  
Last Name: Darlington  
Email Address: darlingtonlaw@gmail.com  
Affiliation: Placer Co Air Pollution Control District

Subject: SLCP comments  
Comment:

Please find attached comments of Placer APCD.

Thanks very much

Christa Darlington

Attachment: [www.arb.ca.gov/lists/com-attach/106-slcpdraftstrategy-ws-VCRWM1ExUXJRNAdj.pdf](http://www.arb.ca.gov/lists/com-attach/106-slcpdraftstrategy-ws-VCRWM1ExUXJRNAdj.pdf)

Original File Name: PCAPCD SLCP Reduction Strategy Comments - signed.pdf

Date and Time Comment Was Submitted: 2015-10-30 14:53:22

No Duplicates.

**Comment 100 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Justin  
Last Name: Oldfield  
Email Address: justin@calcattlemen.org  
Affiliation: California Cattlemen's Association

Subject: Comments  
Comment:

Attached.

Attachment: [www.arb.ca.gov/lists/com-attach/107-slcpdraftstrategy-ws-Wj5WIgdnVWAEdlcI.pdf](http://www.arb.ca.gov/lists/com-attach/107-slcpdraftstrategy-ws-Wj5WIgdnVWAEdlcI.pdf)

Original File Name: Draft Strategy Comments 10-29-2015.pdf

Date and Time Comment Was Submitted: 2015-10-30 14:56:22

No Duplicates.

**Comment 101 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Michelle

Last Name: Passero

Email Address: Mpassero@tnc.org

Affiliation: The Nature Conservancy

Subject: Comments from The Nature Conservancy on Draft Short-Lived Climate Pollutants  
Strategy

Comment:

Please accept the attached comments from The Nature Conservancy.

Thank you.

Attachment: [www.arb.ca.gov/lists/com-attach/108-slcpdraftstrategy-ws-VyQGbFMxVHcEXQdz.pdf](http://www.arb.ca.gov/lists/com-attach/108-slcpdraftstrategy-ws-VyQGbFMxVHcEXQdz.pdf)

Original File Name: SLCP\_TNCCComments\_Final.pdf

Date and Time Comment Was Submitted: 2015-10-30 15:15:08

No Duplicates.

**Comment 102 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Julee

Last Name: Malinowski Ball

Email Address: julee@ppallc.com

Affiliation: California Biomass Energy Alliance

Subject: Comments: Short-Lived Climate Pollutant Reduction Strategy

Comment:

Attached please find comments from the California Biomass Energy Alliance in support of Short-Lived Climate Pollutant Reduction Strategy.

Attachment: [www.arb.ca.gov/lists/com-attach/109-slcpdraftstrategy-ws-VDVXI10+AAwFcAVt.pdf](http://www.arb.ca.gov/lists/com-attach/109-slcpdraftstrategy-ws-VDVXI10+AAwFcAVt.pdf)

Original File Name: ARB Short-Lived Climate Pollutant Strategy (10-30-2015).pdf

Date and Time Comment Was Submitted: 2015-10-30 15:28:28

No Duplicates.

**Comment 103 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Michael  
Last Name: Gallo  
Email Address: mgallo@josephfarms.com  
Affiliation:

Subject: Comments on Draft Short-Lived Climate Pollutant Reduction Strategy  
Comment:

We appreciate the opportunity to submit comments on the draft Short-Lived Climate Pollution Reduction Strategy (SLCPRS). As one of the California's leaders in sustainable dairy farming and onsite renewable energy for cheese production, we support the goals of the Short-Lived Climate Pollution Reduction Strategy and applaud its objectives to significantly reduce methane emissions and increase the adoption of methane reducing technologies in California.

Please see further comments attached.

Attachment: [www.arb.ca.gov/lists/com-attach/110-slcpdraftstrategy-ws-UCNUOIM9AyJWJARb.pdf](http://www.arb.ca.gov/lists/com-attach/110-slcpdraftstrategy-ws-UCNUOIM9AyJWJARb.pdf)

Original File Name: Short Lived Climate Pollutant Reduction Strategy\_Joseph Gallo Farms.pdf

Date and Time Comment Was Submitted: 2015-10-30 15:35:47

No Duplicates.

**Comment 104 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Charles  
Last Name: White  
Email Address: cwhite1@wm.com  
Affiliation: Waste Management

Subject: Solid Waste & Recycling Industry and Local Government Coalition Comments on  
Proposed SLCP

Comment:

Dear CARB --

Please accept the attached zip file that contains a Coalition Letter and an Attachment A discussion our comments, concerns and recommendations regarding the draft proposed SLCP Strategy. Please confirm receipt of the attachments to me.

Best --

Charles A. White  
cwhite1@wm.com

Attachment: [www.arb.ca.gov/lists/com-attach/111-slcpdraftstrategy-ws-WjwGaQNsUmACaFIN.zip](http://www.arb.ca.gov/lists/com-attach/111-slcpdraftstrategy-ws-WjwGaQNsUmACaFIN.zip)

Original File Name: Final Coalition Letter to CARB.zip

Date and Time Comment Was Submitted: 2015-10-30 15:39:26

No Duplicates.



**Comment 105 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Charles

Last Name: Purshouse

Email Address: charles.purshouse@camcocleanenergy.com

Affiliation:

Subject: Camco Response to Draft SLCP

Comment:

See attached submission

Attachment: [www.arb.ca.gov/lists/com-attach/112-slcpcraftstrategy-ws-UTJWMQZqBTUHblUK.pdf](http://www.arb.ca.gov/lists/com-attach/112-slcpcraftstrategy-ws-UTJWMQZqBTUHblUK.pdf)

Original File Name: Camco Comments on SLCP Oct 2015.docx.pdf

Date and Time Comment Was Submitted: 2015-10-30 15:34:11

No Duplicates.

**Comment 106 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Mikhael

Last Name: Skvarla

Email Address: mikhael\_skvarla@gualcogroup.com

Affiliation: CCEEB/The Gualco Group, Inc.

Subject: CCEEB's Draft SLCP Reduction Strategy Comments

Comment:

Please find CCEEB's comments on the Draft SLCP Reduction Strategy.

Attachment: [www.arb.ca.gov/lists/com-attach/113-slcpdraftstrategy-ws-WzgGY1QwAjQKbghX.pdf](http://www.arb.ca.gov/lists/com-attach/113-slcpdraftstrategy-ws-WzgGY1QwAjQKbghX.pdf)

Original File Name: CCEEB SLCP Draft Strategy - Final\_10-30.pdf

Date and Time Comment Was Submitted: 2015-10-30 15:40:25

No Duplicates.

**Comment 107 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Charles  
Last Name: White  
Email Address: cwhite1@wm.com  
Affiliation: Waste Management

Subject: WM Supplemental Comments on Draft Proposed SLCP Strategy  
Comment:

Dear CARB --

Please accept the attached zip file with comments, concerns and recommendations from Waste Management as a supplement to the separately transmitted Coalition letter. The Zipped WM letter and attachments describe the need to update the assessment of SLCP from solid waste and recycling operations using the most current information available.

Please confirm receipt of the zipped documents back to me.

Sincerely,

Charles A. White, PE  
cwhite1@wm.com

Attachment: [www.arb.ca.gov/lists/com-attach/114-slcpdraftstrategy-ws-VDIAb1c4AzEKYANc.zip](http://www.arb.ca.gov/lists/com-attach/114-slcpdraftstrategy-ws-VDIAb1c4AzEKYANc.zip)

Original File Name: Final WM Letter to CARB.zip

Date and Time Comment Was Submitted: 2015-10-30 15:39:26

No Duplicates.

**Comment 108 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Rachael  
Last Name: O'Brien  
Email Address: rachael@agcouncil.org  
Affiliation: Ag Council

Subject: Short-Lived Climate Pollutant Reduction Strategy  
Comment:

Ag Council appreciates the opportunity to submit comments on the  
SLCP Reduction Strategy. Please see attached letter.

Attachment: [www.arb.ca.gov/lists/com-attach/115-slcpdraftstrategy-ws-  
BnUAalc1V3QGX1My.pdf](http://www.arb.ca.gov/lists/com-attach/115-slcpdraftstrategy-ws-BnUAalc1V3QGX1My.pdf)

Original File Name: SLCP\_AgCouncil\_Comments\_Oct2015.pdf

Date and Time Comment Was Submitted: 2015-10-30 15:43:25

No Duplicates.

**Comment 109 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Charles  
Last Name: White  
Email Address: cwhite1@wm.com  
Affiliation:

Subject: Solid Waste & Recycling Industry and Local Government Coalition Comments on  
Proposed SLCP

Comment:

Dear CARB --

Please accept the attached comment letter and Attachment B for your consideration regarding the draft proposed SLCP strategy. These comments are from the parties represented on the Cover Letter and represent our view, comments, concerns and recommendations regarding the proposed SLCP Strategy.

Please confirm receipt of these documents

Sincerely

Charles A. White, P.E.  
cwhite1@wm.com

Attachment: [www.arb.ca.gov/lists/com-attach/116-slcpdraftstrategy-ws-UjRQPwFuAzEFbwNc.zip](http://www.arb.ca.gov/lists/com-attach/116-slcpdraftstrategy-ws-UjRQPwFuAzEFbwNc.zip)

Original File Name: Final Coalition Letter to CARB.zip

Date and Time Comment Was Submitted: 2015-10-30 15:39:26

No Duplicates.

## **Comment 110 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Rick

Last Name: Bettis

Email Address: rckbettis40@gmail.com

Affiliation: Sierra Club, Breathe Ca.League of Women

Subject: Short Lived Climate Pollutants

Comment:

Given the apparent more rapid than anticipated concentration of Greenhouse gases in the atmosphere and the accompanying impacts such as ocean warming, glacier melting, AND more extreme weather events the importance of SLCP has become more critical.

The analysis and conclusion of the IPCC should be the basis for all policies and regulations development by the ARB.

1. We need to strictly limit methane emission from dairies and support the implementation of anaerobic digestion energy facilities at dairies.

2. Capture and use landfill methane emissions.

3. Support replacement of refrigeration and air conditioning systems to reduce the amount of leakage of fluoridated gases.

4. Require and support engine upgrades to reduce cancer causing particulate emissions that are also a source of SLCP.

Thank You for your consideration.

Rick Bettis

Sacramento California

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 15:28:23

No Duplicates.

**Comment 111 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Marisa  
Last Name: Lundin  
Email Address: mlundin@crla.org  
Affiliation: California Rural Legal Assistance, Inc.

Subject: Comments on draft SLCP strategy  
Comment:

Please find comments attached on behalf of California Rural Legal Assistance, Inc.

Thank you,

Marisa Christensen Lundin | Staff Attorney\*  
Community Equity Initiative

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California Rural Legal Assistance - CRLA  
Fighting for Justice, Changing Lives

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211 Bear Mountain Blvd.  
Arvin, California 93203  
EMAIL: mlundin@crla.org  
MOBILE: 661.375.7211

Attachment: [www.arb.ca.gov/lists/com-attach/118-slcpdraftstrategy-ws-VWdVY1ZmVzEKUwFy.pdf](http://www.arb.ca.gov/lists/com-attach/118-slcpdraftstrategy-ws-VWdVY1ZmVzEKUwFy.pdf)

Original File Name: 2015 SLCP Strategy Comment Letter CRLA Final for Submission.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:05:11

No Duplicates.

**Comment 112 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Kayla M.

Last Name: Wagner

Email Address: KMW@Astor-Kingsland.com

Affiliation:

Subject: Comment Letter Re SLCP

Comment:

See attached.

Attachment: [www.arb.ca.gov/lists/com-attach/119-slcpdraftstrategy-ws-BmVROABsV2kAY1U7.pdf](http://www.arb.ca.gov/lists/com-attach/119-slcpdraftstrategy-ws-BmVROABsV2kAY1U7.pdf)

Original File Name: Comment Letter to CARB re SLCP 10.29.15.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:06:05

No Duplicates.



**Comment 113 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Diana

Last Name: Vazquez

Email Address: Diana.Vazquez@sierraclub.org

Affiliation: Sierra Club California

Subject: Comments on the Draft Short-Lived Climate Pollutant Reduction Strategy (September 2015)

Comment:

Please see attachment! Re- sending letter.

Attachment: [www.arb.ca.gov/lists/com-attach/120-slcpdraftstrategy-ws-BXZRPwRqAyJWJABf.pdf](http://www.arb.ca.gov/lists/com-attach/120-slcpdraftstrategy-ws-BXZRPwRqAyJWJABf.pdf)

Original File Name: Short Lived Climate Pollutants Comment Letter-(Final).pdf

Date and Time Comment Was Submitted: 2015-10-30 16:07:45

No Duplicates.

**Comment 114 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Margaret

Last Name: Reeves

Email Address: mreeves@panna.org

Affiliation: Pesticide Action Network

Subject: Sulfuryl Flouride not adequately addressed in SLCP Draft Strategy

Comment:

Please find attached file.

Thank you,

Margaret Reeves

Attachment: [www.arb.ca.gov/lists/com-attach/121-slcpdraftstrategy-ws-UDFSJ10+U15SJ1ci.pdf](http://www.arb.ca.gov/lists/com-attach/121-slcpdraftstrategy-ws-UDFSJ10+U15SJ1ci.pdf)

Original File Name: ARB sulf fl PAN.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:14:35

No Duplicates.

**Comment 115 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Kevin  
Last Name: Flynn  
Email Address: kevin.flynn@brooks.com  
Affiliation: Brooks Automation

Subject: Comments to the September 2015 Draft Strategy  
Comment:

Please review the detailed response to the proposed strategy.

Attachment: [www.arb.ca.gov/lists/com-attach/124-slcpcraftstrategy-ws-UTNTJ1M9VWIXOgBz.pdf](http://www.arb.ca.gov/lists/com-attach/124-slcpcraftstrategy-ws-UTNTJ1M9VWIXOgBz.pdf)

Original File Name: Brooks-Letter in Response to CA-ARB-Draft-Proposal-9-30-2015.pdf

Date and Time Comment Was Submitted: 2015-10-30 15:42:20

No Duplicates.

## **Comment 116 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Evan

Last Name: Edgar

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

Affiliation: Edgar & Associates for Ca. Compost

Subject: Compost and Anaerobic Digestion - AB 32 Cost Effective Measures

Comment:

It would be timely for California Air Resources Board adopt, update, and amend a cost-effectiveness study of AB 32 like the one presented by Stanford University. Data from such a study will show that investments in emerging organics waste management technologies for the production of renewable natural gas and compost will make significant and efficient progress towards accomplishing AB 32's mandate.

The CCC has encouraged CARB and CalRecycle to take advantage of the flow of information from the Organics Grant Program to analyze the aggregate data received to provide an assessment of the metrics associated with greenhouse gas reductions from organics management approaches. The Cap-and-Trade program raised \$850 million for the 2014-2015 Budget with \$30 million allocated to recycling and composting, \$200 million to low carbon transportation, and \$20 million to improving agricultural efficiency. The allocation was based upon the investment priorities set by the Governor and his Climate Action Team which promoted three key sectors that reduce greenhouse gases: Sustainable Communities & Clean Transportation, Energy Efficiency & Clean Energy, and Natural Resources & Waste Diversion.

Anaerobic digestion with composting is the only program that intersects all three key sectors and should receive greater allocation in the future.

Attachment: [www.arb.ca.gov/lists/com-attach/125-slcpdraftstrategy-ws-WjdSNQNwU2dRPgRq.pdf](http://www.arb.ca.gov/lists/com-attach/125-slcpdraftstrategy-ws-WjdSNQNwU2dRPgRq.pdf)

Original File Name: Marginal Abatement Costs Draft.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:15:33

No Duplicates.

**Comment 117 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Sarah

Last Name: Deslauriers

Email Address: sdeslauriers@carollo.com

Affiliation: CA Wastewater Climate Change Group

Subject: Comments on Draft Short-Lived Climate Pollutant Reduction Strategy

Comment:

The California Wastewater Climate Change Group and California Association of Sanitation Agencies appreciate the opportunity to comment on the Draft Short Lived Climate Pollutant Reduction Strategy. Please contact us if you have any questions at (916) 446-0388 or via email at gkester@casaweb.org and sdeslauriers@carollo.com. We welcome the opportunity to further discuss the wastewater community's position in helping ARB proactively reduce SLCP emissions to achieve the commendable State goals and mandates for 2020, 2030, and 2050.

Sincerely,

Sarah A. Deslauriers

CWCCG Program Manager

Attachment: [www.arb.ca.gov/lists/com-attach/126-slcpdraftstrategy-ws-BmUCc1EzBzdQMqAt.pdf](http://www.arb.ca.gov/lists/com-attach/126-slcpdraftstrategy-ws-BmUCc1EzBzdQMqAt.pdf)

Original File Name: CWCCG-CASA-Comments\_DRAFTSLCPReductionStrategy\_Final.pdf

Date and Time Comment Was Submitted: 2015-10-30 15:51:22

No Duplicates.

**Comment 118 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Lisa

Last Name: Handy

Email Address: lisahandy@eia-global.org

Affiliation:

Subject: EIA comments on SLCP Sept 2015 Draft Reduction Strategy

Comment:

Please find attached comments on the draft strategy from the Environmental Investigation Agency. We welcome further dialogue as the strategy advances.

Thank you very much,  
Lisa

Attachment: [www.arb.ca.gov/lists/com-attach/127-slcpdraftstrategy-ws-WzhTNFAjUWBQCVQn.pdf](http://www.arb.ca.gov/lists/com-attach/127-slcpdraftstrategy-ws-WzhTNFAjUWBQCVQn.pdf)

Original File Name: CARB SLCP Strategy Comments\_EIA\_Final\_10.30.15.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:20:00

No Duplicates.

## **Comment 119 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jim

Last Name: Stewart, PhD

Email Address: drjimstewart@gmail.com

Affiliation: Retired Professor of Physics

Subject: Methane is the priority for immediate large reductions

Comment:

Methane is the priority for immediate large reductions

Comments on the Draft SLCP Plan by Jim Stewart, PhD

1. The Draft SLCP Plan is helpful in that it provides totals of emissions based on the updated AR5 20-year GWPs, but it should state the need to apply these to update the overall Scoping Plan, cap-and-trade income, and especially the allocation of revenues to be comparable to the global warming impacts.
2. It would be much better to use instantaneous radiative forcing values than GWPs, because the planet is in an immediate global warming crisis that cannot wait twenty years for reductions.
3. The Draft SLCP Plan shows a target of a reduction in methane levels from 118 in 2013 to 71 MMTCO<sub>2e</sub> by 2030, but needs to show a clear plan to get there. In addition, the methane target should be consistent with the Governor's goal of 40% reductions by 2030, which would be 47 MMTCO<sub>2e</sub>. This is especially important since many methane reduction strategies are far cheaper per ton than carbon reductions.
4. Dairy manure reductions are stated as "voluntary", but need to be mandatory. Strategies should include eliminating connection fees for electricity produced from dairy manure digesters.
5. Enteric emissions need to be addressed beyond "more research." One way to do this would be to include them in cap-and-trade.
6. Current emissions from landfills can be reduced by using small active cells with immediate impermeable capping in the critical first few days after organics are dumped and most of the methane is produced.
7. Future emissions from landfills can be addressed by quickly diverting all organics from landfills, East Bay Municipal Utility District is proposing to do it in less than five years (while ARB is proposing ten).
8. Emissions from past landfills need to be reduced by better capping and by cleaning the gas and feeding the gas into sources that can use it directly (such as pipelines and fuel cells).
9. Ban the use of small internal combustion engines to burn methane, since the pass-through of unburned methane eliminates the climate benefit (but turbines are okay).
10. The high rates of observed fugitive methane emissions from gas and oil wells and associated facilities, especially those in Kern County and Los Angeles County need to be targeted immediately and eliminated in less than a year. JPL drones have begun the process and proven the technology works well, especially when coordinated with ground observations to pinpoint the sources. They should be paid for by large fines on fugitive emissions.
11. Black carbon emissions from on-road vehicles need to be reduced faster and off-road vehicles need to be on a similar track. Much

more resources need to be put into black carbon since the ARB First Update to the Climate Change Scoping Plan says on page 17 that black carbon is 15% of the 2010 inventory (using AR5 20 year GWP).

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 16:23:03

No Duplicates.



**Comment 120 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: John  
Last Name: Freeman  
Email Address: John@mbartech.com  
Affiliation: Mbartech

Subject: Comments in Response to CARB's September 2015 Draft Strategy  
Comment:

Please see my attached letter which is in support of Brooks  
Automation's Letter.

Attachment: [www.arb.ca.gov/lists/com-attach/129-slcpdraftstrategy-ws-  
B2pXMwFhAyIEdgBl.pdf](http://www.arb.ca.gov/lists/com-attach/129-slcpdraftstrategy-ws-B2pXMwFhAyIEdgBl.pdf)

Original File Name: Mbartech-comments-in-support-of-Brooks-Oct-30-2015.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:24:23

No Duplicates.

**Comment 121 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Matthew

Last Name: Plummer

Email Address: m3pu@pge.com

Affiliation: Pacific Gas and Electric Company

Subject: PG&E Comments on ARB Draft SLCP Strategy.

Comment:

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide comments on the Air Resources Board's Draft Short-Lived Climate Pollutant (SLCP) Reduction Strategy (Draft Strategy), which was discussed at workshops on October 13, 14 and 19.

Attachment: [www.arb.ca.gov/lists/com-attach/130-slcpdraftstrategy-ws-B3dcPQNnWVVQNVU6.pdf](http://www.arb.ca.gov/lists/com-attach/130-slcpdraftstrategy-ws-B3dcPQNnWVVQNVU6.pdf)

Original File Name: PGE Comments on Draft SLCP Strategy.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:22:55

No Duplicates.

**Comment 122 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: john

Last Name: davis

Email Address: recyclingjpa@gmail.com

Affiliation: Mojave Desert and Mountain Recycling Aut

Subject: food rescue

Comment:

Food rescue should be included as a methane avoidance measure.  
Edible food can be retrieved safely from commercial sources and  
provide nutrition to disadvantaged individuals. ARB and CalRecycle  
could share best practices with generators and collectors, provide  
incentives to properly equip distributors.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 16:27:09

No Duplicates.

**Comment 123 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: James

Last Name: Ford

Email Address: jim@climateforideas.org

Affiliation: Climate for Ideas

Subject: Comments on SLCP strategy paper

Comment:

Please accept our comments and recommendations.

Attachment: [www.arb.ca.gov/lists/com-attach/132-slcpdraftstrategy-ws-B2RcO1M+WGJQMAhn.docx](http://www.arb.ca.gov/lists/com-attach/132-slcpdraftstrategy-ws-B2RcO1M+WGJQMAhn.docx)

Original File Name: California ARB SLCP comments Oct 30 2015 - James Ford.docx

Date and Time Comment Was Submitted: 2015-10-30 16:32:52

No Duplicates.

## **Comment 124 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jim

Last Name: Wilson

Email Address: poet707@aol.com

Affiliation: 350 Bay Area, Napa Vision 2050

Subject: Short-Lived Climate Pollutants (SLCP) Reduction Strategy

Comment:

SLCP management can't be stressed enough in postponing the climate tipping point. The Climate Tracker Initiative estimated that in 2012, we had a carbon budget of 565GT before 2degC would be exceeded and that, with BAU emissions of 36GT, we have roughly 15 years before that average global temperature increase was exceeded.

More importantly than legacy GHG is the need for immediate reductions of SLCPs such as methane and black carbon. Using a 20-year time horizon, they have CO<sub>2</sub>e of 84 and 3200, respectively. California absolutely needs to curtail these and rethink how we can best utilize our cap and trade treasury to fund elimination of these climate forcers.

The enormity of climate disruption is upon us. We may no longer settle for half-way measures.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 16:26:25

No Duplicates.

**Comment 125 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Peter

Last Name: Weisberg

Email Address: pweisberg@climatetrust.org

Affiliation: The Climate Trust

Subject: The Climate Trust SLCP Comments

Comment:

Attached are The Climate Trust's comments on the Draft SLCP  
Reduction Strategy. Thank you.

Attachment: [www.arb.ca.gov/lists/com-attach/134-slcpdraftstrategy-ws-  
VTYHbVE5WGZXMAF1.pdf](http://www.arb.ca.gov/lists/com-attach/134-slcpdraftstrategy-ws-VTYHbVE5WGZXMAF1.pdf)

Original File Name: Climate Trust Comments on Short-Lived Climate Pollutant Reduction  
Strategy-151019-CAM.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:35:36

No Duplicates.

**Comment 126 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jerilyn Lopez  
Last Name: Mendoza  
Email Address: jmendoza5@semprautilities.com  
Affiliation: SoCalGas and SDG&E

Subject: SoCalGas and SDG&E Comments on SLCP Strategy - Attachment  
Comment:

Please see file for "Attachment" to our written comments on the California Air Resources Board's Proposed Short Lived Climate Pollutant Strategy. The attachment is following on separate email as I am having technical difficulties combining in a .zip file. Thank you for understanding.

Please contact me with any questions or concerns about these comments.

Jerilyn López Mendoza  
SoCalGas and on behalf of SDG&E  
Environmental Affairs Program Manager  
Energy and Environmental Affairs  
555 W 5th St., GCT 17E5  
Los Angeles, CA 90013  
Jmendoza5@semprautilities.com  
(desk) 213-244-5235  
(cell) 213-700-0095  
(fax) 213-244-8257

Attachment: [www.arb.ca.gov/lists/com-attach/135-slcpcraftstrategy-ws-AXIGY1M1UI4AdVQw.pdf](http://www.arb.ca.gov/lists/com-attach/135-slcpcraftstrategy-ws-AXIGY1M1UI4AdVQw.pdf)

Original File Name: SCG\_SDGE SLCP Attachment-CapTrade Biofuels Initiative FINAL.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:40:58

No Duplicates.

**Comment 127 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jean-Pierre  
Last Name: Cativiela  
Email Address: dairycare@aol.com  
Affiliation:

Subject: Comment letter from Dairy Cares  
Comment:

Please see attached.

Attachment: [www.arb.ca.gov/lists/com-attach/136-slcpdraftstrategy-ws-AWVdOlw0ByYHeANg.pdf](http://www.arb.ca.gov/lists/com-attach/136-slcpdraftstrategy-ws-AWVdOlw0ByYHeANg.pdf)

Original File Name: DairyCares SLCP.10.30.15.FINAL.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:44:48

No Duplicates.



**Comment 128 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jerilyn Lopez  
Last Name: Mendoza  
Email Address: jmendoza5@semprautilities.com  
Affiliation: SoCalGas and SDG&E

Subject: SoCalGas and SDG&E Comments on SLCP Strategy  
Comment:

Please see attached file for our written comments on the California Air Resources Board's Proposed Short Lived Climate Pollutant Strategy. Attachment to follow on separate email as I am having technical difficulties combining in a .zip file. Thank you for understanding.

Please contact me with any questions or concerns about these comments.

Jerilyn López Mendoza  
SoCalGas and on behalf of SDG&E  
Environmental Affairs Program Manager  
Energy and Environmental Affairs  
555 W 5th St., GCT 17E5  
Los Angeles, CA 90013  
Jmendoza5@semprautilities.com  
(desk) 213-244-5235  
(cell) 213-700-0095  
(fax) 213-244-8257

Attachment: [www.arb.ca.gov/lists/com-attach/137-slcpcraftstrategy-ws-AnFQNVYwUFwGcwhs.pdf](http://www.arb.ca.gov/lists/com-attach/137-slcpcraftstrategy-ws-AnFQNVYwUFwGcwhs.pdf)

Original File Name: SCG\_SDGE Final SLCP Comments 10-30-15.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:43:55

No Duplicates.

**Comment 129 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Linda

Last Name: Brown

Email Address: lindagailbrown@earthlink.net

Affiliation: Californians for a Sustainable Climate

Subject: Comments on ARB's Draft Short-Lived Climate Pollutant Reduction Strategy

Comment:

On behalf of Californians for a Sustainable Climate, we'd like to thank the California Air Resources Board (ARB) for this opportunity to submit comments in response to the Draft Short-Lived Climate Pollutant Reduction Strategy document (September 2015). Please see attached comments.

Attachment: [www.arb.ca.gov/lists/com-attach/138-slcpdraftstrategy-ws-AWJQN10uWGkBWfck.docx](http://www.arb.ca.gov/lists/com-attach/138-slcpdraftstrategy-ws-AWJQN10uWGkBWfck.docx)

Original File Name: CARB SLCP Comment CfSC 103015.docx

Date and Time Comment Was Submitted: 2015-10-30 16:43:30

No Duplicates.

**Comment 130 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Craig

Last Name: Thomas

Email Address: craig@sierraforestlegacy.org

Affiliation: Sierra Forest Legacy

Subject: Comments on Draft Short-Lived Climate Pollutant Reduction Strategy

Comment:

Attached are comments from Sierra Forest Legacy on the Draft  
Strategy for SLCPs

Attachment: [www.arb.ca.gov/lists/com-attach/139-slcpdraftstrategy-ws-  
ViVcNIQ2UnFWDwh6.docx](http://www.arb.ca.gov/lists/com-attach/139-slcpdraftstrategy-ws-ViVcNIQ2UnFWDwh6.docx)

Original File Name: SLCP Reduction Strategy Draft Plan FINAL comments October 30, 2015  
(Autosaved).docx

Date and Time Comment Was Submitted: 2015-10-30 16:46:07

No Duplicates.

**Comment 131 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Brian

Last Name: Nowicki

Email Address: bnowicki@biologicaldiversity.org

Affiliation: Center for Biological Diversity

Subject: Comments on the SLCP strategy

Comment:

These comments are submitted on behalf of the Center for Biological Diversity in response to the Draft Short-Lived Climate Pollutant Reduction Strategy paper released by the Air Resources Board on September 30. The Center for Biological Diversity appreciates the ARB's recognition of the importance of reducing short-lived climate pollutants and its comprehensive approach to finding reduction options.

Attachment: [www.arb.ca.gov/lists/com-attach/140-slcpdraftstrategy-ws-VTZWNVY5VXIAY1cl.pdf](http://www.arb.ca.gov/lists/com-attach/140-slcpdraftstrategy-ws-VTZWNVY5VXIAY1cl.pdf)

Original File Name: Center comments SLCP strategy (10302015).pdf

Date and Time Comment Was Submitted: 2015-10-30 16:45:33

No Duplicates.

**Comment 132 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Jack

Last Name: Macy

Email Address: jack.macy@sfgov.org

Affiliation: San Francisco Department of Environment

Subject: San Francisco support for landfill ban of organics to reduce methane emissions

Comment:

As I commented at the October 13th workshop on the SLCP Reduction Strategy, the City and County of San Francisco Department of the Environment strongly supports the plan to phase out and ban the landfilling of organics to protect our climate and build healthy soils. San Francisco initiated the first large scale urban residential and commercial composting program with food scraps starting in 2000. This program became mandatory in 2009 requiring every property and everyone to separate all organics from landfilled trash. As a result of this policy, 99% of all properties are now compliant with having service for the diversion of organics from landfill and over 700 tons per day of organics are being diverted from landfill. San Francisco has demonstrated cost effective successful diversion of organics from landfill to beneficial uses, primarily composting, with significant demonstrated climate benefits including reduced irrigation and energy use, reduced fertilizer and pesticide use and significant carbon sequestration. We support this plan that needs to include adequate funding to support the needed growth in organics processing infrastructure and the implementation of reasonable regulations that allow the growth of the organics recycling. Thank you.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 16:33:48

No Duplicates.

**Comment 133 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: harvey  
Last Name: eder 1223 wilshire b  
Email Address: harveyederpspc@yahoo.com  
Affiliation: public solar power coalition

Subject: immediate total solar conversion scd /california/pspc/&he director  
Comment:

I/we incorporate by reference all communications with scd and carb on solar ITSC and law suite etc.. Methane must use at least the 80 to 86 20yr gwp and now renewable nat gas methane should be allowed in ca. like fossel fuels it must be keept in the ground asap in oil and gas wells and aquafers etc

for self and PSPC ex dir

harveyederpspc@yahoo.com

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 16:49:09

No Duplicates.

## **Comment 134 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Juliette

Last Name: Bohn

Email Address: juliette@strategicsolutionsjbc.com

Affiliation: Juliette P Bohn Consulting

Subject: Strongly support elimination of organic waste from landfills

Comment:

Greetings CARB,

Juliette P. Bohn Consulting (JBC) strongly supports the strategies put forth by CARB to reduce short-lived climate pollutants. The SLCP reduction strategies are well thought out, and will set California on a path to achieve significant climate change mitigation within our lifetimes. This is a very exciting prospect, and I am grateful for the vision and follow-through of the CARB staff in developing such a strategic approach.

I want to encourage you to stand your ground fearlessly in regards to the elimination of organic materials from landfills by 2025. Putting food waste in landfills creates environmental problems, economic loss, and social missed-opportunities. Organic waste diversion and utilization is some of the absolute the lowest hanging fruit in terms of achieving immediate and permanent GHG emissions reductions. Furthermore, proven solutions exist to prevent, reduce and utilize the entire organic waste stream.

By banning organics from landfills, individuals, businesses, institutions and local governments will be required to adjust consumption, donate more food to food banks (reducing food insecurity), and haul food waste to feed pigs and worms (supporting local businesses). Furthermore, as a direct result of the this policy, project developers will no longer have to compete with cheap landfill tipping fees and can obtain financing and build new organic waste processing systems under a sustainable business model. New yard waste and food waste compost systems will be built, and anaerobic digesters will be constructed at dairies, landfills, waste water treatment plants / other facilities that have a large demand for heat and/or electricity and/or a large fertilizer demand (e.g., food manufacturers, grocery store distribution centers, casinos, schools, flower farms etc.). Digesters will also be developed as stand-alone units producing renewable vehicle fuel (RCNG) supporting the goals of the CA Low Carbon Fuel Standard.

Additionally, jobs will be created, new economic ripple effects will be generated in local economies, the agriculture sector will be supported, and carbon will be sequestered in our soils. There is no end to the positive environmental, economic and social impacts that food waste diversion and utilization will have when implemented across California.

For this reason I strongly encourage CARB to fully and quickly implement the SLCP strategy of eliminating organics from landfills

in the next 10 years. With regulatory cooperation, public - private partnerships, and thoughtful development approaches, new facilities can be constructed within a year's time - and sufficient processing capacity can easily be developed over the next 5-10 years.

One final comment on this topic: please make sure that digested residuals do not go back into landfills due to contamination. These materials still contain volatile compounds as well as valuable nutrients and carbon sequestration benefits when returned to the soils. Digester and compost systems vary in terms of the efficacy of contamination removal and material stabilization. Systems that can create market-ready soil amendments should be prioritized so that the intent of this policy is not subverted or diluted.

Thank you for your consideration of the above comments and thank you for your fearless leadership with regards to eliminating organics from landfills as well as other strategies to reduce SLCPs as fast as possible.

Sincerely,

Juliette

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 16:55:15

No Duplicates.



**Comment 135 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Cathy

Last Name: Pieroni

Email Address: cpieroni@sandiego.gov

Affiliation:

Subject: City of San Diego, Public Utilities Dept. SLCP strategy comments

Comment:

City of San Diego PUD comments attached.

Attachment: [www.arb.ca.gov/lists/com-attach/145-slcpcraftstrategy-ws-AnFTMQBeACMDcAJm.pdf](http://www.arb.ca.gov/lists/com-attach/145-slcpcraftstrategy-ws-AnFTMQBeACMDcAJm.pdf)

Original File Name: SD PUD comments to ARB re draft SLCP Reduction Strategy.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:58:47

No Duplicates.

**Comment 136 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: MARK

Last Name: GAGLIARDI

Email Address: mgagliardi@oaklandnet.com

Affiliation: Rec

Subject: Food Recovery

Comment:

We also support broadening and expanding the Strategy to include the most cost-effective 'reduce and reuse' strategies for keeping organics out of landfills, including:

- Edible food rescue and distribution, including long-standing activities (e.g., community food banks, animal feed) and newer innovations (e.g., FoodShift, LeanPath)
- Source reduction strategies (e.g., US EPA's Food Too Good to Waste initiative)

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-10-30 16:57:11

No Duplicates.

**Comment 137 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: MARK

Last Name: GAGLIARDI

Email Address: mgagliardi@oaklandnet.com

Affiliation: Recyclers Global Warming Council (RGWC)

Subject: Reduce & Reuse Strategies for Food Waste Reduction

Comment:

Please see attached letter.

Attachment: [www.arb.ca.gov/lists/com-attach/147-slcpdraftstrategy-ws-WjIRNIQKVnYEalQ7.pdf](http://www.arb.ca.gov/lists/com-attach/147-slcpdraftstrategy-ws-WjIRNIQKVnYEalQ7.pdf)

Original File Name: CA Short-Lived Climate Pollutant Strategy\_RBWC comments\_10-30-15.pdf

Date and Time Comment Was Submitted: 2015-10-30 16:57:11

No Duplicates.

**Comment 138 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Ryan

Last Name: Kenny

Email Address: ryan.kenny@cleanenergyfuels.com

Affiliation:

Subject: Comments on Draft SLCP Strategy

Comment:

Please find attached comments concerning the Draft SLCP Strategy.  
Thank you.

Attachment: [www.arb.ca.gov/lists/com-attach/148-slcpdraftstrategy-ws-WjldNwdoBDIKU1c0.pdf](http://www.arb.ca.gov/lists/com-attach/148-slcpdraftstrategy-ws-WjldNwdoBDIKU1c0.pdf)

Original File Name: CLNE Comment Letter on SLCP Strategy.pdf

Date and Time Comment Was Submitted: 2015-11-02 10:57:32

No Duplicates.

## **Comment 139 for Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Dan  
Last Name: Noble  
Email Address: danwyldernoble@gmail.com  
Affiliation: Association of Compost Producers

Subject: SLCP Comment  
Comment:

Dear SLCP Reduction Draft Strategy Team,

Attached please find the comment letter that the Association of Compost Producers is submitting for serious consideration by the SLCP Strategy development team. Please note that we were a few minutes late last Friday after 5 PM on the CARB website... so we are trusting that these comments will make it into the right hands for consideration by the appropriate team members.

Sincerely,  
Dan  
Dan Noble, Executive Director  
Association of Compost Producers  
The Calif. State Chapter of the US Composting Council  
"We Build Healthy Soil" - [www.HealthySoil.org](http://www.HealthySoil.org)  
<http://compostingcouncil.org/icaw/> - [www.Buy-Compost.com](http://www.Buy-Compost.com)  
Cell/text: (619) 992-8389 - [DanWylderNoble@gmail.com](mailto:DanWylderNoble@gmail.com)

Attachment: [www.arb.ca.gov/lists/com-attach/149-slcpdraftstrategy-ws-WjlVPABsVHcDalck.zip](http://www.arb.ca.gov/lists/com-attach/149-slcpdraftstrategy-ws-WjlVPABsVHcDalck.zip)

Original File Name: Compost Association Comment.zip

Date and Time Comment Was Submitted: 2015-11-05 13:10:00

No Duplicates.

**Comment 140 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: David

Last Name: Baker

Email Address: grasacramento@gmail.com

Affiliation: Green Restaurants Alliance Sacramento

Subject: SLCP Comment

Comment:

I hope to include it for comments on the Short Lived Climate  
Pollutants.

Sincerely,

~ david s baker

Attachment: [www.arb.ca.gov/lists/com-attach/150-slcpdraftstrategy-ws-  
WzgGYQFIBSYFYgRb.pdf](http://www.arb.ca.gov/lists/com-attach/150-slcpdraftstrategy-ws-WzgGYQFIBSYFYgRb.pdf)

Original File Name: CAEPA\_ARB\_comments.pdf

Date and Time Comment Was Submitted: 2015-11-05 13:17:43

No Duplicates.

**Comment 141 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

This comment was posted then deleted because it was unrelated to the Workshop item or it was a duplicate.

**Comment 142 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Nick  
Last Name: Lapis  
Email Address: nicklapis@cawrecycles.org  
Affiliation: Californians Against Waste

Subject: SLCP Comment  
Comment:

See attached.

Nick Lapis  
Legislative Coordinator | Californians Against Waste  
916.443.5422 | 415.845.6335 (m)

Attachment: [www.arb.ca.gov/lists/com-attach/152-slcpdraftstrategy-ws-AXICaFw+AiFWDwVi.docx](http://www.arb.ca.gov/lists/com-attach/152-slcpdraftstrategy-ws-AXICaFw+AiFWDwVi.docx)

Original File Name: SLCP Group Comments 10-30-15.docx

Date and Time Comment Was Submitted: 2015-11-05 13:29:12

No Duplicates.



**Comment 143 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Angie  
Last Name: Lottes  
Email Address: [angie@thewatershedcenter.com](mailto:angie@thewatershedcenter.com)  
Affiliation: The Watershed Research and Training Cent

Subject: SLCP Comment  
Comment:

Hi Michael and David,

The Watershed Research and Training Center tried to submit one page of comments on the Draft SLCP Reduction strategy on Friday. A timeout issue with the form caused a delay and we missed the deadline for submission.

Please accept this letter if at all possible. We expect that this letter will be the only to combine support for wood markets, existing forest bioenergy power plants, and the inclusion of Black Carbon in the Forest Carbon Plan.

Thank you,  
Angie Lottes

--

Angie Lottes  
Biomass Program Manager  
The Watershed Research and Training Center  
[www.thewatershedcenter.com](http://www.thewatershedcenter.com)  
PO Box 356 | Hayfork, CA 96041  
Cell: 314-610-2237

Attachment: [www.arb.ca.gov/lists/com-attach/153-slcpdraftstrategy-ws-AHdXI1YjVWVRCFAz.pdf](http://www.arb.ca.gov/lists/com-attach/153-slcpdraftstrategy-ws-AHdXI1YjVWVRCFAz.pdf)

Original File Name: WRTC Comments on SLCP\_10.30.2015.pdf

Date and Time Comment Was Submitted: 2015-11-05 13:31:07

No Duplicates.

**Comment 144 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Joey  
Last Name: Martinelli  
Email Address: [jmartinelli@wspa.org](mailto:jmartinelli@wspa.org)  
Affiliation: Western States Petroleum Association

Subject: SLCP Comment  
Comment:

Dear Mr. Mehl:

Please see attached WSPA comments on ARB's Draft Short-Lived Climate Pollutant Reduction Strategy, dated September, 2015. If you have any questions, please contact Cathy at (916) 498-7752 or email [cathy@wspa.org](mailto:cathy@wspa.org).

Thank you.

Joey Martinelli  
Executive Assistant, President  
Western States Petroleum Association  
1415 L Street, Suite 600  
Sacramento, CA 95814  
Phone: (916) 498-7750  
Email: [joey@wspa.org](mailto:joey@wspa.org)

Attachment: [www.arb.ca.gov/lists/com-attach/154-slcpdraftstrategy-ws-Wi0AdQNYU2FSC1c0.pdf](http://www.arb.ca.gov/lists/com-attach/154-slcpdraftstrategy-ws-Wi0AdQNYU2FSC1c0.pdf)

Original File Name: WSPA comments on ARBs Draft Short-Lived Climate Pollutant Reduction Strategy.pdf

Date and Time Comment Was Submitted: 2015-11-05 13:33:12

No Duplicates.

**Comment 145 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Stacey  
Last Name: Sullivan  
Email Address: SSullivan@suscon.org  
Affiliation: Sustainable Conservation

Subject: Comments on the SLCP strategy  
Comment:

See attached

Attachment: [www.arb.ca.gov/lists/com-attach/155-slcpdraftstrategy-ws-WyhdLgR2VXIEYwZv.docx](http://www.arb.ca.gov/lists/com-attach/155-slcpdraftstrategy-ws-WyhdLgR2VXIEYwZv.docx)

Original File Name: Sustainable Conservations SLCP comments.docx

Date and Time Comment Was Submitted: 2015-11-06 08:49:14

No Duplicates.

**Comment 146 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Johannes D.

Last Name: Escudero

Email Address: johannes@rngcoalition.com

Affiliation: Coalition For Renewable Natural Gas

Subject: Comments on the SLCP strategy

Comment:

See attached.

Executive Director

Attachment: [www.arb.ca.gov/lists/com-attach/158-slcpdraftstrategy-ws-UCJUPFM1AzMDWIIx.pdf](http://www.arb.ca.gov/lists/com-attach/158-slcpdraftstrategy-ws-UCJUPFM1AzMDWIIx.pdf)

Original File Name: RNGC Comments on Draft Strategy to Reduce Short Lived Climate Pollutants.pdf

Date and Time Comment Was Submitted: 2015-11-06 08:49:14

No Duplicates.

**Comment 147 for Short-Lived Climate Pollutant Draft Strategy  
(slcpdraftstrategy-ws) - 1st Workshop.**

First Name: Christopher  
Last Name: Berry  
Email Address: cberry@aldf.org  
Affiliation: Animal Legal Defense Fund

Subject: Comments on the SLCP strategy  
Comment:

See attached.

Attachment: [www.arb.ca.gov/lists/com-attach/159-slcpdraftstrategy-ws-BmdTOVA1ADUDWgFt.pdf](http://www.arb.ca.gov/lists/com-attach/159-slcpdraftstrategy-ws-BmdTOVA1ADUDWgFt.pdf)

Original File Name: ALDF letter.pdf

Date and Time Comment Was Submitted: 2015-11-12 12:39:36

No Duplicates.

**There are no comments posted to Short-Lived Climate Pollutant Draft Strategy (slcpdraftstrategy-ws) that were presented during the Workshop at this time.**