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

First Name: Joseph Last Name: Kubsh Email Address: jkubsh@meca.org Affiliation: MECA

Subject: Black carbon reduction strategies Comment:

Please find attached MECA's comments on ARB's short-lived climate pollutant strategy that are specific to mobile source black carbon reduction strategies.

Attachment: www.arb.ca.gov/lists/com-attach/1-slcpstrategy-ws-UTwFZgFjAjBWD1c0.pdf

Original File Name: MECA Comments on ARB Short-lived Climat Pollutants 051515.pdf

Date and Time Comment Was Submitted: 2015-05-15 09:33:46

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

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

Subject: HFC and High GWP Refrigerants Comment:

The US EPA currently has a proposed rule to delist HFC's under review at the Office of Management and Budget. I encourage the California ARB to wait until this rule is published as a final rule and then review the outcome. At this time commercial refrigeration manufacturers are facing increased regulatory burden at the federal level to make products more efficient as well as environmentally safe. Technology and testing are required to obtain these goals. CO2, mentioned on the CARB website, is not an option for all applications and while reducing GWP it may also increase energy consumption. Manufacturers are working with suppliers to develop alternatives to the existing refrigerants.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-05-19 14:46:23

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

First Name: Troy Last Name: Davis Email Address: tdavis@mayekawausa.com Affiliation: Mayekawa USA MYCOM

#### Subject: Natural Refrigerants are the solution to the F-Gas concern Comment:

In regards to the fastest growing source of GHG emissions, F-Gases, the solution is the promotion and use of Natural Refrigerants including Ammonia, CO2, Hydrocarbons and Air. Some of these refrigerants have been in use for 120-140 years, so their properties and effects to the environment are well known. While there are some additional safety aspects required when using these refrigerants, they have been proven to be safe and reliable with properly designed and installed systems. With chemical based refrigerants such as CFC's, HCFC's, HFC's and now HFO's, it takes us 20-30 years to figure they are harmful to our environment, therefore requiring another ban and introduction of new synthetic refrigerants all at a great cost to the environment and to the end users. Natural Refrigerants offer a wide temperature applications range from ultra low temp to bldg. water chillers so they can be used to replace existing chemical based refrigerants systems. In addition with low charge (under 500 lbs total) technology, Ammonia systems can be installed and operated safely as many manufacturers now offer equipment with very low leakage rate. Co2 is an excellent secondary refrigerant that when used properly in a cascade type system, offers very high energy efficiency regardless of the ambient conditions. The concept paper outlines 54% of GHG emissions comes from the Commercial and Industrial refrigeration sectors, therefore using Natural Refrigerants targeting these areas would contribute significantly to SB-605 goals on an accelerated schedule. Last, Natural refrigerant based systems are highly energy efficient systems that can save end users 10-30% in total energy costs, so the promotion using energy savings and low to no GHG emissions would be recommended. These systems can be retrofit or new applications. Many manufacturers are taking the steps necessary to offer these safe, reliable and energy efficient systems to California and much has been done with new technology in just the last 2-3 years. Therefore I highly support Governor Brown's efforts to reduce overall SLCP's and look forward to the implementation of SB-605.

Attachment:

**Original File Name:** 

Date and Time Comment Was Submitted: 2015-05-25 08:29:55

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

First Name: Leo Last Name: McDonnell Email Address: leomcd@hotmail.com Affiliation: Midland Bull Test%McDonnell Angus

Subject: Using RFI Genetic selection to reduce Methane in cattle Comment:

RFI (Residual Feed Intake) is a relatively new genetic trait that academics and some cattle producers are trying to select for the reduces cattle feed intake. When balanced in selecting also for production scientists in Australia, Canada, and here in the US have found up to a 20% less intake. Research in these same countries are now finding that by selecting for RFI, one not only can reduce feed intake but will improve feed utilization and studies have found between a 20-40% reduction in methane produced. Unfortunately, the systems to measure these trait are fairly expensive and nit all cattle seedstock producers are willing to invest on this technology. Also, their is a large group of seedstock producers and Universities compiling their data to identify those families of cattle and individuals that excel in this trait. For further information you can contact me or GrowSafe systems in Canada Leo McDonnell

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-05-26 14:27:43

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

First Name: Maureen Last Name: Hardwick Email Address: maureen.hardwick@dbr.com Affiliation: IPAC

Subject: IPAC Comments on SLCP Concept Paper Comment:

Thank you very much for your consideration of these comments.

Attachment: www.arb.ca.gov/lists/com-attach/5-slcpstrategy-ws-UzpcKlU1VWUDWglq.doc

Original File Name: IPAC Comments on Calif. Concept Paper (Short-Lived Climate Pollution Reduction Strategy (May 26, 2015).doc

Date and Time Comment Was Submitted: 2015-05-26 15:04:33

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

First Name: Michael Last Name: Checa Email Address: m\_a\_checa@yahoo.com Affiliation: Biologist, MBA, SustainabilityActivist

Subject: Tackling the root of the complex SLCPs problem ASAP Comment:

Hello! Since the 1980 humans clarified how to think systemically about the complex problem of sustinability. As Einstein suggested (paraphrased): "To solve a complex problem you cannot use the same type of thinking that created the problem".

WE NEED A SHARED MENTAL MODEL -- a common compass. LEARN and APPLY the science-based, highest-order, non-negotiable system principles of the workings of an environmentally sustainable society: the Framework for Strategic Sustainable Development (FSSD) (TNS based). Visit: http://thenaturalstep.org/en/the-system-conditions.

In 2000 the American Planning Association used TNS before diligently issuing the APA Policy Guide on Planning for Sustainability (https://www.planning.org/policy/guides/adopted/sustainability.htm).

AICP, APA's Professional Institute, is the entity that certifies professional planners all over the US (https://www.planning.org/aicp/). This fact -- equivalent to an available "fulcrum" for leverage -- is HUGE!

APA adopted this policy guide in 2000 - already 15 years ago !!!

Please adopt State-wide the APA Policy Guide on Planning for Sustainability!

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-05-26 20:40:36

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

First Name: Deborah Last Name: Wright Email Address: deborah.a.wright@falconsafety.com Affiliation: Falcon Safety Products, Inc.

Subject: Comments Short Lived Climate Pollutant Strategy Comment:

Please see attached comments. Thank you.

Attachment: www.arb.ca.gov/lists/com-attach/7-slcpstrategy-ws-VzEGYQZrBTULYgJs.docx

Original File Name: falcon comments 2015 HFC.docx

Date and Time Comment Was Submitted: 2015-05-27 08:04:29

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

First Name: Jean Last Name: Bogner Email Address: jbogner@uic.edu Affiliation: University of Illinois at Chicago

Subject: Review of Concept Paper Comment:

Comments on: Short-Lived Climate Pollutant Reduction Strategy California ARB May 2015 Concept Paper Comments by: J. Bogner, PhD Research Professor Emerita University of Illinois Chicago Dept. of Earth & Environmental Sciences jbogner@uic.edu Mobile: 630-915-8872

Please see attached file.

Attachment: www.arb.ca.gov/lists/com-attach/8-slcpstrategy-ws-AmAFbAZgUm8FZgR2.pdf

Original File Name: Bogner comments May2015.pdf

Date and Time Comment Was Submitted: 2015-05-27 10:32:36

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

First Name: Kevin Last Name: Fay Email Address: fay@alliancepolicy.org Affiliation: Alliance for Responsible Atmospheric Pol

Subject: Alliance Comments on Short-Lived Climate Pollutant Reduction Strategy Concept Paper Comment:

May 27, 2015

Mr. Bart Croes Division Chief Research Division California Air Resources Board 1001 I Street Sacramento, CA 95814

Re: Short-Lived Climate Pollutant Reduction Strategy Concept Paper

Dear Mr. Croes:

I am writing on behalf of the Alliance for Responsible Atmospheric Policy ("Alliance") to provide comments regarding the Short-Lived Climate Pollutant (SLCP) Reduction Strategy concept paper produced by the Air Resources Board (ARB).

The 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 more than 100 companies across several sectors engaged in the development of economically and environmentally beneficial international and domestic policies regarding fluorinated gases. Many of our members are active in the California market.

A list of Alliance member companies appears below, some of whom may also submit written comments. As our members would be most impacted by the HFC components of the SLCP reduction strategy, it is on that area of the concept paper that these comments will focus.

The Alliance is proud of its extensive history of working in a constructive manner with ARB, the US government and with

international bodies on the protection of stratospheric ozone and the mitigation of climate change. Our membership worked closely with US Senator Chris Murphy in the development of his SLCP legislation introduced in 2014 and the Alliance is active as a non-state actor in HFC Initiative under the global Climate and Clean Air Coalition (CCAC) to Reduce SLCPs (An Alliance statement made during the recent CCAC High Level Assembly in Geneva is also attached for reference).

Our membership believes that an effective means of reducing the future climate change contribution of HFCs must be global in nature. It also must do so in an orderly, flexible fashion which allows companies to continue to fulfill consumers' need for our products and technologies which are vital to public health, food safety, energy conservation, comfort and productivity. The Montreal Protocol has met both of these standards when successfully addressing CFCs and HCFCs. We believe an amendment to address HFCs would do so as well.

The Alliance appreciates the close attention ARB has paid to developments in the Montreal Protocol. We have sought to provide timely updates to ARB on industry's perspective towards progress in Protocol amendment discussions and the significant effort industry is contributing to facilitate the transition from high global warming potential (GWP) HFCs. That effort has taken the form of directly supporting diplomacy towards a Protocol amendment, as demonstrated by our participation on the India-US HFC Task Force, as well as spending some \$5 billion dollars over the next decade in research, development and commercialization of new technologies for the global market.

The Alliance believes the cap and reduction model reflected in the amendment provides a far better approach for cost-effective action than do unilateral sub-global command and control regulations. The Alliance has also advocated this global cap and reduction approach as part of the Montreal Protocol process as a far better mechanism than the use of the US Environmental Protection Agency's (EPA) Significant New Alternatives Policy (SNAP) de-listing authority used in federal policy. We encourage ARB to develop an SLCP reduction strategy which is consistent with this cap and reduction model rather than a series of command and control restrictions.

As the ARB is likely aware, Environment Canada earlier this year responded to industry concerns over reliance on SNAP-like sector-based prohibitions in developing its own HFC regulations. The department changed course and proposed a hybrid model, which incorporates a gradual phase-down of HFCs consistent with the phase-down schedule proposed by the North American parties to the Montreal Protocol.

The Alliance appreciates ARB's procedure of consulting with interested stakeholders in advance of developing its SLCP reduction strategy. In order to achieve the environmental goal of these potential regulations, it is critical to understand the variety of challenges and opportunities present in the transition from high-GWP technologies. A global phase-down will allow the markets to determine which technologies transition first, providing certainty on the environmental benefits while providing adequate transition time for sectors where alternatives are not yet readily available. The Montreal Protocol has succeeded because it has been able to accommodate these nuances and has relied on long-term management principles to achieve the desired environmental policy objectives.

In terms of the timeline proposed in the concept paper, the Alliance encourages ARB to ensure that benchmarks are chosen with consideration of other critical timelines affecting the transition from high-GWP HFCs, including the Montreal Protocol process, the US EPA's SNAP rulemaking schedule and the US Department of Energy's (DOE) efficiency standards rulemaking process. Misaligned transition dates impose significant and unnecessary cost, burden, and complexity on industry.

On ARB's proposed goals intended to form the foundation of the SLCP reduction strategy, the Alliance especially supports: "Achieve Scientific-Based Targets" and "Identify Practical Solutions to Overcome Barriers." Both concepts resonate well with our belief that while substitute technologies are evolving rapidly, HFC management efforts must be based on actual technology availability.

On the overall goal of exploring measures to reduce HFC use in California by an additional 40 percent by 2030 on top of the 40 percent reduction expected as a result of AB 32 and proposed federal rules, the Alliance believes that 2050 is a more feasible target. Achieving an 80 percent reduction by 2030 is sooner than found in any of the current HFC phase-down proposals under the Montreal Protocol. Next-generation technologies and applications must be developed, commercialized and widely deployed in order to achieve significant reductions in high-GWP HFC use. As part of that process, those technologies must be adopted by domestic and international code-setting organizations. Existing code and standards restrictions could pose challenges to companies attempting to move towards lower-GWP alternatives, while meeting the demand for their products from consumers in California. Combined, those elements of the transition require more time than proposed in the concept paper.

ARB has proposed to consider measures to achieve further transition to low-GWP alternatives in a number of specific sectors. The Alliance encourages ARB to specify its definition of "low-GWP." It is important that ARB avoid unintended consequences by considering to what extent alternatives meeting that definition are commercially available.

On reducing leaks from existing equipment and at end-of-life, the Alliance supports the responsible use of refrigerants. We know that the majority of refrigerant emissions occur during charging, service and disposal of air-conditioning and commercial refrigeration units. That is why in January 2014, the Alliance submitted a petition to extend the regulations under Section 608 of the federal Clean Air Act to HFCs and other substitutes for class I and class II ozone-depleting substances. These policies have proven effective in limiting ODS emissions and, as seen at EPA's November 2014 stakeholder meeting in response to our petition, most stakeholders believe those provisions will be equally effective at limiting HFC emissions.

As industry we are moving forward with voluntary measures to promote the responsible use of refrigerants. At the September 2014 UN Climate Summit, the Alliance, in conjunction with the Air-Conditioning, Heating and Refrigeration Institute and ABRAVA, the Brazilian Association for HVAC-R, launched the Global Refrigerant Management Initiative under CCAC to reduce leaks and service emissions throughout the industry's global supply chain. In addition to exploring options to improve education, training and certification, the initiative will promote the recycling, recovery, reclaiming and end of life destruction of refrigerants and develop additional policies to promote proper refrigerant management. This initiative has already received the support of industry associations from 9 countries and the EU, representing 4 continents, and has begun initial activities in 2015.

On the proposed early action to reduce emissions from commercial refrigeration, ARB suggests it may link this effort to existing energy efficiency programs. The Alliance encourages ARB to remain technology neutral in the design of this linkage, but agrees that consideration of the energy efficiency and life cycle climate performance (LCCP) of equipment is critical to designing a sustainable HFC climate policy.

The Alliance welcomes the opportunity to consult directly with ARB to answer further questions relevant to its SLCP reduction strategy to ensure that it is consistent with efforts in the Montreal Protocol to address HFCs. We are ready to work to ensure the avoidance of the rapid global growth scenarios in the use of HFCs, and to promote the development and implementation of substitute technologies that allow for a manageable transition around the globe.

The membership of the Alliance is proud of the industry contribution to the development of alternatives to high-GWP compounds and their implementation in equipment and products. Government, industry and other stakeholders must remain focused on supporting a global transition to these alternatives. The Alliance thanks ARB for providing an opportunity to comment and looks forward to working in a constructive manner to address HFCs. If you have any questions, please feel free to reach me at fay@alliancepolicy.org or (703) 243-0344.

Sincerely, Kevin Fay Executive Director Alliance for Responsible Atmospheric Policy

Members:

AGC Chemicals Americas A-Gas/RemTec Air-Conditioning, Heating & Refrigeration Institute Airgas American Pacific Corp. Arkema Association of Home Appliance Manufacturers Auto Care Association Bard Manufacturing Co. BASF Brooks Automation, Inc. Cap & Seal Company Carrier Corporation Center for the Polyurethanes Industry Combs Gas

Consolidated Refrigerant Solutions Daikin Applied Danfoss DuPont Dynatemp International Emerson Climate Technologies E.V. Dunbar Co. Extruded Polystyrene Foam Association Falcon Safety Products FP International Golden Refrigerant Heating, Air-conditioning & Refrigeration Distributors International Honeywell Hudson Technologies Hussmann ICOR International IDQ Holdings Ingersoll-Rand International Pharmaceutical Aerosol Consortium Johnson Controls Lennox International Metl-Span Corporation Mexichem Fluor Inc. Midwest Refrigerants Mitsubishi Electric National Refrigerants Owens Corning Specialty & Foam Products Center Rheem Manufacturing Company Ritchie Engineering Solvay Sub-Zero The Dow Chemical Company Trane Company Whirlpool Corporation Worthington Cylinder

Attachment: www.arb.ca.gov/lists/com-attach/9-slcpstrategy-ws-UDITNIY0ByQAWQNr.pdf

Original File Name: ICCP HLA Intervention 5-20-15.pdf

Date and Time Comment Was Submitted: 2015-05-27 10:54:34

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

First Name: Christopher Last Name: Berry Email Address: cberry@aldf.org Affiliation: Animal Legal Defense Fund

Subject: Comments to ARB's Short-Lived Climate Pollutant Reduction Strategy Concept Paper Comment:

Please see Animal Legal Defense Fund's Comments to ARB's Short-Lived Climate Pollutant Reduction Strategy Concept Paper, attached.

Attachment: www.arb.ca.gov/lists/com-attach/10-slcpstrategy-ws-WmhVYwQ0B2FXfAY2.pdf

Original File Name: 2015-05-27 ALDF ARB Concept Paper Comments.pdf

Date and Time Comment Was Submitted: 2015-05-27 14:22:34

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

First Name: Niles Last Name: Brinton Email Address: niles@charborn.com Affiliation: Charborn Biochar

#### Subject: Opportunity for Air Quality Improvement and Economic Development Comment:

I am happy to see some thought being given to the waste of resources and the climate pollution signified by each and every wildfire and prescribed pile-burn. Our forests may be our single greatest climate liability, since they are growing larger, thicker, and in this drought, drier and more flammable. I help address this problem by developing biochar soil amendments for marketing in to agriculture. I hope the CARB can work with CALFire, CEC, CDFA, and DWR to start a groundbreaking new initiative which promotes the budding biochar industry by upgrading our existing biomass plants to have fewer emissions and to produce good biochar for benefits as a soil amendment. In turn, we could have a revenue source associated with removal of dry, shredded biomass from our forests, reducing the wildfire emissions, improving habitat, and reducing risks to our crucial watersheds. Use of biochar as a soil amendment permanently sequesters this carbon in to the soil, further improving California's climate outlook. We need a new, sustainable biomass economy that provides renewable energy, improved habitat, reduces our wildfire risk, and improves our soils and water quality.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-05-29 16:20:00

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

First Name: Larry Last Name: Buckle Email Address: Buckle@ies-eng.com Affiliation:

Subject: Comments Regarding the Short-Lived Climate Pollutant Reduction Strategy Concept Paper Comment:

Comment:

Thank you for the opportunity to attend the ARB workshop on May 27th and to comment on the Short-Lived Climate Pollutant Reduction Strategy Concept Paper.

I only have a few comments regarding reduction of fugitive methane emission resulting from biological degradation of organic materials. I agree and fully support the organics disposal reduction goals of 2020 and 2025. However the resultant emission reduction resulting from disposal avoidance alone could be missing much of the opportunity. As an example:

If highly volatile food wastes are allowed to be composted they will likely go anaerobic resulting in VOC emission comparable with landfilling. To mitigate for highly volatile organic waste, food waste should only be anaerobically digested, where generated gasses are captured.

If food waste or other organic wastes are aerobically or anaerobically digested, the resultant digestate should not be allowed to be landfill disposed. The resultant digestate will be similar to wood being landfilled. Wood can produce fugitive landfill emission. Adequate food waste pretreatment investment needs to be made such that resultant digestate is marketable.

Pressure needs to be placed on the CPUC to attract greater volumes of organic based renewable energy into the natural gas and electricity distribution system.

Again, thank you for this opportunity to comment.

Attachment:

**Original File Name:** 

Date and Time Comment Was Submitted: 2015-06-01 14:41:23

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

First Name: John Last Name: Haeckel Email Address: jhaeckel@cleanfuelpartners.com Affiliation: Clean Fuel Partners, LLC

#### Subject: Follow up comments to Workshop Comment:

My comments are from the perspective of the CEO of a start-up which sees great potential to deliver business solutions to environmental issues through biorefineries (we want to capture methane as well as strip out nitrogen and phosphorous from digestate):

1. As you think through what I expect will be incentive structures to encourage adoption, I think that fostering highest and best end uses for the outputs as an economic matter will help projects to attract private capital on an un-subsidized or limited subsidy basis, creating enormous leverage for the incentive dollars you may recommend. I would be happy to share my basis for suggesting this.

2. If you have not created one, it may be useful to develop an inventory of organic waste streams either created by state entities/agencies/etc. or where the disposition of waste streams is directed by the state in one way or another. Subject, of course to contractual and/or other commitments, this creates for you an economic tool to encourage private capital participation by helping solidify one key component of the equation - input sourcing. While it is not my current focus, I have spent a fair 3. amount of time, dating to a year ago, exploring the use of liquefied natural gas ("LNG") as a marine fuel. My question/comment for you is please not to leave the shipping industry out of the equation. If diesel is bad for the environment, residual fuel oil is much worse. Although Emission Control Area restrictions should cause a shift to somewhat more environmentally friendly fuel grades for SOx and NOx compliance, that is ultimately a function of compliance. I have not kept up on it, so do not know the recent history of experience with compliance.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-06-02 07:16:02

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

First Name: Craig Last Name: Thomas Email Address: craig@sierraforestlegacy.org Affiliation: Sierra Forest Legacy

Subject: Comment Letter on Short-Lived Climate Pollutant Reduction Strategy Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/14-slcpstrategy-ws-B3RTPF05UHEBdQlo.pdf

Original File Name: Sierra Forest Legacy.pdf

Date and Time Comment Was Submitted: 2015-06-02 13:52:49

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

First Name: Debbie Last Name: Reed Email Address: dreed@drdassociates.org Affiliation: C-AGG

Subject: C-AGG Comments on ARB SLCP Concept Paper Comment:

Thank you for the opportunity to comment on the Short Lived Climate Pollutant Concept Paper.

Attachment: www.arb.ca.gov/lists/com-attach/15-slcpstrategy-ws-BWZRelc3UGQFZAdY.pdf

Original File Name: C-AGG ARB SLCP 6-9-2015.pdf

Date and Time Comment Was Submitted: 2015-06-09 14:21:43

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

First Name: Evan Last Name: Edgar Email Address: evan@edgarinc.org Affiliation: Edgar & Associates

Subject: Support Concept Paper to divert 90% of all organics by 2025 Comment:

Edgar & Associates represents many haulers, composters, anaerobic digestion operators, recycling facilities, and landfills. Our clients support the 90% of all organics from landfills by 2025 building on the implementation of AB 341 and AB 1826 to 2020, and AB 1594 and SB 605 after 2020 to 2025. Cap-and-trade revenues will need to be awarded to build the infrastructure which has shown to be one of the most cost-effective GHG reduction strategies in order to compete with cheaper landfills. Permits among the Cal-EPA agencies for water, waste, and air need to be streamlined.

The SLCP Plan to considering measures to meet a goal of diverting 90% of organics from landfills through source reduction and organics recycling by 2025, can be accomplished by recognizing and successfully implementing the current goals for 2020. AB 341 has set a statewide goal to recycle or compost 75% of the waste stream by 2020. AB 1826 mandates that more than half of the commercial organic waste be collected by 2020. The projected result of this organics diversion is 8,162,806 new

tons by 2020, and measured in avoided metric tons of carbon dioxide (MTCO2e) is 4,383,249 MTCO2e by 2020.

The AB 32 Scoping Plan First Update adopted in May 2014 calls for 5.0 to 7.5 million tons of food waste and green waste be diverted by 2020 (50% to 75% diversion rate), which results in avoiding between 3.03 to 5.62 MMTCO2e being avoided (copy attached). At least 100 new or expanded compost and anaerobic digestion facilities will be needed by 2020. Note that wood (1.73 million tons) and compostable paper (1.28 million) were not included in these AB 32 calculations by CARB. As CARB updates the Scoping Plan this summer to accommodate the Governor's Executive Order B-30-15 to provide a framework for achieving the 2030 target to achieve a 40% reduction below 1990 levels by 2030, CARB should harmonize AB 341, AB 1826 and SB 605 programs into the Scoping Plan Second Update.

SB 605 - 90% Reduction by 2025: Building upon AB 341 and AB 1826 to get to the 2020 goals, and recognizing green waste alternative daily cover counting as disposal after 2020, the SLCP Plan goal of diverting 90% of organics from landfills through source reduction and organics recycling by 2025 is achievable. The organic waste disposal from the commercial, residential, and self-haul sectors when reduced to 10% of their 2014 levels reaches a total reduction of 14,750,740 tons by 2025, and measured in avoided metric tons of carbon dioxide (MTCO2e) is 7,922,080 MTCO2e by 2025.

Another 100 new or expanded compost and anaerobic digestion facilities will be needed between 2020 and 2025. With regulatory streamlining among the Air Boards and the Water Boards within Cal-EPA, and with increased cap-and-trade revenue allocation towards composting, anaerobic digestion and renewable natural gas production facilities, the industry is poised to achieve these goals much like achieving the AB 939 recycling goals of the nineties

Evan Edgar, Principal Civil Engineer

Attachment: www.arb.ca.gov/lists/com-attach/16-slcpstrategy-ws-AnVQPlw0VXIEZwZZ.pdf

Original File Name: White Paper with Attachments - 6 09 15.pdf

Date and Time Comment Was Submitted: 2015-06-10 16:00:28

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

First Name: Brennon Last Name: Flahive Email Address: bflahive@socwa.com Affiliation:

Subject: Comment to CARB's SLCP Strategy Comment:

Attached you will find comment from the South Orange County Wastewater Authority regarding the CARB recently released SLCP Strategy.

Attachment: www.arb.ca.gov/lists/com-attach/17-slcpstrategy-ws-AWIFYlQnBTRWD1U2.pdf

Original File Name: Carb Comments SLCP.pdf

Date and Time Comment Was Submitted: 2015-06-10 17:06:06

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

First Name: Greg Last Name: Kester Email Address: gkester@casaweb.org Affiliation: CASA

Subject: CASA Comment Letter in support of CARB Concept Paper Comment:

Good afternoon:

Attached please find a letter in support of the CARB Concept Paper to reduce SLCPs in California from CASA.

Please contact Greg Kester if you have any questions.

Thank you.

Attachment: www.arb.ca.gov/lists/com-attach/18-slcpstrategy-ws-VmABKVdnWDpQeFVk.pdf

Original File Name: 6.11.15 CASA Comment letter in support of CARB concept paper to reduce SL...[1].pdf

Date and Time Comment Was Submitted: 2015-06-11 12:05:51

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

First Name: Amanda Last Name: Johnson Email Address: ajohnson@edf.org Affiliation: Environmental Defense Fund

Subject: Comments of EDF on the Short-Lived Climate Pollutant Reduction Strategy Concept Paper Comment:

Thank you for accepting EDF's comments.

Attachment: www.arb.ca.gov/lists/com-attach/19-slcpstrategy-ws-UjdRM1E2BwtSNwFu.pdf

Original File Name: EDF Comments on SLCP Reduction Strategy.pdf

Date and Time Comment Was Submitted: 2015-06-11 14:42:50

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

First Name: John Last Name: Haeckel Email Address: jhaeckel@cleanfuelpartners.com Affiliation: Clean Fuel Partners, LLC

Subject: Additional comments Comment:

In addition to the inventory of waste streams in #2 in my earlier comments, I would suggest an inventory of state government fuel consumption by type and location. Combined with an inventory of state organic waste streams, by type and location, you may find yourselves with an interesting opportunity to provide a key component of moving RNG projects forward - predictability.

The state of California could be in a unique position to supply feed-stock for biogas production from its own organic waste streams, and off take commitments for gas and other clean by-products by directing that state bodies utilize RNG for vehicle fuel, or other uses like RNG-powered electricity generation and soil amendments to stabilize land post-wildfire or other soil replenishment uses. Wielding these tools in combination may let the state encourage biogas production by creating certainty of both supply and demand for prospective producers. Incentives can be built into one or both ends of the process if needed, but providing both committed supply and demand would remove a significant obstacle to attracting private capital to the biogas production arena.

Attachment:

**Original File Name:** 

Date and Time Comment Was Submitted: 2015-06-11 15:10:05

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

First Name: Julia Last Name: Levin Email Address: jlevin@bioenergyca.org Affiliation: Bioenergy Association of California

Subject: Comments on SLCP Concept Paper Comment:

Attached please find the comments of the Bioenergy Association of California on the SLCP Concept Paper. Thank you!!

Attachment: www.arb.ca.gov/lists/com-attach/21-slcpstrategy-ws-VzUGYVQ2U19XMgBv.pdf

Original File Name: BAC Comments on SLCP Concept Paper.pdf

Date and Time Comment Was Submitted: 2015-06-11 16:47:19

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

First Name: Liz Last Name: Whiteley Email Address: lizwhiteley@gmail.com Affiliation:

Subject: Comments on ARB's SLCP Reduction Strategy Comment:

To whom it may concern:

I applaud ARB's commitment to reducing HFC use 80% by 2030 here in California. In your concept paper you state, "HFC emission reductions could be achieved through sector specific prohibitions, where feasible and cost effective alternatives are available, by imposing a mitigation fee on sales of high-GWP HFCs, or other potential options."

I believe it is worthwhile to explore all feasible options; however, I would strongly encourage ARB to consider incentives and programs to promote environmentally-friendly alternatives to HFCs, instead of taxing or banning certain HFC uses.

For example, in commercial and retail food refrigeration there are many good, low-GWP alternatives to HFCs (including hydrocarbons for stand-alone refrigerators and freezers, CO2 and ammonia). Often referred to as "natural refrigerants" these alternatives offer many benefits: significantly lower (or even zero) GHG emissions from refrigerant leaks, lower refrigeration and maintenance costs for equipment operators, and improved energy efficiency (which not only lowers a store's overall GHG footprint, but also lessens demand on the electric grid).

ARB should help drive market uptake of these new technologies, for example, by helping fund the installation of natural refrigeration technology in new grocery stores. ARB could use GGRF money to help supermarkets install new systems, or offer rebates to stores that install these low-GWP, energy efficient refrigeration systems. By incentivizing installation of these systems, California will help drive the market transformation and economies of scale we need here in the U.S. to make natural refrigerants the "natural" choice--better for stores' bottom-line and better for the environment.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-06-12 08:58:39

# Comment 23 for Short-Lived Climate Pollutant Strategy (slcpstrategy-ws) - 1st Workshop.

First Name: John Last Name: Pastore Email Address: jpastore@dudek.com Affiliation: SCAP

Subject: Comment Letter on ARB's Preparation Of A Short-Lived Climate Pollutant Strategy Comment:

From John Pastore of SCAP

Attachment: www.arb.ca.gov/lists/com-attach/23-slcpstrategy-ws-WjlQNwd0BzYDWgh7.pdf

Original File Name: CARB SLCP SCAP June 2015.pdf

Date and Time Comment Was Submitted: 2015-06-12 10:05:34

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

First Name: Michael Last Name: Van Brunt Email Address: mvanbrunt@covanta.com Affiliation: Covanta

Subject: Covanta comments on SLCP Concept Paper Comment:

Attached, please find Covanta's comments on the SLCP Concept Paper.

Attachment: www.arb.ca.gov/lists/com-attach/24-slcpstrategy-ws-U2FSZAMzUDYFLgQ0.pdf

Original File Name: 2015-06 Covanta Comments - CARB SLCP Concept Paper.pdf

Date and Time Comment Was Submitted: 2015-06-12 10:46:09

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

First Name: Catherine Last Name: Reheis Boyd Email Address: joey@wspa.org Affiliation: WSPA

Subject: Comments on Short-lived Climate Pollutant (SLCP) Reduction Strategy CARB Concept Paper ( Comment:

Please see attached WSPA Comments on Short-lived Climate Pollutant (SLCP) Reduction Strategy CARB Concept Paper (May 2015). Thank you.

Attachment: www.arb.ca.gov/lists/com-attach/25-slcpstrategy-ws-UCdVIFwtBDYAWQJx.pdf

Original File Name: WSPA SLCP Comments.pdf

Date and Time Comment Was Submitted: 2015-06-12 11:01:16

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

First Name: Lisa Last Name: Massaro Email Address: lmmassaro@dow.com Affiliation: The Dow Chemical Company

Subject: Dow Comments on ARB's SLCP strategy Comment:

Please see the attached document for Dow's comments on ARB's preparation of a Short-Lived Climate Pollutant Strategy. Thank you, Lisa Massaro, The Dow Chemical Company

Attachment: www.arb.ca.gov/lists/com-attach/26-slcpstrategy-ws-UzdROFAmVFhRNFM8.pdf

Original File Name: Dow comments - CARB SLCP June 2015.pdf

Date and Time Comment Was Submitted: 2015-06-12 11:22:34

# Comment 27 for Short-Lived Climate Pollutant Strategy (slcpstrategy-ws) - 1st Workshop.

First Name: Justin Last Name: Oldfield Email Address: justin@calcattlemen.org Affiliation:

Subject: Comments from CCA on SLCP Concept Paper Comment:

Please see attached.

Attachment: www.arb.ca.gov/lists/com-attach/27-slcpstrategy-ws-VjVTNlQ0AAxQNQdo.pdf

Original File Name: CCA Comments on SLCP Concept Paper 6-12-2015.pdf

Date and Time Comment Was Submitted: 2015-06-12 11:26:12

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

First Name: Wayne Last Name: Davis Email Address: wdavis@harvestpower.com Affiliation: Harvest Power

Subject: SLCP Comments Comment:

Thank you for the opportunity to comment on this important document.

Attachment: www.arb.ca.gov/lists/com-attach/28-slcpstrategy-ws-Vz9UM1EiACUKaVck.pdf

Original File Name: Harvest Power Comments on ARB SLCP 2015-06-12.pdf

Date and Time Comment Was Submitted: 2015-06-12 11:56:25

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

First Name: Mary Last Name: Dane Email Address: mdane@traulsen.com Affiliation: ITW Food Equipment Group-Traulsen/Kairak

Subject: Comments regarding Self Contained Commercial Refrigeration Products Comment:

The comments attached outline our general experiences and outlook for the proposed strategy planning.

Please let us know if you have any questions and if we can be of service in providing any technical data.

Attachment: www.arb.ca.gov/lists/com-attach/29-slcpstrategy-ws-ADJTZQc3BGIDKAIy.pdf

Original File Name: 2015-0610 Traulsen\_CA Short Life Pollutants\_Comments.pdf

Date and Time Comment Was Submitted: 2015-06-12 12:43:43

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

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

Subject: Comments Regarding the Short-Lived Climate Pollutant Reduction Strategy Concept Paper Comment:

Attached please find the comments of the Agricultural Council of California and the California Farm Bureau Federation on the SLCP Concept Paper. Thank you.

Attachment: www.arb.ca.gov/lists/com-attach/30-slcpstrategy-ws-B2ZdPAdZBTUAaVQh.pdf

Original File Name: Ag Council and CFBF Comments on SLCP Concept Paper.pdf

Date and Time Comment Was Submitted: 2015-06-12 12:46:44

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

First Name: Keilly Last Name: Witman Email Address: keilly@kwrms.com Affiliation: KW Refrigerant Management Strategy

Subject: LImit HFCs in Supermarkets Comment:

Without action by the CA government, HFC emissions will increase dramatically over the next 15 years. The best way to prevent that from happening is to offer incentives for supermarket companies to transition away from HFCs to natural refrigerants, both in their commercial systems and in self-contained units. The natural refrigerant technologies exist, but they are new to the US and prices are higher than traditional leaky HFC technologies. An incentive program in CA for supermarkets would increase volume and allow equipment manufacturers to achieve economies of scale, thus bringing prices down to the point where they are at parity or better. The time to act is now, as supermarket systems have a lifespan of about 20 years. Every new HFC system that is installed will make it harder for CA to achieve it's 2030 goal. The average HFC supermarket emits 3,920,000 pounds of CO2eq per year.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-06-12 13:30:34

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

First Name: J Stacey Last Name: Sullivan Email Address: ssullivan@suscon.org Affiliation: Sustainable Conservation

Subject: comments on SLCP Concept Paper Comment:

Attached please find Sustainable Conservation's comments on ARB's Short-Lived Climate Pollutant Reduction Strategy Concept Paper.

Attachment: www.arb.ca.gov/lists/com-attach/32-slcpstrategy-ws-WyhXJAR2VnEDZAJr.doc

Original File Name: Sustainable Conservation comments on SLCP Concept Paper.doc

Date and Time Comment Was Submitted: 2015-06-12 13:58:20

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

First Name: Ryan Last Name: Kenny Email Address: ryan.kenny@cleanenergyfuels.com Affiliation: Clean Energy

Subject: Comment Letter re: Short Lived Climate Pollutants Comment:

Please find attached the comment letter from Clean Energy concerning the Short-Lived Climate Pollutant Strategy Concept Paper. Thank you for considering our views.

Ryan Kenny Senior Public Policy and Regulatory Affairs Advisor Clean Energy

Attachment: www.arb.ca.gov/lists/com-attach/33-slcpstrategy-ws-VTZQOIY5VGIEXQJh.pdf

Original File Name: CLNE Comment Letter on SLCP FINAL.pdf

Date and Time Comment Was Submitted: 2015-06-12 14:11:26

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

First Name: Jessica Last Name: Olson Email Address: olsonj@ayreslawgroup.com Affiliation: Ayres Law Group LLP

Subject: Honeywell Comments on ARB Concept Paper Comment:

Please see the attached comments on the May 7, 2015 concept paper, "Short-Lived Climate Pollutant Reduction Strategy," from Honeywell International Inc.

Attachment: www.arb.ca.gov/lists/com-attach/35-slcpstrategy-ws-VWRcbwEtAGMFNVR5.pdf

Original File Name: 15-06-12 Honeywell Comments to ARB.pdf

Date and Time Comment Was Submitted: 2015-06-12 14:31:51

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

First Name: James Last Name: Garner Email Address: jgarner@westcoastadvisors.com Affiliation:

Subject: SLCP Concept Paper Comment Letter Comment:

Please find attached a comment letter from the Agricultural Energy Consumers Association regarding CARB's Short-lived Climate Pollution Reduction Strategy Concept Paper.

Attachment: www.arb.ca.gov/lists/com-attach/36-slcpstrategy-ws-AW1SIF0uUFwDcQFu.pdf

Original File Name: Ltr to ARB Nichols re short lived climate pollutant reduction strategy.pdf

Date and Time Comment Was Submitted: 2015-06-12 14:37:46

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

First Name: Veronica Last Name: Pardo Email Address: veronica@crrcnorth.org Affiliation: Regulatory Affairs Associate

Subject: CRRC Comments Re: SLCP strategy Comment:

The California Refuse Recycling Council thanks you for this opportunity.

Attachment: www.arb.ca.gov/lists/com-attach/37-slcpstrategy-ws-UTICdgFyUWFVDFUm.pdf

Original File Name: CRRC SLCP Final Comment Letter 06 12 15.pdf

Date and Time Comment Was Submitted: 2015-06-12 14:57:50

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

First Name: John Last Name: Ferraro Email Address: jferraro@kellencompany.com Affiliation: Extruded Polystyrene Foam Association

Subject: CalEPA ARB "Short-Lived Climate Pollutant Reduction Strategy Concept Paper" Comment:

The Extruded Polystyrene Foam Association (XPSA) appreciates the opportunity to provide the attached comments on the referenced Concept Paper. XPSA is a trade association representing manufacturers of extruded polystyrene foam (XPS) insulation products and the industry's raw material suppliers. As you review our comments, please feel free to contact me with questions or concerns.

John Ferraro XPSA Executive Director

Attachment: www.arb.ca.gov/lists/com-attach/38-slcpstrategy-ws-WiJTJQZ0V2UBWFA8.pdf

Original File Name: XPSA Letter to CARB.pdf

Date and Time Comment Was Submitted: 2015-06-12 15:03:42

# Comment 38 for Short-Lived Climate Pollutant Strategy (slcpstrategy-ws) - 1st Workshop.

This comment was posted then deleted because it was unrelated to the Workshop item or it was a duplicate.

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

First Name: Sarah Last Name: Deslauriers Email Address: SDeslauriers@carollo.com Affiliation: CA Wastewater Climate Change Group

Subject: CWCCG Comments Regarding the Concept Paper on the Short Lived Climate Pollutant Reduction Comment:

The California Wastewater Climate Change Group (CWCCG) appreciates the opportunity to comment on the Short Lived Climate Pollutant Reduction Strategy Concept Paper. Please contact me if you have any questions at (925) 705-6404 or sdeslauriers@carollo.com. We welcome the opportunity to further discuss the wastewater community's position and help ARB proactively reduce SLCP emissions to achieve the commendable State goals and mandates for 2020 and beyond.

Sincerely, Sarah A. Deslauriers Program Manager

Attachment: www.arb.ca.gov/lists/com-attach/40-slcpstrategy-ws-UjFUJQRmBTVSMwlW.pdf

Original File Name: CWCCG Comments\_SLCP Concept Paper\_061215\_FINAL.pdf

Date and Time Comment Was Submitted: 2015-06-12 15:01:04

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

First Name: Graham Last Name: Noyes Email Address: gnoyes@kfwlaw.com Affiliation: Attorney for Sierra Energy

Subject: Comments of Sierra Energy RE: SLCP Concept Paper Comment:

Attached please find comments submitted on behalf of Sierra Energy. Please contact me if there are any questions regarding the comments. Thank you for the opportunity to provide input to this process. Best Regards, Graham Graham Noyes Keyes, Fox & Wiedman LLP 980 Ninth Street, 16th Floor Sacramento, CA 95814 (916)668-4636 Direct (206)856-8784 Cell Licensed to Practice in California, Washington and the District of Columbia gnoyes@kfwlaw.com kfwlaw.com

Attachment: www.arb.ca.gov/lists/com-attach/41-slcpstrategy-ws-B3QCaAZkUXJXDlU2.pdf

Original File Name: SLCP comments of Sierra Energy 12 June 2015.pdf

Date and Time Comment Was Submitted: 2015-06-12 15:33:50

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

First Name: Kevin Last Name: Washington Email Address: kwashington@itw.com Affiliation: Illinois Tool Works Inc.

Subject: Comments to CARB's SLCP May 27 public meeting Comment:

Comments to CARB's SLCP May 27 public meeting

Attachment: www.arb.ca.gov/lists/com-attach/42-slcpstrategy-ws-AGISIFMIBwsAZQZp.docx

Original File Name: ITW comments to SLCP plan outline June 12 2015.docx

Date and Time Comment Was Submitted: 2015-06-12 15:43:50

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

First Name: Julee Last Name: Malinowski Ball Email Address: julee@ppallc.com Affiliation:

Subject: CBEA Comments on Short-Lived Climate Pollutant Strategy Comment:

On behalf of the California Biomass Energy Alliance (CBEA), attached please find comments regarding Short-Lived Climate Pollutant Strategy.

Attachment: www.arb.ca.gov/lists/com-attach/43-slcpstrategy-ws-VTZQOQNvVmgBYgVr.pdf

Original File Name: COMMENTS Short-Lived Climate Pollutant Strategy 06-12-2015.pdf

Date and Time Comment Was Submitted: 2015-06-12 15:51:41

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

First Name: Rebecca Last Name: Spector Email Address: rspector@centerforfoodsafety.org Affiliation:

Subject: comments to the Air Resources Board's Short Lived Climate Pollutant Reduction Comment:

On behalf of the undersigned groups, representing hundreds of thousands of consumers and thousands of farmers in California, we offer the attached comments in response to the Air Resources Board's Short Lived Climate Pollutant Reduction Strategy Concept Paper.

We look forward to further discussions with the agency on this important issue.

Carter Dillard, Animal Legal Defense Fund Kelly Damewood, California Certified Organic Farmers (CCOF) Rebecca Spector, Center for Food Safety Brent Newell, Center on Race, Poverty & the Environment Patty Lovera, Food and Water Watch Kari Hamerschlag, Friends of the Earth Ben Lilliston, Institute for Agriculture and Trade Policy Jessica Culpepper, Public Justice Kendra Kimbirauskas, Socially Responsible Agriculture Project Jo Ann Baumgartner, Wild Farm Alliance

Attachment: www.arb.ca.gov/lists/com-attach/44-slcpstrategy-ws-BWRTJwdkUV0LbgRr.pdf

Original File Name: ARB Concept Paper Comments letter.6.12.15.FINAL.pdf

Date and Time Comment Was Submitted: 2015-06-12 16:07:01

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

First Name: Lisa Last Name: Handy Email Address: lisahandy@eia-global.org Affiliation: Environmental Investigation Agency

Subject: Comments on CARB's SLCP Reduction Strategy Concept Note Comment:

The Environmental Investigation Agency appreciates the opportunity to comment on this SLCP Reduction Strategy Concept Paper and we look forward to further discussions as you continue to develop the strategy. Please find our comments attached.

Sincerely, Lisa Handy

Attachment: www.arb.ca.gov/lists/com-attach/45-slcpstrategy-ws-VDJRPgdoWGpROwdY.pdf

Original File Name: Final EIA Comments\_CARB SLCP ReductionStrategy\_6.12.15.pdf

Date and Time Comment Was Submitted: 2015-06-12 16:15:41

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

First Name: Brian Last Name: Nowicki Email Address: bnowicki@biologicaldiversity.org Affiliation: Center for Biological Diversity

Subject: Comments re SLCP concept paper Comment:

Please accept these comments submitted on behalf of the Center for Biological Diversity and our over 100,000 members and supporters in California, regarding the Short-Lived Climate Pollutant Reduction Strategy Concept Paper.

Attachment: www.arb.ca.gov/lists/com-attach/47-slcpstrategy-ws-VDdQNFQxAAwDZgFu.pdf

Original File Name: CBD comments SLCP concept paper (06 12 2015).pdf

Date and Time Comment Was Submitted: 2015-06-12 16:27:52

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

First Name: John Last Name: Atkinson Email Address: jatkinson@vng.co Affiliation: VNG

Subject: NGVs and SLCPs Comment:

Attached are VNG's comments on the SLCP concept paper. Thanks for the opportunity to provide some input on this important topic.

Best, John Atkinson VNG Director of Regulatory and Government Affairs jatkinson@vng.co 1458 Echo Park Ave Los Angeles, CA 90026

Attachment: www.arb.ca.gov/lists/com-attach/48-slcpstrategy-ws-BnBTO1cxUV1SeQRb.pdf

Original File Name: VNG - SLCP concept paper comments.pdf

Date and Time Comment Was Submitted: 2015-06-12 16:35:40

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

First Name: Frank Last Name: Moore Email Address: fmoore@smithbucklin.com Affiliation:

Subject: Public Comments on the Air Resources Board's Preparation of a Short Lived Climate Pollutan Comment:

Please accept the following attahced PDF as comments submitted by the North American Association of Food Equipment Manufacturers.

Attachment: www.arb.ca.gov/lists/com-attach/49-slcpstrategy-ws-BWgBbgRmUHEFbFQn.pdf

Original File Name: Microsoft Word - NAFEM Letter to CARB re SLCP Reduction Strategy June 12 2015.pdf

Date and Time Comment Was Submitted: 2015-06-12 16:57:01

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

First Name: MARK Last Name: GAGLIARDI Email Address: mgagliardi@oaklandnet.com Affiliation: Recyclers Global Warming Council (RGWC)

Subject: Banning Organics from Landfill Disposal Comment:

The Recyclers Global Warming Council (RGWC) of the California Resource Recovery Association (CRRA) represents interests within the CRRA and overall resource recovery industry to address the issue of climate protection through Zero Waste strategies: reduce, reuse, recycling, composting and product stewardship. The CRRA is the oldest and one of the largest non-profit organizations in the United States dedicated to reducing waste, pollution, and greenhouse gas (GHG) production through Zero Waste strategies.

RGWC appreciates the opportunity to provide input on the Short-Lived Climate Pollutant Strategy.

Banning organics statewide is viable as an incremental policy and program strategy; there are cities and counties already doing so in CA and elsewhere with an incremental, iterative approach to implementation; and California should move forward with doing so.

Alameda County banned plant debris disposal, is implementing mandatory recycling of organics, is serious about it, and is willing to share its policy approach and program results as the state considers eliminating disposal of organic materials in CA landfills. Similarly, San Francisco has adopted and is implementing mandatory organics recycling.

A Commercial Organics Disposal Ban was recently adopted by New York City. Fort Collins, CO banned corrugated cardboard boxes/packaging from landfill disposal for all commercial, industrial, and residential generators and also banned landfill disposal of electronics.

Many other states have banned yard trimmings from landfills for many years. Massachusetts has recently adopted a ban on all organics from landfills. Massachusetts has used bans very successfully to stimulate waste reduction, recycling and composting as well as climate protection benefits. North Carolina has had a Cardboard Ban for many years that has been particularly successful ( http://nrcrecycles.org/mobius/nrcwp-content/uploads/2015/01/Blair-Pollock-White-Paper.pdf

).

Banning organics from landfill disposal is a viable strategy and a key to achieving ARB's goals.

Mark Gagliardi, Chair CRRA, Recyclers Global Warming Council

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-06-12 17:01:39

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

First Name: Patrick Last Name: Serfass Email Address: pserfass@ttcorp.com Affiliation: American Biogas Council

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

Dear Chairwoman Nichols and Mr. Corey, I am writing on behalf of the American Biogas Council to express our strong support for the Short‐Lived Climate Pollutant Reduction Strategy Concept Paper. The Concept Paper provides an excellent summary of the science and the urgency of reducing SLCPs and a very good starting point for developing the strategy to reduce SLCPs. We look forward to working with the Air Board and other stakeholders to develop a strategy that will reduce SLCPs and other pollution while helping to meet the state's clean energy, waste diversion and other important goals. The American Biogas Council (ABC) represents over 200 businesses in across the US, including over 3 dozen located in California and dozens others doing business there, who are all dedicated to the development of the biogas industry. Our member companies span the entire biogas industry supply chain: project developers, landowners, anaerobic digestion providers, waste water companies, waste managers, utilities, financial firms and others. The ABC reiterates and strongly supports these three main points and associated sub‐ points submitted by the Bioenergy Association of California (BAC), one of our members: A. Strong Support for the Concept Paper Overall The ABC strongly supports the Concept Paper overall and applauds the Air Board for producing an excellent first draft. We are especially impressed with the very strong summary of the science, the clear message throughout the Concept Paper about the urgency of reducing SLCPs, cross‐ sector and integrated strategies to reduce SLCPs. B. Immediate Research Needs The Concept Paper points out in several places where additional research and demonstration is needed. ABC supports the BAC recommendation that the Air Board and other agencies should begin immediately to address the following important research needs: 1. Need to Quantify Lifecycle Emissions and Reductions from Organic Waste, including Different End Uses. 2. Need a lifecycle analysis of the GHG/SLCP emissions and reductions from forest fuel treatments and their end uses. 3. Need to quantify emissions reductions from organic soil amendments such as biochar, biosolids, digestate and compost. C. Recommended Strategies to Reduce SLCPs The ABC also supports the BAC recommended strategies that the Air Board should add: 1. Align GGRF and other funding with SLCP reduction priorities. 2. Need to change utility processes and incentives. 3. Need a cross sector strategy to increase the use of renewable

gas, such as a Renewable Gas Standard. Like the BAC, we urge the Air Board to propose a policy that requires the increased production and use of renewable natural gas, like the Renewables Portfolio Standard (RPS) in the electricity sector and the Low Carbon Fuel Standard in the transportation sector. More than 25 percent of California's greenhouse gas emissions are from the use of fossil natural gas (not including leaks). Increasing the production and use of biogas processed into renewable natural gas would reduce SLCPs upstream, reduce fossil fuel emissions, and provide organic soil amendments such as biochar and biosolids. Increasing renewable gas production can reduce greenhouse gas emissions by tens of millions of metric tons per year. Incentives are powerful tools for piloting and demonstrating new technologies and helping to commercialize an industry, but they do not provide the long‐term market demand or certainty needed to truly transform an industry. Just as California needs the RPS and LCFS to move to renewable energy and low carbon fuels, it needs a policy to significantly expand the production and use of renewable gas. The American Biogas Council urges the Air Board to recommend, in the SLCP Strategy, the adoption of a Renewable Gas Standard or other policy that requires California to increase the percentage of renewable gas, particularly biogas, produced and used in California. The path ARB proposes to take is at the forefront nationally on these issues. No other jurisdiction has put on the table anything nearly as comprehensive in the scope of the GHG issues they propose to address. Nor has an executive agency in any other state so boldly proposed integrated strategies that cross multiple agencies within the executive branch, as well as action from the legislature. This is bold leadership, and we support ARB's direction. We look forward to working with the Air Board to develop and implement a successful strategy to reduce SLCPs. The Concept Paper is a great start.

Sincerely, Patrick Serfass Executive Director American Biogas Council

Attachment: www.arb.ca.gov/lists/com-attach/51-slcpstrategy-ws-VSZVP1AyUHBQCVB9.pdf

Original File Name: SLCS - American Bio Gas.pdf

Date and Time Comment Was Submitted: 2015-06-15 09:22:10

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

First Name: J.P. Last Name: Cativiela Email Address: jcativiela@westcoastadvisors.com Affiliation: Dairy Cares

Subject: Dairy Cares SLCP Comments Comment:

Please see attached.

J.P. Cativiela jcativiela@westcoastadvisors.com Senior Vice President West Coast Advisors 925 L Street, Suite 800 Sacramento, CA 95814 Office (916) 441-4383 Mobile (916) 261-6556

Attachment: www.arb.ca.gov/lists/com-attach/52-slcpstrategy-ws-B2NRNlw0VncBfgBj.pdf

Original File Name: DairyCares.SLCP FINAL 6 12 2015.pdf

Date and Time Comment Was Submitted: 2015-06-15 10:20:13

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

First Name: Brent Last Name: Newell Email Address: bnewell@crpe-ej.org Affiliation: Center on Race, Poverty&the Environment

Subject: Comments on the SLCPS Comment:

See attached. Brent Newell Legal Director Center on Race, Poverty & the Environment 1999 Harrison Street, Suite 650 Oakland, CA 94612 (415) 346-4179 x304 (415) 346-8723 fax bnewell@crpe-ej.org www.crpe-ej.org

Attachment: www.arb.ca.gov/lists/com-attach/53-slcpstrategy-ws-W2lXYQY2BWNQeFRk.zip

Original File Name: 2015.06.10 SB 605 Concept Paper comments FINAL.zip

Date and Time Comment Was Submitted: 2015-06-15 10:37:56

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

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

Subject: American Carbon Registry Comment:

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

Kind regards, Arjun Patney Policy Director American Carbon Registry

Attachment: www.arb.ca.gov/lists/com-attach/54-slcpstrategy-ws-UzJcOVAjWVVWM1I9.pdf

Original File Name: ACR comments to ARB on SLCP Strategy June 2015 FINAL\_signed.pdf

Date and Time Comment Was Submitted: 2015-06-15 12:36:48

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

First Name: Alexander Last Name: Hillbrand Email Address: ahillbrand@nrdc.org Affiliation: Natural Resources Defense Council

Subject: NRDC Comments on ARB Strategy for Reduction in Hydrofluorocarbons Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/55-slcpstrategy-ws-UT9QJFUwV2dSCwFp.pdf

Original File Name: NRDC HFC Comments on CARB SLCP Concept Paper.pdf

Date and Time Comment Was Submitted: 2015-06-16 13:12:25

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

First Name: David Last Name: Calabrese Email Address: david.calabrese@daikinus.com Affiliation: Daikin

Subject: Comments to ARB Short-Lived Climate Pollutant Strategy Concept Paper Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/56-slcpstrategy-ws-VjIBZgRsVm4FagJs.pdf

Original File Name: Daikin Ltr\_ARB SLCP Strategy FINAL.pdf

Date and Time Comment Was Submitted: 2015-06-17 10:19:23

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

First Name: Matthew Last Name: Plummer Email Address: M3Pu@pge.com Affiliation: Pacific Gas and Electric Company

Subject: Pacific Gas and Electric Company's Comments on the ARB Short- Lived Climate Pollutan Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/57-slcpstrategy-ws-VCQFZARgAw9SNwRr.pdf

Original File Name: PGE Comments SLCP Concept Paper.pdf

Date and Time Comment Was Submitted: 2015-06-18 12:56:05

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

First Name: John Last Name: Shears Email Address: shears@ceert.org Affiliation: CEERT

Subject: Joint NGO Comments on Short Lived Climate Pollutant Reduction Strategy Concept Paper Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/58-slcpstrategy-ws-VD5WP101UG0BcwFe.pdf

Original File Name: Joint NGO Letter on CARB SLCP Concept Paper Final\_06.17.15.pdf

Date and Time Comment Was Submitted: 2015-06-18 12:56:05

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

First Name: Mikhael Last Name: Skvarla Email Address: Mikhael\_Skvarla@gualcogroup.com Affiliation: CCEEB

Subject: Re: Short-Lived Climate Pollutant Strategy – Concept Paper Comment:

See attached

Attachment: www.arb.ca.gov/lists/com-attach/59-slcpstrategy-ws-VjVcOQFlU2VVMQhX.pdf

Original File Name: CCEEB SLCP Concept Paper\_6-19.pdf

Date and Time Comment Was Submitted: 2015-06-22 08:09:33

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

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

Subject: Comments by SCG and SDGE on SLCPs Comment:

See attached.

Sincerely, Jerilyn López Mendoza Environmental Affairs Program Manager - Air Resources Board SoCalGas and on behalf of SDG&E

Attachment: www.arb.ca.gov/lists/com-attach/60-slcpstrategy-ws-BXYBYwZgWW8ELFAj.zip

Original File Name: SDGE.SoCalGas.zip

Date and Time Comment Was Submitted: 2015-06-22 09:17:56

There are no comments posted to Short-Lived Climate Pollutant Strategy (slcpstrategy-ws) that were presented during the Workshop at this time.