## **Comment 1 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Darryl Last Name: Mori Email Address: darryl.mori@artcenter.edu Affiliation: ArtCenter College of Design

Subject: CA colleges and universities can help with this effort Comment:

ArtCenter College of Design (www.artcenter.edu) is pleased that the State of California is taking thoughtful steps to mitigate the environmental effects ostensibly caused by Volkswagen's use of illegal emissions-related devices in some of its vehicles.

As both a California-based nonprofit organization and an institution of higher education, ArtCenter urges Volkswagen and the State of California to maximize this occasion as a timely opportunity to educate the public.

We are excited by the idea of multifaceted public awareness campaigns about ZEVs. There is a great potential role for the academic sector to advise and strengthen the effectiveness of these campaigns. California has an unusually strong, relevant pool of expertise in its colleges and universities. ArtCenter, as just one example, has more than 80 years of experience in teaching advertising, and it is also regarded as one of the top colleges in world for automotive design and graphic design. Conceiving multimodal campaigns and vehicle-related experiences is a core institutional strength.

California's colleges and universities are educating future industry leaders. Inviting students and faculty to be part of the solution could be an excellent way to inform the next generation.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-01 14:49:48

## **Comment 2 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Tim Last Name: Castleman Email Address: tim@practicalcycle.com Affiliation: Practical Cycle

Subject: Electric Bikes for Transportation Comment:

It is disappointing to find the electric bike overlooked as a low cost, clean transportation option! They need no special charging infrastructure, provide efficient effective transportation tools that use less of everything! Electric bikes should be included in every program that aims to reduce emissions while solving transportation challenges. All of the incentives that are applied to cars and trucks should be available equally to electric bikes. Please do not ignore electric bikes.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-01 17:31:30

## **Comment 3 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Linda Last Name: Coburn Email Address: linda@pedego101.com Affiliation: E-Bike Retailer in California

Subject: What about e-bikes? Comment:

I applaud the broad scope of projects/education proposed by the ARB with respect to the Volkswagen settlement. But it seems you are missing out on a low-cost, minimal infrastructure ZEV: electric bicycles. E-bikes are perfect for people in communities underserved by mass transit. They require very little power consumption. They promote a healthy lifestyle and more livable communities. A relatively small rebate would go a very long way to making these amazing machines affordable for low-income buyers. Please consider applying some of the settlement funds to supporting this approach to greening our cities.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-01 22:27:13

#### **Comment 4 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: James Last Name: Pachan Email Address: jpachan@actransit.org Affiliation: AC Transit

Subject: Funding for Fuel Cell Bus Engine Retrofits Comment:

AC Transit's highest performing fuel cell engine is nearing 24,000 hours, which is only 1,000 hours from the DOT/FTA Ultimate Target of 25,000 hours. Several other fuel cell engines are approaching 20,000 hours.

AC Transit has begun to see a degradation of performance in the older fuel cell engines, and there is a concern that these fuel cell engines are reaching the end of their useful life. This could result in a situation where the number of fuel cell buses in operation actually begins to decrease, which could have an impact on agencies considering transition to these zero emission buses.

AC Transit has in the past proposed funding for retrofit of some of the fuel cell engines in these buses to allow for an expansion of its fuel cell bus fleet from the current 13 buses to 23 buses after the next order of New Flyer fuel cell buses are received at the end of 2018. The retrofit is also important in validating the ability to have a 12 year fuel cell transit bus.

AC Transit is requesting that the Air Resources Board allocate some of the Volkswagen Settlement funds to provide for a funding source for the retrofit of our 2010 Van Hool fuel cell buses with new Ballard fuel cell engines.

The following is updated language from prior requests for funding the retrofit of these buses.

In order for heavy-duty fuel cell vehicles to gain widespread acceptance, fleet operators need to have access to real-world data and lessons learned when making future fleet decisions. The goal of the AC Transit Fuel Cell Bus Power Plant Retrofit project is to extend the service life of the AC Transit fuel cell bus fleet through a competitively bid fuel cell power plant retrofit and provide the data and lessons learned that can assist other transit and heavy-duty vehicle fleet operators.

The project proposes to retrofit six power plants operating currently in AC Transit's fuel cell bus fleet with the latest fuel cell technology. Each failed fuel cell power plant will be replaced with one of the original fuel cell power plants in storage. Most fuel cell suppliers are now offering newer fuel cell system models, which have been marketed as more durable, reliable, and compact. The proposed project will select the highest performing fuel cell power plant model commercially available. The power plants with the least amount of operating hours will be removed from the buses and will be stored on-site as spares to replace any failed fuel cell engines.

Six next generation fuel cell power plants will replace the original fuel cell power plant. The remaining seven fuel cell power plants will be kept in service until each one catastrophically fails, which is anticipated within the project timeframe.

The proposed project intends to determine two important findings necessary for fuel cell bus commercialization: 1) fuel cell power plant durability, and 2) improved fuel cell power plant performance. Durability of a fuel cell power plant in real-world operation has yet to be determined. For instance, the 2004 model fuel cell power plants operating in AC Transit's fuel cell bus fleet was originally anticipated to operate up to 5,000 hours.

Every fuel cell power plant in AC Transit's 2010 model year fuel cell bus fleet has now exceeded 14,000 hours. The longest operational fuel cell power plant is currently approaching 24,000 hours, nearing the durability of a diesel engine at 25,000 hours. It will be a critical milestone for fuel cell technology if any of AC Transit's fuel cells exceed the durability of conventional technology. All of AC Transit's fuel cell power plants will be run until catastrophic failure to produce a statistically significant conclusion of fuel cell durability.

AC Transit will also be able to evaluate and provide data for heavy-duty fuel cell technology. All active fuel cell bus fleets are operating last generation fuel cell systems, resulting in outdated fuel cell bus performance data are based on older fuel cell power plant models. AC Transit can concurrently operate seven fuel cell buses with the original fuel cell power plants along with six buses operating new fuel cell power plants. The old and new fuel cell power plants will be operated on identical and similar routes for an apples-to-apples comparison that will indicate the potential performance of commercial fuel cell technology. The outcomes of this project can help build confidence for fuel cell technology in other heavy-duty applications.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-02 07:12:51

## **Comment 5 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Kay Last Name: Siegel Email Address: kksiegel@h2safe.com Affiliation: H2Safe, LLC, CHBC

Subject: Hydrogen cars Comment:

Will there be any funding for research of on board hydrogen storage?

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-02 09:12:58

## **Comment 6 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Brenton Last Name: Smith Email Address: brunoylupe@hotmail.com Affiliation: EKAPCD

#### Subject: ZEV Infrastructure Comment:

deploy charging facilities to fill the voids. What about rest areas? Only recently has it become possible for me to drive from Bakersfield to Fresno in less than six hours. And even then I will have to plan options and alternatives carefully. Why is there alternative fuel vehicle dedicated spaces at rest stops and not dedicated areas with charging facilities for only battery electric vehicles? If more than an hour is required only to recharge for a trip of 100 miles or more, distance bev driving will remain an extra-ordinary adventure for only the brave.

"May include installation of: ∗ Level 2 chargers ∗ DC Fast Chargers"

---> MUST include!

To drive round-trip from Rosamond to Pasadena I charged for FIVE additional HOURS beyond the full charge I started with.

bgs

Attachment:

**Original File Name:** 

Date and Time Comment Was Submitted: 2016-12-02 14:41:44

## **Comment 7 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Michael Last Name: Nicholas Email Address: mianicholas@ucdavis.edu Affiliation: UC Davis

Subject: Fast Charging Tool Available for PG&E Territory Comment:

UC Davis partnered with PG&E, E3, and PlugShare to create a fast charger siting tool for PG&E territory under EPIC funding. It combined transformer capacity estimation with fast charger demand from UC Davis models. Information is available here:

https://www.pge.com/en\_US/about-pge/environment/what-we-are-doing/electric-program-investment-charge/direct-current-electric-vehicle-fast-chargers.page

It can a useful framework for future fast charger planning including that which may be contemplated by Volkswagen.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-06 09:56:51

## **Comment 8 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Josh Last Name: Boone Email Address: jboone@pevcollaborative.org Affiliation: CA PEV Collaborative

Subject: PEV Collaborative Public Statement RE VW CA ZEV Investments Workshop Comment:

See attached PDF.

Attachment: www.arb.ca.gov/lists/com-attach/9-vw-zevinvest-ws-WzpWIgRnAw8Hdwdw.pdf

Original File Name: ARB VW Workshop\_KehoeComments\_161202\_FINAL\_SubmittedtoARBDocket.pdf

Date and Time Comment Was Submitted: 2016-12-06 09:54:42

#### **Comment 9 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: John Last Name: Kalb Email Address: johnk@evchargingpros.com Affiliation: EV Charging Pros

Subject: VW Investment Idea Comment:

I have an idea about how to get more charing in multifamily properties.

Existing multifamily property owners are not interested in investing in investigating or deploying EV charging infrastructure. There are too many issues to investigate and resolve for a small population of residents as EV charging is not an amenity or business model that is required to support 100% of their residents.

All they really want to do is be able to know how many charging stations their property can support, but without a load study, site walks and business/ use case decisions they cannot answer the question. And they will not spend money looking at the issue.

The answer to deploying more charging infrastructure in existing multifamily complexes is to pay for load studies and EV charging consulting.

For example, I know a property manager who has 36 properties under management. They will not spend any money looking at EV charging. If the VW settlement would be the funding source for site specific load studies combined with 5 hours of site specific education, assessment and decision guidance (total cost 2,500 per project, or \$90K for these 36 properties) it would be possible for these sites to be able to communicate an EV Charging Policy to their residents.

And based on previous experience let's say 6 stations can be supported with existing electrical infrastructure per property so that a total 216 charging stations might be supported. That equals investing \$415 per charging station to get the site ownership and management prepared.

They don't want to spend money on this yet it is a critical component of making multifamily sites EV ready. Given that AB 2565 allows properties with policies to have tenants pay for charging infrastructure, if you eliminate the sticking point of cost to develop the policy, you might actually enable the support of property managers and owners, who so far have been extremely resistant. And tenants will know that they can install chargers if they get vehicles, a win/win.

This idea requires the partnership of EV charging consultants and electricians. Property owners don't want to talk to vendors and be

sold something, this is an information project first, then an equipment decision. Every vendor I have asked to support his idea will not because they can't invest their profit margins from hardware to get the project, so they are only going for low hanging sales fruit.

John Kalb, is Founder and President, EV Charging Pros (EVCP), an independent consultant, assisting commercial property owners, workplaces, and multifamily organizations to define corporate EV policies, explore site-specific EV charging requirements, evaluate vendor solutions and develop deployment plans. Since 2012 EVCP has worked on hundreds of EV charging projects. EVCP clients include:

Action Properties Bently Properties Boston Properties California Apartment Assoc. Common Interest Management Equity Office Intuit Parkworks US Presidio Trust Prometheus Real Estate Shorenstein Reality Spear St. Capital Trinity Properties Watry Design

John co-founded The Multifamily Electric Vehicle Working Group in 2014. Participants discuss the challenges, opportunities, technologies, best practices and case studies that factor into deploying EV charging within the multifamily space. These meetings include the following organizations:

Alliance Residential Avalon Bay Buzzuto Essex Real Estate Forrest City FF Properties GreyStar Irvine Company Lakeside Properties Pacific Urban Residential Prometheus Real Estate Group ROEM Development Saris Regis Woodmont Real Estate

John has spoken on panels, published articles and hosted webinars for organizations including:

Apartment Marketing Apartment Magazine Buildings Magazine CA Public Utilities Commission CA Apartment Association CA Parking Association Commonwealth Club Climate One HOA Magazine IREM Lodging Engineer NAIOP Insiders National Parking Association Nat. Multifamily Housing Council UC Davis Sustainable Transportation

John is on the Board of Directors of these leading transportation organizations:

City Car Share Emerge Mobility Charge Across Town California EV Alliance

Previously John served as Vice President of Research for Hattras, a market research firm focused on the data storage industry. Clients include EMC, Hitachi, LSI, NetApp, QLogic, and Cisco. John has developed dozens of market research and business plans for companies seeking to enter new markets. In the 1980's John was VP for Investment Banking at Dakin Securities, where he sourced private and mezzanine financing for companies seeking to raise up to \$50M.

John Kalb | Founder | EV Charging Pros p - 415.209.6585 | c - 415.717.5241 www.evchargingpros.com johnk@evchargingpros.com Twitter @evchargingpros

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-08 10:14:00

## **Comment 10 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Michael Last Name: Dray Email Address: michael.dray@calstatela.edu Affiliation: Cal State LA Hydrogen

Subject: VW Settlement Comments Comment:

We would respectfully request allocation of some of the VW settlement funds for hydrogen station technician training, public education, and accelerating the construction of new hydrogen fueling infrastructure. At Cal State LA Hydrogen Research & Fueling Facility, we are employing student engineers (approx. 10) to study, operate and repair hydrogen fueling equipment. We have also given educational tours to approximately 15,000 members of the public, all while fueling FCEV vehicles. Notably, Cal State LA Hydrogen made the first sale of hydrogen by the kilogram in world history to Volkswagen, having received the first type approved dispenser certification by DMS just weeks earlier. We have thus made history with Volkswagen and would offer extended collaboration if funding is available.

Respectfully submitted, Michael Dray, Esq. Cal State LA Hydrogen Manager

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-08 16:58:20

## **Comment 11 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: CarlFCEV cars have a Last Name: Lawton Email Address: carllwtn@yahoo.com Affiliation: SHSP - Strategic Highway Safety Plan

Subject: VW Dieselgate Settlement funds apportionment details Comment:

FCEV cars have a huge advantage over BEV cars in that they have no range anxiety issues & long charging times but there are very few H2 stations & those are all too close together given that the 3 mainstream FCEVs have a comfortable 300mile range. As part of the VW Dieselgate settlement with CARB they should put aside a BILLION dollars to build out the H2 Highway along major CA FWY & HWY routes to be readily accessible & not just at an obscure gas station somewhere. Secondly the AAA will be wise to consider to have a "Mobile H2 Refill" service truck to dispense H2 to a stranded FCEV anywhere in California just as they do now with the 5 gallon jerry-can of regular gas. The H2 would be kept in a carbon-fiber tank ala Hyundai Tucson FCEV & filled to H70/10,000PSI at MAX VOLUME. This would quickly replenish an stranded empty tank of a FCEV in a minute equalizing at H35/5,000PSI for a half tank each driving range of about 150miles..more than enough to find H2 station.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-12 14:27:10

## **Comment 12 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Maureen Last Name: Blanc Email Address: maureen@chargeacrosstown.com Affiliation: Charge Across Town

Subject: Support for ZEV Investment in Educational Outreach Comment:

PLEASE SEE THE ATTACHED LETTER

Attachment: www.arb.ca.gov/lists/com-attach/13-vw-zevinvest-ws-UTJVMIYIVWQGXwRo.doc

Original File Name: CARB Letter.doc

Date and Time Comment Was Submitted: 2016-12-13 11:48:19

## **Comment 13 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jon Last Name: Enberg Email Address: jon.enberg@wattzon.com Affiliation: WattzOn

Subject: EV Benefits Calculator Comment:

To promote consumer awareness and adoption of EVs, a web-based EV savings engine that calculates \$ savings on utility bills and fuel costs, by importing a consumer's utility data (one-click) and selecting current vehicle. Also calculates CO2 footprint reduction.

All TOU info, smart meter data, energy storage, utility rates, vehicle mpg, etc. are included in the calculator. Results are calculated based upon a consumer's utility data, desired EV and current vehicle.

The savings engine is an online tool with open data APIs.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-13 13:03:09

## **Comment 14 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Michelle Last Name: Overmeyer Email Address: movermeyer@mst.org Affiliation:

Subject: ZEV and Transit Comment:

The comment letter from Monterey-Salinas Transit is attached.

Attachment: www.arb.ca.gov/lists/com-attach/15-vw-zevinvest-ws-B2pXIgB1BQkKb1Q7.pdf

Original File Name: MST comment letter.pdf

Date and Time Comment Was Submitted: 2016-12-13 15:41:37

#### **Comment 15 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Charlie Last Name: Bogue Email Address: charlie@windwingtech.com Affiliation: Wind + Wing Technologies

Subject: VW Green City - ZEV Transit Opportunities Comment:

To Whom It May Concern,

This is a comment for the record regarding Volkswagen's Zero Emission Vehicle Investment Commitment, and how those funds may be applied or appropriated. More specifically, our comment applies to the "Green City" section of the commitment, and within that we are focused on the ZEV transit applications and ZEV freight applications.

At Wind + Wing Technology we have already completed a demonstration of our Wind Assist technology in collaboration with ARB and the BAAQMD through the AQIP program for a ferry demonstration on the San Francisco Bay. From the success of that project we now have a second demonstration vessel in design and construction for launch in Summer 2017, as well as ongoing conversations and contract negotiations with multiple clients for Zero Emission US Coast Guard certified vessel applications in California (utilizing electric and wind-assist hybrid propulsion). In addition, we have developed an application for the same Wind-Assist technology to be adapted for the maritime freight transport applications.

As we have developed this market and identified the need for Zero Emissions transit alternatives for both public and freight sectors, there are a number of applications that are applicable in California. In addition Volkswagen has a distinct need to improve their market appeal and their corporate image by moving in the Zero Emission direction. While these alternatives are not related to Zero Emission Vehicles per se, we feel strongly that given that the categories were already created under the Green City commitment, that there is a ripe opportunity for a win-win development of the Zero Emission maritime transportation market.

With funding from VW, we would quickly be able to scale our operations and provide exponential near-term benefits for improving the emissions for multiple communities simultaneously. We are unclear exactly how the Green City is chosen, or how the transit options fit within that city chosen, but feel that ferry and passenger transportation can benefit a wide range of population that travel to various destinations in California from port to port.

We are available for any questions or clarification, and thank you for your time to include this in consideration.

Best,

Charlie

Charlie Bogue Director of Market Development and Strategy

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-14 09:16:30

#### **Comment 16 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Martin Last Name: Bloedt Email Address: martin.bloedt@siemens.com Affiliation: Siemens Industry Inc.

Subject: Suggestion guidelines for Volkswagen ZEV investments Comment:

Dear California Air Resources Board,

We understand that CARB has announced the intent on how to specify Volkswagen California ZEV Investment Commitment through a Public Process. We very much support the growth of the ZEV market and accompanying infrastructure. At Siemens, we also believe the commitment should include other areas that will pave the way to our clean energy future. To confirm our commitment, in September 2015, Siemens announced its intention to cut the carbon footprint of its operative business in half by 2020 and to become climate neutral by 2030. To achieve this, Siemens is focusing on four different levers: energy efficiency, decentralized energy systems, intelligent e-mobility solutions and the purchasing of clean electricity.

Siemens believes there are several areas discussed in the Investment Commitment announcement that warrant additional consideration.

#### 1. ZEV infrastructure

We believe that ZEV infrastructure investments should be focused on promoting intermodal transport i.e. using individual transportation such as electric cars for short distances and for connections with other modes of transportation such as public transit, intercity rail transport and air.

We are convinced that especially the combination of ZEV with rail provides important advantages in terms of total greenhouse gas emissions, other emissions, reduction of traffic congestion and energy usage.

We therefore suggest to direct Volkswagen's infrastructure investment into charging stations located near public transportation hubs, in order to facilitate the use of electric cars on short distances from home to stations, where the EV can charge and the user connects to other transportation modes.

2. Green City

We understood from the workshop on 12/02/2016 that ARB suggests to direct the Green City investments rather to one single place where changes can be really transformative instead of spreading the investments over a larger number of cities.

With respect to the necessary choice of a future "Green City" we propose to CARB to choose a city that serves as intermodal transportation hub connecting individual motorized traffic with at least passenger rail, air and regional transit. This approach would provide most benefits in leveraging the combination of various modes of transportation, for the befits of more people (not only local inhabitants but also travelers in transit) and provide greater emission reductions. We think for example of using zero emission vehicles for connections between airport, intercity railway stations, light rail stations etc. for boosting not only individual transportation but also energy-efficient public transportation by rail. Specifically, we think that the city of San Diego could be suitable.

In addition we would also like to see CARB support and guide funds of Volkswagen's commitment toward intelligent technologies in cities to better manage the traffic that is increasing so quickly on California roads, thereby increasing congestion and affecting air quality and carbon emissions. Siemens has invested in many systems that support adaptive signal control, being able to move vehicles more efficiently through the road network and prioritizing cleaner modes like bike and transit through our existing transportation systems. We believe that investing in intelligent traffic systems – both hardware and software – is a cost-effective way to support the goals of a clean air future with reduced emissions.

By incorporating some of these ideas into the Investment Commitment, Siemens believes we can help California achieve the ambitious climate change goals laid out for the state.

Thank you for your consideration.

Martin Bloedt for Siemens Mobility

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-14 14:46:13

#### **Comment 17 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: David Last Name: Uselton Email Address: dcuselton@gmail.com Affiliation: FC leases for almost three years now

Subject: Comments on VW settlement plan for 2.0L engines Comment:

Hello,

I have read the materials and would like to applaud the efforts to deliver a program which will direct a large portion of the settlement towards balancing the equation by making VW invest in Zero Emissions programs.

I have had my Hyundai Tucson FCEV for almost three years now and will be taking on another FCEV when my current lease is up.

This is subject of my comments. Very encouraging to see that 25% will go to programs to help enable zero emission option for low income areas as this is fantastic. Looking to focus more charging stations for EV's in public and health care related locations is also a wonderful and deserving strategy.

I was hoping to see a more solid segment that showed a hard commitment to some of the money going towards continuing to build out the Fuel Cell refueling infrastructure as well.

Both EV and FCEV are wonderful answers to lowering emissions and helping to curb our dependency on fossil fuels. FC's do not seem to be getting the same "hard" plans and programs as EV's are in the documents I have reviewed for this settlement. They are certainly mentioned but in more general terms.

Considering that VW has no plans for FC's in air public messaging for future vehicles, it does seem that this program does still favor VW in this area as opposed to being neutral and helping support the Zero Emissions for both technologies including all the FC technology that Honda, Toyota and Hyundai continue to push forward.

So I hope there can be some improvement in the hard allocation of a healthy portion (maybe 25%) toward delivering more FC refueling locations as this strategy continues on its path to the final plan.

Thank you for your time,

Dave Uselton

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-14 18:11:16

## **Comment 18 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Mike Last Name: Saxton Email Address: MikeS@OrangeEv.com Affiliation: Orange EV

Subject: Orange EV's ZEV Investment comments: Heavy-duty vehicles + Funding mechanisms Comment:

Please see the attached letter for Orange EV's comments regarding CARB's ZEV Investment Commitment recommendations. In short, we request that California's priority recommendations include: 1) funding for charging stations and electrical charging infrastructure for exclusive use by heavy-duty electric vehicles; and 2) streamlined, first-come first-served funding mechanisms. Thank you for your continued hard work, and for your consideration in this matter.

Attachment: www.arb.ca.gov/lists/com-attach/19-vw-zevinvest-ws-AG9UIAdnUm9QMVM2.pdf

Original File Name: Orange EV Comments on CA VW ZEV Investment Commitment.pdf

Date and Time Comment Was Submitted: 2016-12-15 09:24:43

#### **Comment 19 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Leslie Last Name: Graham Email Address: lgraham@greencommuter.org Affiliation: Green Commuter

Subject: Volkswagen's Zero Emission Vehicle Investment Commitment Comment:

Dear California Air Resources Board Members and Staff,

We appreciate the opportunity to provide comments on the Volkswagen's (VW) Appendix C zero emission vehicle (ZEV) Investment in California.

Green Commuter, a minority-woman-owned Benefit Corporation headquartered in California, has developed an innovative system that utilizes a fleet of 100% zero-emission vehicles (ZEV) to provide a combined service of vanpool, car sharing and/or fleet replacement to maximize efficiency, decrease the cost of commuting, and increase ZEV access for all consumers in California. The Green Commuter model operates vanpool vehicles as public car share and/or fleet replacement vehicles during non-commute hours. This integrated approach reduces costs and increases benefits-improving zero-emission mobility, reducing emissions, and alleviating traffic and parking issues.

Mobility services that maximize occupancy and use of the vehicles are ideally suited for electric vehicle technologies. Utilizing the electric vehicles for multiple forms of mobility services – including vanpooling, car sharing and fleet replacement maximizes efficiency and increases the benefits of zero-emission technology. Zero-emission vanpooling, with the combined car sharing/fleet replacement and necessary supporting EVSE infrastructure, increases awareness and access for more Californians to ride in an electric vehicle and help reach the State's ZEV deployment and air quality goals, including the Governor's ZEV Action Plan, SB 350, SB 1275, and SB 535.

Green Commuter supports the Air Resources Board (ARB) four guiding principles for the Consent Decree Appendix C. Our specific comments include:

• We support the installation of ZEV infrastructure, specifically DC fast-chargers at workplaces and Level 2 chargers at Park and Ride Lots or other vanpool pick-up locations. We respectfully request expanding eligibility to include Level 3 mobile charging stations to allow more EVs to access fast charging and improve zero-emission vehicle scalability. Mobile chargers provide the ability to charge during off-peak periods and utilize the batteries to charge vehicles during peak periods, reducing the strain to the electrical grid and lowering costs.

• We strongly support the inclusion of programs or actions to increase public exposure and/or access to ZEVs without purchase or lease of a vehicle. Specifically, we support zero-emission car

share and rideshare services, and respectfully request the inclusion of zero-emission vanpooling in the guiding principles for Appendix C to include funding for zero-emission vanpooling in all four investment plans over the next ten years which will maximize opportunities for California residents of all economic means to ride and drive a zero-emission vehicle.
We applaud the inclusion of a Green City to provide key demonstrations of zero-emission car sharing services and respectfully request the inclusion of zero-emission vanpooling in all four investment plans over the next ten years to further ZEV access.

Thank you for the opportunity to provide comments on the VW Consent Decree Appendix C. We look forward to continuing to work together to help carry out the goals and initiatives of increasing public and equitable access to zero-emission vehicles for consumers in California.

Sincerely, Leslie Graham - Director, Grants and Partnerships Gustavo Occhiuzzo - Chief Executive Officer

Attachment: www.arb.ca.gov/lists/com-attach/21-vw-zevinvest-ws-UCZRIFMNAyMCYQVx.pdf

Original File Name: VW Settlement Comment Letter Dec 2016.pdf

Date and Time Comment Was Submitted: 2016-12-15 09:56:58

# Comment 20 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.

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

## **Comment 21 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Paul Last Name: Gutierrez Email Address: paulg@ibew234.org Affiliation:

Subject: VW Comment Letter Comment:

Attached is IBEW 234's VW comment letter.

Attachment: www.arb.ca.gov/lists/com-attach/23-vw-zevinvest-ws-USdVJFIMAjJVPAVo.pdf

Original File Name: VW Comment Letter.pdf

Date and Time Comment Was Submitted: 2016-12-15 11:35:23

## **Comment 22 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Katherine Last Name: Stainken Email Address: kstainken@pluginamerica.org Affiliation: Plug In America

Subject: Plug In America Comments to Appendix C of the VW Settlement for CA Comment:

To Whom it May Concern,

Attached please find Plug In America's comments to Appendix C of the VW Settlement. Should you have further questions about these comments, please do not hesitate to contact me.

Thank you for your leadership, and we look forward to working with you!

Best regards,

Katherine Stainken Policy Director, Plug In America

Attachment: www.arb.ca.gov/lists/com-attach/24-vw-zevinvest-ws-AXECaFwoVGBRCABp.pdf

Original File Name: Plug In America Comments on VW Settlement Appendix C for California\_161215v1.pdf

Date and Time Comment Was Submitted: 2016-12-15 12:07:26

## **Comment 23 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Mikael Last Name: Sloth Email Address: mslot@nelhydrogen.com Affiliation: Nel Hydrogen

Subject: Inclusion of hydrogen in ZEV Investment Plan Comment:

Comment is provided in enclosed letter.

Attachment: www.arb.ca.gov/lists/com-attach/25-vw-zevinvest-ws-B2lRMgZrWVVWMwBv.pdf

Original File Name: NEL\_comment-ARB-VW\_15-12-2016.pdf

Date and Time Comment Was Submitted: 2016-12-15 12:16:52

## **Comment 24 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Mike Last Name: McKeever Email Address: mmckeever@sacog.org Affiliation: SACOG

Subject: Comments Regarding California's Guidance for the Zero Emission Vehicle Investment Plan Comment:

Please see attached letter.

Attachment: www.arb.ca.gov/lists/com-attach/26-vw-zevinvest-ws-WiBUNwNwBTkBWAdi.pdf

Original File Name: Zero Emission Vehicle Investment Plan 12 16 16.pdf

Date and Time Comment Was Submitted: 2016-12-15 13:51:46

## **Comment 25 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Larry Last Name: Greene Email Address: lgreene@airquality.org Affiliation: Sacramento Air District

Subject: Comments Regarding California's Guidance for the Zero Emission Vehicle Investment Plan Comment:

Please see attached

Attachment: www.arb.ca.gov/lists/com-attach/27-vw-zevinvest-ws-Wy1TIIULU2wGZQI9.pdf

Original File Name: VW Letter of Support\_121516\_Final.pdf

Date and Time Comment Was Submitted: 2016-12-15 14:29:01

#### **Comment 26 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Stacey Last Name: Reineccius Email Address: ceo@electrictrees.com Affiliation: Powertree Services Inc.

Subject: Comments on Multi-Family and ZEV Comment:

ZEV delivery into the California market has been well received but is not being delivered to the driving population in a balanced fashion.

Per CVRP data almost 93% of ZEVs have been sold to property owners who have a single family home.

Yet, 42% of the general population do not own a home but rather they rent.

In urban centers these figures are even more disparate with 67%+ of San Francisco and 54% of Los Angeles being rental rather than owner occupied.

This denies the Renter access to the savings from ZEVs, the tax credits, the rebates and the ongoing savings in fuel.

It also denies the general market the 2/3rd of interested buyers (per UCLA Luskin market interest study of ZEV purchase intent) access to EVs.

To put it another way, enabling consistent and equal access to CHARGING FOR RENTERS CAN TRIPLE THE MARKET FOR EVS.

A tripled market makes every other activity encouraging ZEVs that much more cost effective and beneficial, whether funding, CO2 reduction and per study by the Strategen Consulting Group and UC Berkeley a 50% reduction in gasoline consumption in California will bring a \$51 Billion per year benefit in economic stimulus to the CA economy.

Yet 2/3rd of this benefit is blocked by lack of access to charging for Renters.

Based on this, three investment criteria are eveident to maximize the return on investment for all parties:

First: A strong emphasis in funding for the the Development (site identification, acquisition and placement), Construction and Sustainable business models supporting Rental markets is essential.

Beneficial multi-way wins are possible and emphasis in any investment plan on serving multi-unit dwelling/multi-family residential properties will yield returns to Volkswagen and the State of California much greater than continuation of single family or public access charging.

Second: Emphasis should also be placed on projects where universal access technology, such as AC Level 2 charging, which is present on 100% of plug in vehicles over the 20% of less that are equipped with the pricier DC charging formats. Cost effective design argues that support of higher rate AC charging will serve a larger population and be more useful.

Third: Sustainable Economics are every bit as vital as Sustainable Ecologics. Successful business models should be amplified. The State of California's Energy Commission has invested in numerous projects to help prove out work and attention should be paid to forming partnerships with firms already equipped with the expertise and on-the-ground knowledge to advance any investment more cost effectively.

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Thank you for your efforts! -
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Attachment: www.arb.ca.gov/lists/com-attach/28-vw-zevinvest-ws-UiFWJFMgVWdXJVM2.pdf

Original File Name: Strategen\_2030\_Governor\_Goals.pdf

Date and Time Comment Was Submitted: 2016-12-15 14:55:30

## **Comment 27 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: F. Kent Last Name: Leacock Email Address: kleacock@proterra.com Affiliation:

Subject: Proterra Comments on VW Settlement- CA ZEV Investments Comment:

Proterra appreciates opportunity to provide comments on Volkswagen's (VW) zero emission vehicle (ZEV) investment commitment development process and investment areas for California. Please see our detailed comments attached.

Attachment: www.arb.ca.gov/lists/com-attach/29-vw-zevinvest-ws-ViAFdAFfVWVVMgZZ.pdf

Original File Name: VW CA Settlement\_Proterra Comments Appendix C\_Final.pdf

Date and Time Comment Was Submitted: 2016-12-15 16:35:19

## **Comment 28 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Will Last Name: Barrett Email Address: william.barrett@lung.org Affiliation: American Lung Association in California

Subject: Joint comments in re: VW ZEV Investment Comment:

Comments submitted on behalf of: American Lung Association in California Center for Energy Efficiency and Renewable Technologies Coalition for Clean Air Sierra Club California Union of Concerned Scientists

Attachment: www.arb.ca.gov/lists/com-attach/30-vw-zevinvest-ws-UzBROABgU2xSPQF1.pdf

Original File Name: Coalition comments re ARB Guidance to VW 12.15.16.pdf

Date and Time Comment Was Submitted: 2016-12-15 16:40:01

# **Comment 29 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Claire Last Name: Dooley Email Address: claire.dooley@EVgo.com Affiliation: EVgo

Subject: EVgo comments on the Volkswagen Settlement - CA ZEV Investments - 1st workshop Comment:

Attached.

Attachment: www.arb.ca.gov/lists/com-attach/31-vw-zevinvest-ws-VzJUJFM1VWlWDwVy.pdf

Original File Name: EVgo WrittenComments CaliforniaAirResourcesBoard VW 2016-12-15.pdf

Date and Time Comment Was Submitted: 2016-12-15 18:05:00

# **Comment 30 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: William Last Name: Elrick Email Address: belrick@cafcp.org Affiliation: California Fuel Cell Partnership

Subject: Input on VW settlement Comment:

Please accept this input to the Volkswagen settlement activities

Attachment: www.arb.ca.gov/lists/com-attach/32-vw-zevinvest-ws-VjVdOlcwBzcFcwhX.pdf

Original File Name: CaFCP comments on VW settlement\_20161215.pdf

Date and Time Comment Was Submitted: 2016-12-15 20:24:18

### **Comment 31 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Thomas Last Name: Escher Email Address: tescher@redandwhite.com Affiliation: Red and White Fleet

Subject: VW Settlement - pollution has no borders Comment:

Since 2014, we have been working with Sandi National Labs and MARAD/DOT on the feasibility of a zero pollution 35 knot high speed ferry. The completed study (on the web at "maritime.sandia") shows that a zero pollution 35 knot hydrogen fuel cell ferry is possible using todays "off the shelf" components.

Many maritime vessel operators and the Red and White Fleet are working to build new vessels and/or retrofit existing vessels to achieve zero pollution using proven technology. This include both hydrogen fuel cells as the main vessel power and/or batteries as main vessel power.

We would like you to include the following comments in your final study:

a. Each passenger vessel has a transport capacity of several hundred cars, so a zero pollution passenger vessel will reduce pollution and congestion.

b. Include both public and private passenger vessels along with land vehicles

c. Include passenger vessels that can be retrofitted with zero pollution engines.

d. Include passenger vessels that are new construction as it is not always possible to retrofit a vessel to be zero pollution.

e. Since passenger vessels serve ports that are in disadvantaged communities, include passenger vessels.

f. Since the infrastructure for land vehicles have charging stations, allow passenger vessels infrastructure to also have dockside charging stations.

Pollution effects everyone. Please treat passenger vessels, both public and private, the same as land vehicles as pollution has no border.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-15 20:45:27

# **Comment 32 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Judy Last Name: Robinson Email Address: Robinsonju@saccounty.net Affiliation:

Subject: Comments Regarding California's Guidance for the Zero Emission Vehicle Investment Plan Comment:

Please see attached comment letter. Thank you

Attachment: www.arb.ca.gov/lists/com-attach/34-vw-zevinvest-ws-B2ZXIwBjV1tQJVUw.pdf

Original File Name: ARB Settlement Comment Letter Sac County 12-16-16.pdf

Date and Time Comment Was Submitted: 2016-12-15 20:59:09

### **Comment 33 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Bruce Hodge Last Name: Bruce Hodge Email Address: hodge@tenaya.com Affiliation: Carbon Free Palo Alto

Subject: Carbon Free Palo Alto's Comments on the VW Settlement, CA ZEV Investments Comment:

The text below is from the letter, attached in PDF format, that we also sent to: California Air Resources Board Chair Mary D. Nichols 1001 "I" Street Sacramento, CA 95814 November 16, 2016 Re: Comments on the Volkswagen Settlement, Appendix C Dear Chair Nichols and Staff: Carbon Free Palo Alto (CFPA) thanks you and your staff for the opportunity to comment on the Volkswagen (VW) Settlement, Consent Decree, Appendix C and the California Air Resources Board's (CARB) presentation slides from the public input workshop held on December 2, 2016. Summary: 1) We support the proposed programs in Appendix C as only relates to battery electric vehicles 2) Settlement funding should not be wasted on hydrogen Fuel Cell vehicles. Background: We support the proposed programs in Appendix C as relates to battery electric vehicles. CFPA was formed to help Palo Alto reach its aggressive goal of 80% carbon reduction by 2030. Car transportation is the largest single source of CO2 emissions in our community and many others. Our city has converted to 100% carbon-free electricity in large part to support the switch away from fossil fuels to electricity for transportation and buildings. Many other cities in California also have a goal to provide 100% renewable electricity to their residents by 2030 or sooner. This means that all funding available from the Settlement can be productively used today to accelerate us along a proven route to zero emissions car transportation and a flexible renewable energy infrastructure.

Our city focuses exclusively on plug-in, battery electric technology as the best path to carbon-free car transportation for many reasons.

Battery electric vehicles are • Cost-effective automobile transportation solutions today - they offer lower lifetime cost of ownership than gasoline powered cars and can be charged in many existing locations • Flexible and available in many forms, from plug-in hybrid to full battery electric, that cover the complete set of range and charge time requirements • The lowest carbon and energy footprint, light duty vehicles • True Zero Emission Vehicles, wells-to-wheels, wherever renewable energy is on-line • Complementary to a flexible and resilient electrical energy infrastructure where renewable energy can be harnessed and building and transportation solutions can rapidly evolve CFPA strongly recommends against funding hydrogen infrastructure programs with public money from the Settlement. Lack of infrastructure is often cited by industry groups as the only obstacle to the development of a fuel cell vehicle market. However 95% of hydrogen fuel comes from natural gas and will remain so for the foreseeable future. In addition, public investment in the excessively expensive "fossil" hydrogen fueling network (\$2M per station) is highly speculative while vehicles are still expensive, unproven and largely unavailable.

There is no economical or energy-efficient way to produce hydrogen from carbon free, renewable energy. It simply takes too much energy (2 to 3 times as much) to generate hydrogen from water, compress it, distribute it and fuel a high pressure tank to power a fuel cell vehicle compared to just charging a battery electric vehicle from the grid. Moreover, producing hydrogen from water uses significant amounts of fresh water, a scarce resource in California.

Fuel cell vehicles that use "fossil" hydrogen from natural gas generate the same amount of emissions as today's efficient hybrid vehicles with limited scope for improvement given the technical limitations. They should therefore not qualify as "Zero Emissions Vehicles" (ZEV) for the purpose of directing Settlement funds. Further, promoting hydrogen vehicles as a viable near or medium term, low/no carbon transportation solution confuses consumers entering the market looking for a low or zero emissions vehicle.

The following table developed by Carbon Free Palo Alto shows that the EV market is already significant and accelerating while the Hydrogen Fuel Cell market remains just a projection. As such, it is highly unlikely that Fuel Cells will play a significant role in reducing transportation emissions.

California Count Electric Vehicles Hydrogen Fuel Cell Vehicles Models for Sale\* 20+ 2 2016 ~250,000 <500 2019 ~600,000 ~13,500 2022 ~1,200,000 ~43,600 Cost \$29k-Leaf \$57k-Mirai Fuel \$/yr\*\* \$450 \$1,250 Energy/yr\*\* Tank to Wheel 4.5 MWh 7.6 MWh Energy/yr\*\*\* Well to Wheel 6.5 MWh 33-40 MWh

\* 20 EV models sold in all leading CA cities in 2016. November, 2016 ICCT report. FCV models for sale in 2016: Toyota Mirai, 8 dealers, Toyota website; Hyundai Tucson, lease only, near H2 stations, Hyundai website. \*\* Tank to Wheel based on 15,000 miles/yr base, Leaf: \$0.10/kWH, 3.3 miles/kWH; Mirai, \$5.5/kg H2, 2 miles/kWh; https://www.fueleconomy.gov/feg/fcv\_sbs.shtml \*\*\* Well to Wheel based on renewable energy + electrolysis, http://phys.org/news/2006-12-hydrogen-economy-doesnt.html Hydrogen fuel-cell transportation still needs "four miracles". Energy Secretary Stephen Chu's comments from 2009 are, in essence, still true today; for hydrogen to work, "four miracles" need to happen: 1) There needs to be an efficient and low-cost way to produce

hydrogen
2) There needs to be a safe, high-density method of storing
hydrogen in automobiles.
3) An infrastructure for distributing hydrogen has to be built so
that fuel-cell vehicles would have ample refueling options; and
4) We need to improve the capacity of the fuel-cell systems
themselves

Chu concluded that achieving all four big breakthroughs would be unlikely. "Saints only need three miracles," he added.

CARB responded to Secretary Chu at the time as follows:

Industry projections for the fuel cell vehicle market are continually rolled back. Likewise, the present CARB projections roll back the forecast above five more years to 47,000 Fuel Cells by 2022. Other technical and economic statements regarding fuel cell vehicles contained the response have likewise failed to materialize. This lack of progress combined with the accelerating EV market strongly suggests that the market has already decided that hydrogen cars are not a winning technology for the foreseeable future. A recent Stanford study comparing the longer term scenarios of hydrogen vs battery electric based transportation also conclude that investing in the path toward hydrogen cars would not be a sound investment.2

The envisaged hydrogen car market has outsized infrastructure cost, untested products and no clear economic or environmental value. Any public investment and promotion of hydrogen stations will likely be seen as wasted on a "white elephant".

Bruce Hodge CFPA Founder and Chair

  CC: Jack Broadbent, BAAQMD, jBroadbent@baaqmd.gov Palo Alto City Council, city.council@cityofpaloalto.org Menlo Park City Council, city.council@menlopark.org Mountain View City Council, city.clerk@mountainview.gov Mark Berman, State Assembly Member Elect, marc@voteberman.com Stephen Cue, Stanford, Former U.S. Secretary or Energy, schu@stanford.edu Jerry Hill, CA Senator Assembly, 1528 South El Camino Real, Suite 303, San Mateo, CA 94402 Notes: Paraphrased from: https://www.technologyreview.com/s/413475/q-a-steven-chu/ 2 Battery cars a better choice for reducing emissions than fuel cell cars. Stanford Precourt Institute for Energy. Nov. 14, 2016. https://energy.stanford.edu/news/battery-cars-better-choice-reducingemissions-fuel-cell-cars

Attachment: www.arb.ca.gov/lists/com-attach/35-vw-zevinvest-ws-UGEFNVBgUDECNQE1.pdf

Original File Name: 161214 VW Settlement CFPA Final.pdf

Date and Time Comment Was Submitted: 2016-12-15 21:38:11

# **Comment 34 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Alex Last Name: Cherepakhov Email Address: anc@firstpriorityglobal.net Affiliation:

Subject: VW Comment Letter Comment:

see attached

Attachment: www.arb.ca.gov/lists/com-attach/36-vw-zevinvest-ws-UiRWJ1QKBzgCYQB0.pdf

Original File Name: VW Letter 12162016.pdf

Date and Time Comment Was Submitted: 2016-12-16 07:26:39

# **Comment 35 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Kitty Last Name: Adams Email Address: kitty.adams@adoptacharger.org Affiliation: Executive Director

Subject: Volkswagen settlement Comment:

Attached are comments on the VW settlement. Thanks!

Attachment: www.arb.ca.gov/lists/com-attach/38-vw-zevinvest-ws-AmECZVY1AzIFXFA8.docx

Original File Name: carb letter.docx

Date and Time Comment Was Submitted: 2016-12-16 08:27:56

# **Comment 36 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Michelle Last Name: clark Email Address: michelle.clark@deweysquare.com Affiliation: Electric Vehicle Charging Association

Subject: EVCA comments re: VW Settlement - ZEV Investments Comment:

Please find comments attached from the Electric Vehicle Charging Association.

Attachment: www.arb.ca.gov/lists/com-attach/39-vw-zevinvest-ws-AGVQIAdlBTcGX1Ix.docx

Original File Name: EVCA comments re VW Investment - CARB 12.16.2016.docx

Date and Time Comment Was Submitted: 2016-12-16 09:41:42

# **Comment 37 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Andrew Last Name: Berg Email Address: aberg@necasandiego.org Affiliation: NECA

Subject: Volkswagen Settlement Comment:

See attached file.

Attachment: www.arb.ca.gov/lists/com-attach/40-vw-zevinvest-ws-ViBTOIM+U2sGcwl+.pdf

Original File Name: volkswagen settlement letter.pdf

Date and Time Comment Was Submitted: 2016-12-16 09:40:23

# **Comment 38 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Ashley Last Name: Walker Email Address: awalker@nossaman.com Affiliation:

Subject: Public Comment on VW ZEV Investment Comment:

The San Diego County Regional Airport Authority appreciates the opportunity to submit comments on the VW \$800 million 10-year zero emission vehicle (ZEV) investment commitment in California. Please find our comments in the attached letter.

Attachment: www.arb.ca.gov/lists/com-attach/41-vw-zevinvest-ws-AHMBZlQ7U18LaVI7.pdf

Original File Name: San Diego Airport Authority VW Investment Public Comments.pdf

Date and Time Comment Was Submitted: 2016-12-16 10:27:47

# **Comment 39 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Ramsay Last Name: Stevens Email Address: ramsaystevens@gmail.com Affiliation:

Subject: NECA ECAP & Buildify Comments Comment:

To Whom It May Concern, Please see my attached letter for your consideration.

Attachment: www.arb.ca.gov/lists/com-attach/42-vw-zevinvest-ws-WylcKVMNAH5XDgRy.pdf

Original File Name: RS - VW Comment Letter.pdf

Date and Time Comment Was Submitted: 2016-12-16 10:34:56

# **Comment 40 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Christopher Last Name: Smith Email Address: chris@paradigmpower.org Affiliation:

Subject: VW & CARB Comments Comment:

Please See Attached File

Attachment: www.arb.ca.gov/lists/com-attach/43-vw-zevinvest-ws-UCBcO1YlVmRSMAVs.docx

Original File Name: Paradigm Power - VW Comment Letter.docx

Date and Time Comment Was Submitted: 2016-12-16 10:25:18

# **Comment 41 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Michael Last Name: Pimentel Email Address: michael@caltransit.org Affiliation: California Transit Association

Subject: VW Settlement - Appendix C Comment:

Comments from the California Transit Association's Executive Director Joshua W. Shaw attached here as a PDF.

Attachment: www.arb.ca.gov/lists/com-attach/44-vw-zevinvest-ws-AWJWJFw8Ul4HdwN0.pdf

Original File Name: CTA VW Settlement Decree - Appendix C - 12-15-16.pdf

Date and Time Comment Was Submitted: 2016-12-16 10:49:31

# **Comment 42 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Wayne Last Name: Leighty Email Address: W.Leighty@Shell.com Affiliation: Shell New Energies

Subject: Shell comments to CARB regarding VW California ZEV Investment Commitment Comment:

Please see uploaded document.

Attachment: www.arb.ca.gov/lists/com-attach/45-vw-zevinvest-ws-B2QAZ10uADEAWVc7.pdf

Original File Name: CARB Letter\_121616.pdf

Date and Time Comment Was Submitted: 2016-12-16 10:37:57

# **Comment 43 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Douglas Last Name: Lung Email Address: dlung@scvneca.com Affiliation:

Subject: VW Settlement Comment:

Letter attached.

Attachment: www.arb.ca.gov/lists/com-attach/46-vw-zevinvest-ws-WjRcP1Y0ADJWPQNi.pdf

Original File Name: necamail@scvneca.com\_20060330\_120554.pdf

Date and Time Comment Was Submitted: 2016-12-16 11:02:39

# Comment 44 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.

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

### **Comment 45 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Steve Last Name: Jones Email Address: sj@itm-power.com Affiliation: ITM Power Inc.

Subject: Hydrogen vehicle support Comment:

ITM Power supports the notion that VW should support all ZEV vehicle technologies and not simply the battery technology that VW is backing in the short term.

Hydrogen vehicles are being supported by the state of California in terms of building out refueling stations. ITM urges VW to further support the roll out of more stations for hydrogen vehicles in the state that expand the network and provide larger site fueling capacity up to 500kg per day. ITM Power also urges the settlement funds to be used to support the generation of large amounts of renewable hydrogen in the state of California. Centralized hydrogen production focused on producing fuel with a zero carbon footprint will maximize the impact of hydrogen vehicles in California. One such technology is using renewable electricity to electrolyze water and produce hydrogen fuel with zero carbon footprint. In order to seed the market for renewable hydrogen funding is required to build the first few renewable hydrogen facilities and continue to drive carbon out of the fuel supply chain in California. This is already being done in various euopean countries ansd the VW settlement provides california with a unique oppertunity to become a world leader in renewable hydrogen production.

Kind regards Steve Jones ITM Power

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-16 11:31:25

### **Comment 46 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jeffrey Last Name: Serfass Email Address: jserfass@californiahydrogen.org Affiliation: California Hydrogen Business Council

Subject: VW California ZEV investment Commitment Comment:

Please find attached the California Hydrogen Business Council's comments to the Air Resources Board on the Volkswagen California ZEV investment commitment. We strongly support ARB's strong encouragement to VW to include hydrogen infrastructure and outreach.

This is my second attempt to comment since my previous attempt was unsuccessful in uploading the attached file.

Attachment: www.arb.ca.gov/lists/com-attach/51-vw-zevinvest-ws-AmNXIwBjWVUDc1Qj.pdf

Original File Name: ARB VW Comments December 2016 - Rev A.pdf

Date and Time Comment Was Submitted: 2016-12-16 11:54:40

### **Comment 47 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Tamara Last Name: Perry Email Address: tamara.perry@laedc.org Affiliation: LAEDC

Subject: Recommendations for the Volkswagen Settlement Investment Priorities Comment:

Sir/Madam:

The e4 Advanced Transportation Center of Southern California (e4ATC), a California Energy Commission funded initiative of the Los Angeles County Economic Development Corporation to establish a Center for Alternative Fuels and Advanced Vehicle Technology, is pleased to submit the following recommendations regarding the priorities of the Volkswagen (VW) settlement investment priorities.

The e4ATC promotes Southern California as the national hub for advanced transportation technology research, development, demonstration, production and exportation, and whose efforts include: attracting investment to spur innovation, commercialization, and increase market activity; encouraging the transfer of technology out of academia into the hands of private firms; strengthening the region's workforce and education systems to develop the requisite talent to support this fast-growing industry; and advocating for sensible policy initiatives to engender a regulatory environment that is conducive to achieving e4ATC's top-line goal of establishing Southern California as a world leader in advanced transportation and alternative fuel innovation.

The e4ATC members and participants are comprised of advanced transportation industry, education, research, finance and government thought leaders from across Southern California. Over the past three years, e4ATC has examined global best practices in the areas of: rulemaking and administrative law; economic and community development; infrastructure planning and deployment; and education and workforce development. Based on these findings and with collective and input from the e4ATC members, we respectfully submit the following recommendations:

First, it is imperative that Southern California receive a proportional distribution of resources remitted though the settlement, a minimum of \$90 million. Los Angeles County is home to nearly 10 million residents, 25 percent of the California's population, and its goods movement industry moves more than 40 percent of nation's containerized goods. Passenger vehicles, and medium- and heavy-duty vehicles all contribute to the concentration of air pollutants which negatively affect health outcomes for many residents, especially those in disadvantaged communities, more than half of which are located in Los Angeles County. Proportional funding will encourage early adoption and innovation of products,

processes, services and technologies to ensure a cleaner, healthier environment.

Second, we would like to commend ARB for prioritizing VW settlement investment in disadvantaged communities. We echo the tenets of senate bill 535 (de León, 2012) and suggest that at least 25% of funds allotted to the Los Angeles area be designated to programs in disadvantaged communities, and that 10% of these funds be appropriated to infrastructure projects for projects that will have immediate impact within these communities.

Disadvantaged communities includes those that are disproportionately affected by pollution and environmental hazards, and with socioeconomic vulnerability. By this definition, established by SB 535, of the 1,994 census tracts in the state of California, 1,018 of them (51 percent) are located in in Los Angeles County alone. Indeed, of the 9.4 million residents who live in these census tracts, 4.348 million live in Los Angeles County nearly 46 percent of the total disadvantaged population for the state. It is imperative that funds allocated for disadvantaged communities be proportionately directed to the jurisdictions that contain these census tracts. This means that at least half of the 25 percent of funds designated for disadvantaged communities should be directed to projects or programs in Los Angeles County.

Third, in an effort to avoid duplicating or neglecting existing projects and programs of the state, utilize the Advanced Transportation of Southern California (ATC) to conduct the market outreach and to act as the regional convener, as required by the settlement priorities. The ATC can provide a roadmap complete with information, resources, and connectivity with regional partners as VW considers its investment priorities, and it well positioned to act as a neutral arbiter or conduit for advisement and connectivity.

According to the International Council on Clean Transpiration, when infrastructure increases, so does adoption. Utilizing data to map out major employers, e4ATC can identify potential workplace and fleet charging sites in or near disadvantaged communities, and can optimize other programs that can buy-down lease costs of vehicles for public agencies, further developing the requisite infrastructure. Increasing infrastructure in Los Angeles County will spur rapid and widespread adoption. The ATC is prepared to offer suggestions and recommendations that will allow VW to provide additive benefit to programs and initiatives already at play in the region. The e4ATC can also provide necessary information regarding Green City candidates including infrastructure needs, existing programs, opportunity sites, and other deployment opportunities.

Fourth, we encourage the ARB to remain adamant that data collection, transparency, and impact assessment be conducted and maintained by VW, and, as the regulatory body, the ARB should provide consistent oversight. This investment has the potential to significantly impact the adoption of ZEVs and other technologies (hydrogen, autonomous vehicles, etc.). Providing guidance, encouraging evaluation, and maintaining a database that offers analytical evidence for impact will help the state, and local entities alike, determine what "works" and why, and how to invest in future efforts we bring California to the forefront as a the de facto leader of the alternative fuel and advanced transportation industry.

It is our hope that an appropriate settlement investment level, along with the investment application called for in this letter, will be made in the Los Angeles region, which is not only prepared to receive and expeditiously deploy targeted resources, but can be the standard-bearer in setting best management practices precedent for ZEV investment, development, deployment and adoption. For all of these reasons, we encourage Volkswagen and the California Air Resources Board adequately consider the above recommendations and ensure that Southern California receives balanced and proportional share of investment.

Should you have any additional questions and/or comments, please do not hesitate to contact Tamara Perry, Director of Strategic Initiatives with the Los Angeles County Economic Development Corporation, at tamara.perry@laedc.org

Sincerely, Jeff Joyner Co-Chair, LAEDC e4Mobility Alliance Michael Boehm Co-Chair, LAEDC e4Mobility Alliance Executive Director, e4 Advanced Transportation Center of Southern CA JoAnne Stewart Co-Chair, LAEDC e4Mobility Alliance Rick Teebay Co-Chair, LAEDC e4Mobility Alliance

Attachment: www.arb.ca.gov/lists/com-attach/52-vw-zevinvest-ws-VDEFN1w8AiVSN1cI.pdf

Original File Name: e4ATC VW investment recommednations.docx.pdf

Date and Time Comment Was Submitted: 2016-12-16 11:56:49

## **Comment 48 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Micah Last Name: Mitrosky Email Address: mmitrosky@ibew569.org Affiliation: IBEW Local 569

Subject: IBEW-NECA-Sierra Club VW Comment Letter Comment:

Please see attached VW Zero Emission Vehicle Investment comment letter on behalf of IBEW-NECA California LMCC; Sierra Club California; and IBEW Locals 11, 40, 47, 332, 441 and 569.

Attachment: www.arb.ca.gov/lists/com-attach/53-vw-zevinvest-ws-BWxXM1QwV3NWfQJs.pdf

Original File Name: IBEW-NECA-Sierra Club VW Comment Letter 121616.pdf

Date and Time Comment Was Submitted: 2016-12-16 12:01:04

# **Comment 49 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Gordon Last Name: Loebl Email Address: gloebl@hornblower.com Affiliation:

Subject: Support for Maritime Comment:

Strongly support the use of VW settlement funds to reduce engine emissions in passenger vessels by building new or re-power/retrofit of existing vessels. This also includes the creation of associated fueling/charging infrastructure with a maritime focus. This approach creates a larger impact and return on investment compared to vehicles as a single passenger vessel can reduce emissions equivalent to hundreds of cars.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-16 11:53:58

# **Comment 50 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Gilbert Last Name: Garza Email Address: ggarza@fresnocog.org Affiliation: Fresno County Rural Transit Agency

Subject: Submittal of VW Investment Commitment projects Comment:

Hello, I am submitting a list of proposed VW Investment Commitment projects on behalf of Fresno County Rural Transit Agency (FCRTA). See attached list of projects. Gilbert Garza Associate Planner FCRTA

Attachment: www.arb.ca.gov/lists/com-attach/55-vw-zevinvest-ws-USFTJ1c5UmsCYQRn.xlsx

Original File Name: Projects List.xlsx

Date and Time Comment Was Submitted: 2016-12-16 12:09:59

# **Comment 51 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Gilbert Last Name: Garza Email Address: ggarza@fresnocog.org Affiliation: Fresno County Rural Transit Agency

Subject: Submittal of VW Investment Commitment projects cover letter Comment:

Hello, I am submitting a cover list that describes the previously sent list of proposed projects. Gilbert Garza Associate Planner FCRTA

Attachment: www.arb.ca.gov/lists/com-attach/56-vw-zevinvest-ws-UyVcLVEPADoLY1Am.pdf

Original File Name: VW Investment Commitment Projects Cover Letter.PDF

Date and Time Comment Was Submitted: 2016-12-16 12:16:19

# **Comment 52 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Peggy Last Name: Brown Email Address: peggy@ocneca.org Affiliation: Orange County Chapter, NECA

Subject: VW settlement Comment:

Please see attached.

Attachment: www.arb.ca.gov/lists/com-attach/57-vw-zevinvest-ws-WiwHdlZ5AiFVN1Uz.pdf

Original File Name: VW.pdf

Date and Time Comment Was Submitted: 2016-12-16 12:27:15

# **Comment 53 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jennifer Last Name: Venema Email Address: jvenema@cityofsacramento.org Affiliation: City of Sacramento

Subject: Comments Regarding California's Guidance for the Zero Emission Vehicle Investment Plan Comment:

Submitted on behalf of Mayor Darrell Steinberg and Interim City Manager Howard Chan. Please see attached.

Attachment: www.arb.ca.gov/lists/com-attach/58-vw-zevinvest-ws-BWRQJABjAg4FeQJn.pdf

Original File Name: ARB\_ZEVInvestment\_CommentSignedLetter\_12162016\_CityOfSacramento.pdf

Date and Time Comment Was Submitted: 2016-12-16 12:29:52

# **Comment 54 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jason Last Name: Lang Email Address: jason@caleec.com Affiliation:

Subject: Appendix C Comments Comment:

Attached, please find the comments for one of our clients, CALSTART

Attachment: www.arb.ca.gov/lists/com-attach/59-vw-zevinvest-ws-UzACZQRpBCRWJARl.pdf

Original File Name: CALSTART Comments on VW Settlement Appendix C - CA ZEV Investment Plan - 12-16-16- Final.pdf

Date and Time Comment Was Submitted: 2016-12-16 12:33:12

# **Comment 55 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Greg Last Name: Armstrong Email Address: Grega@norcalneca.org Affiliation: National Electrical Contractors Assoc.

Subject: VW Settlement Comment:

See attached letter

Attachment: www.arb.ca.gov/lists/com-attach/60-vw-zevinvest-ws-BnBRIAdZBDsAYwRw.doc

Original File Name: VW Letter.doc

Date and Time Comment Was Submitted: 2016-12-16 12:55:50

### **Comment 56 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Tamara Last Name: Perry Email Address: tamara.perry@laedc.org Affiliation: LAEDC

Subject: Recommendations: Volkswagen Settlement Investment Priorities Comment:

Sir/Madam:

On behalf of the Los Angeles County Economic Development Corporation (LAEDC), an organization whose purpose is to raise standards of living for the residents of Southern California, defined as the Los Angeles, Orange, San Bernardino, and Riverside counties, by increasing economic opportunity and regional prosperity, I am writing to respectfully submit this letter with proposed recommendations for the Volkswagen settlement investment priorities.

Since 2012, Southern California has become a center for the world's clean vehicle consumer and producer markets. On the consumer side, a 2016 Clean Edge report revealed that the number of electric vehicles and plug-in electric vehicles in Southern California (including Los Angeles, Orange, Riverside, and San Bernardino counties increased from 9,822 in 2012 to 79,866 in 2016 - a more than eight-fold increase, and total electric vehicle charging stations increased from 353 in 2012 to 1,097 in 2016.

On the development and production side, Southern California has seen a precipitous escalation in the amount of investment (an estimated \$768 million from 2013-2014) directed towards the region's "clean technology" industry, especially within the sub-disciplines of clean vehicles and alternative fuels. What's more, further industry growth is being driven by the more than 20 automotive manufacturers and design centers domiciled throughout the region, as well as some of the nation's most forward-looking metropolitan planning organizations and transit agencies who, with adequate support, stand ready to aggressively deploy infrastructure to support the widespread and accelerated deployment of zero emission vehicles (ZEVs).

The confluence of governmental leadership, concentration of industry firms, and the regional need to improve air quality has laid the groundwork for the Southern California's advanced transportation ecosystem. And, the region's unique blend of assets also provides significant upside opportunity to accelerate a megaregional clean vehicles adoption and deployment strategy. But much-needed and targeted investment into ZEV infrastructure is urgently needed here in Southern California to achieve these ZEV aspirations, providing the impetus for local leaders, businesses and residents to push for increased ZEV adoption and usage. Adding to this urgency, it is clear that investment in Southern California would not only have significant direct economic, environmental and quality of life impacts, but also stimulate further "spillover" economic and job benefits from continued innovation, commercialization, deployment and export of ZEV technologies, services and products from our geographically concentrated industry. With this in mind, we urge you to consider the following recommendations:

1) It is imperative that Southern California receive a proportional distribution of resources remitted though the settlement, a minimum of \$90 million. Southern California is home to approximately 45 percent of the California population and its goods movement industry moves more than 40 percent of nation's containerized goods. Passenger vehicles, and medium- and heavy-duty vehicles all contribute to the concentration of air pollutants which negatively affect health outcomes for many residents, especially those in disadvantaged communities. Proportional funding will encourage early adoption and innovation of products, processes, services and technologies to ensure a cleaner, healthier environment. 2) Funds designated for disadvantaged communities (25 percent) should be proportionately directed to the jurisdictions that contain these census tracts. Disadvantaged communities includes those that are disproportionately affected by pollution and environmental hazards, and with socioeconomic vulnerability. By this definition, established by SB 535, of the 1,994 census tracts in the state of California, 1,018 of them (51 percent) are located in in Los Angeles County alone. Indeed, of the 9.4 million residents who live in these census tracts, 4.348 million live in Los Angeles County - nearly 46 percent of the total disadvantaged population for the state. It is critical the Los Angeles County and the Southern California region receive proportionately directed funding.

3) Infrastructure development and deployment must be prioritized. Southern California has ongoing efforts that present pathways to immediate "in the ground" infrastructure applications, which would amplify the effect of the investment.

4) Disadvantaged communities ought to receive at least 25 percent of the appropriated investment resources, of which 10 percent should be allocated to installments that immediately benefit disadvantaged communities at central or adjacent sites. 5) The City of Los Angeles should receive special consideration as a candidate for the "Green City" initiative. Not only does the City of Los Angeles contain more than its "fair share" of disadvantaged communities (as determined by the calenviroscreen), it is home to some of the most significant traffic congestion in the country, two of the busiest ports in the nation, and a consistently top-ten rank in worst metropolitan air quality in the United States. The investment proposed in the Green City initiative would support Los Angeles' current efforts already enacted to address these unfortunate claims, and would also kick-start the next wave of disruptive invention, innovation, and radical change necessary to improve health outcomes for residents.

It is our hope that an appropriate settlement investment level, along with the investment application called for in this letter, will be made in the Southern California region, which is not only prepared to receive and expeditiously deploy targeted resources, but is positioned to be the standard-bearer for the entire state in setting best management practices precedent for ZEV investment, development, deployment and adoption. For all of these reasons, we encourage Volkswagen and the California Air Resources Board adequately consider the above recommendations and ensure that Southern California receives balanced and proportional share of investment.

Should you have any additional questions and/or comments, please do not hesitate to contact Tamara Perry, Director of Strategic Initiatives with the Los Angeles County Economic Development Corporation, at tamara.perry@laedc.org

Sincerely,

David Flaks President & COO, LAEDC

Attachment: www.arb.ca.gov/lists/com-attach/61-vw-zevinvest-ws-BnBdLFcJAiIGZQI9.pdf

Original File Name: VW settlement LAEDC letter\_FINAL.pdf

Date and Time Comment Was Submitted: 2016-12-16 12:53:21

# **Comment 57 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Michael Last Name: Lord Email Address: michael.lord@toyota.com Affiliation: Toyota Motor North America

Subject: Toyota Comments on California's Guidance Regarding VW's California ZEV Commitment Comment:

Please see attachment

Attachment: www.arb.ca.gov/lists/com-attach/63-vw-zevinvest-ws-AXVSOwF5V2sKeFIz.pdf

Original File Name: Toyota Comments on California's Guidance Regarding VW's California ZEV Commitment.pdf

Date and Time Comment Was Submitted: 2016-12-16 13:09:19

## **Comment 58 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Kenneth Last Name: Kurani Email Address: knkurani@ucdavis.edu Affiliation: University of California

Subject: VW ZEV Investment Plan Comment:

That emphasis should be placed on ZEV education and outreach in the first 30 month spending plan of the VW ZEV Investment Plan is unassailable. The success of any other action to grow ZEV markets-including charging and fueling infrastructure deployment-depends on potential consumers knowing of those actions. Research to date indicates the vast majority of car-owning households-even new car-buying households-remain unaware of the present possibilities to buy and drive any of a growing variety of ZEVs. The vast majority of the car-buying public does not recognize ZEVs when they see them and does not perceive the growing extent of ZEV charging and fueling infrastructure. Proposals to 1) immediately and rapidly spread and increase vehicle buyers' awareness of ZEVs, 2) prompt vehicle buyers consideration of the social goals and private motivations for ZEVs, and 3) provide vehicle buyers with targeted, relevant information based on their interests, will benefit every ZEV stakeholder and every citizen.

Statements from the ZEV stakeholder community are shaped by the fact those statements are made by stakeholders, i.e., by people immersed in ZEVs but not necessarily immersed in the lives of most Californians to whom ZEVs remain unknown. Support for ZEV infrastructure, also a goal of the first 30 month spending plan, is not a substitute for education and outreach. At present, it seems unlikely infrastructure deployment is even a complement to ZEV education and outreach until enough vehicle buyers have asked whether a ZEV is right for them. Only when vehicle buyers ask themselves this question do the signs of a transition to ZEVs-vehicles, charging/fueling infrastructure, incentives-become visible and interpretable. Only if people know the signs and what they mean will people look for the signs. Showing people the signs of a ZEV transition, teaching people what the signs mean and how to interpret the signs within the contexts their own lives, i.e., conducting a pervasive ZEV education and outreach to the population of motor vehicle buyers, will make advertising, infrastructure deployment, incentive programs, and all other aspects of the ZEV transition visible and thus more effective. Thus the choice in formulating the first 30 month spending plan is not between ZEV education and outreach on the one hand and infrastructure deployment on the other, but on balancing of the two to their greatest effect.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-16 13:20:09

## **Comment 59 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Paul D. Last Name: Hernandez Email Address: paul.hernandez@energycenter.org Affiliation: Center for Sustainable Energy (CSE)

Subject: CSE's Response to the Public Workshop to Discuss Volkswagen's ZEV Investment Plan Comment:

DATE: DECEMBER 16, 2016

Dear Mr. Williams,

Attached (in PDF format) please fine the "Response to the Public Workshop to Discuss Volkswagen's Zero Emission Vehicle Investment Commitment Development Process and Investment Areas and California Zero-Emission Vehicle Investment Plan", Submitted Electronically, December 16, 2016.

CSE appreciates the opportunity to provide these comments for your review. Please continue to consider CSE a resource on these and other matters, and feel free to reach out to me with any questions or for clarifications regarding these comments.

Thank you,

-Paul D. Hernandez Transportation Electrification Policy Manager Center for Sustainable Energy

Attachment: www.arb.ca.gov/lists/com-attach/65-vw-zevinvest-ws-VjUCYVU6VXJQM1Mh.pdf

Original File Name: Center for Sustainable Energy Response to the Public Workshop on California ZEV Investment Plan 12.16.2016 FINAL.pdf

Date and Time Comment Was Submitted: 2016-12-16 13:36:17

# **Comment 60 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: ivor Last Name: john Email Address: ivorjohn@cox.net Affiliation: Independent Consultant

Subject: VW Settlement Funds Comment:

Please find attached comments on the CARB draft proposal for ZEV Investment of VW Settlement funds.

Thanks for providing this opportunity to comment.

Ivor John

 $\label{eq:lists/com-attach/66-vw-zevinvest-ws-BnBdLFAOACAHZARw.pdf$ 

Original File Name: VW Settlement - Comments-IvorJohn-121616.pdf

Date and Time Comment Was Submitted: 2016-12-16 13:41:58

## **Comment 61 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Morry Last Name: Markowitz Email Address: mmarkowitz@fchea.org Affiliation: Fuel Cell and Hydrogen Energy Assn.

Subject: Comments Regarding Volkswagen's ZEV Investment Commitment Comment:

FCHEA applauds the ARB for stating important guiding principles for the anticipated investment and urges all investment cycles support new hydrogen refueling station (HRS) construction and support HRS operation and maintenance. FCHEA looks forward to cooperating with California policy-makers and stakeholders to further advance HRS network expansion, public awareness and consumer satisfaction. For the full text of FCHEA's comments, see attached statement.

Attachment: www.arb.ca.gov/lists/com-attach/68-vw-zevinvest-ws-AWddOAFoV2FRNgVa.pdf

Original File Name: FCHEA Comments 161216.pdf

Date and Time Comment Was Submitted: 2016-12-16 14:21:43

# **Comment 62 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Henry Last Name: Li Email Address: hli@sacrt.com Affiliation:

Subject: Comments Regarding California's Guidance for the Zero Emission Vehicle Investment Plan Comment:

Please disregard the previous version of the letter and utilized the attached copy.

If there are questions, please contact the office at 916-321-2988.

Thank you,

Xai Leggett

Attachment: www.arb.ca.gov/lists/com-attach/69-vw-zevinvest-ws-VDUBbgR3VVIWIgZj.pdf

Original File Name: Air Resources Board.pdf

Date and Time Comment Was Submitted: 2016-12-16 14:56:06

# **Comment 63 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Annecom Last Name: Smart Email Address: anne.smart@chargepoint.com Affiliation: ChargePoint

Subject: ChargePoint Comments on VW ZEV Investment Comment:

Attached are comments from ChargePoint on the VW ZEV Investment in California. Please let me know if you have any problems opening the document.

Attachment: www.arb.ca.gov/lists/com-attach/70-vw-zevinvest-ws-VTZQNwR3BzYCWwh+.pdf

Original File Name: CARB VW Comments 12.16.16.pdf

Date and Time Comment Was Submitted: 2016-12-16 14:53:17

# **Comment 64 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jim Last Name: Willson Email Address: jmw@laneca.org Affiliation:

Subject: VW Settlement Comment:

Please see attached letter.

Attachment: www.arb.ca.gov/lists/com-attach/71-vw-zevinvest-ws-AWgFblM1VykLPAUz.pdf

Original File Name: img-161216111346.pdf

Date and Time Comment Was Submitted: 2016-12-16 14:57:08

## **Comment 65 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Linda Last Name: Urata Email Address: projectcleanairmanager@gmail.com Affiliation: San Joaquin Valley EV Partnership

#### Subject: Comments from the SJV EV Partnership on the VW Settlement CA ZEV Investments Comment:

Representing the underprivileged eight-county region of California's Central Valley, The Partnership is a consortium of Economic and Workforce development stakeholders and EV professional volunteers representing charging and EV manufacturers. Fund more public charging at all levels at key strategic 1. locations: Airports, hospitals, school campuses, shopping centers, movie theaters ... Provide additional incentives for low and moderate income 2. consumers. Create special lease programs to lower the barrier to entry. 3. Provide scrap and replace programs offering used EV replacements, or special lease/purchase on new EV's. Provide general funding for ride-and-drive events, 4. workplace charging workshops, and the creation of a website to promote the Partnership's activities. Fund local media promotion for EV education, 5. ride-and-drives, incentive information, dealership sales force education Support electric carshare and emphasize importance on 6. services supporting zero emission transportation for rural residents, carpoolers, farmworkers and students. 7. Provide for multi-family charging Provide for workplace charging Level 1 and 2. Do not 8. require public charging access to use the funds for private property. Do not require charging be metered or networked 9. 10. More zero emission school buses are needed. (Transit as well, though there are other funding sources for transit at current time). 11. Allow for repowered school buses 12: Add funding for small communities to provide EV Dial-a-Ride Service. 13. Add funding for group purchase / fleet purchase rates for workplaces that install charging infrastructure, such as hospitals, universities and colleges, school districts, ag produce packing sheds, government agencies and so on.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-16 15:20:36

# **Comment 66 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Vincent Last Name: Wiraatmadja Email Address: vincent@weidemangroup.com Affiliation:

Subject: BYD Comments to the VW Settlement- Appendix C Comment:

Please see attached.

Attachment: www.arb.ca.gov/lists/com-attach/73-vw-zevinvest-ws-VyFcLQZYVXUKaVMn.pdf

Original File Name: VW Settlement Appendix C Letter 12-16-16.pdf

Date and Time Comment Was Submitted: 2016-12-16 15:50:42

# **Comment 67 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Richard Last Name: Teebay Email Address: rteebay2@isd.lacounty.gov Affiliation: County of Los Angeles

Subject: Recommendations for VW Settlement Investment Priorities Comment:

Please see attached

Attachment: www.arb.ca.gov/lists/com-attach/74-vw-zevinvest-ws-USNXNFAyBTkAawVo.pdf

Original File Name: Recommendations for VW Settlement Investment Priorities.pdf

Date and Time Comment Was Submitted: 2016-12-16 15:53:19

# **Comment 68 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: J Last Name: Lang Email Address: jason@caleec.com Affiliation:

Subject: VW Appendix C comments Comment:

Here is a revised version of the comments given by our client, CALSTART

Attachment: www.arb.ca.gov/lists/com-attach/75-vw-zevinvest-ws-AWJcOwZrWXlQIgdm.pdf

Original File Name: CALSTART Comments on VW Settlement Appendix C - CA ZEV Investment Plan - DRAFT 2012-12-16.pdf

Date and Time Comment Was Submitted: 2016-12-16 15:53:23

# **Comment 69 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Glen Last Name: Tepke Email Address: gtepke@mtc.ca.gov Affiliation: Metropolitan Transportation Commission

Subject: Volkswagen California ZEV Investment Letter Comment:

Comments from Metropolitan Transportation Commission (MTC) attached.

Attachment: www.arb.ca.gov/lists/com-attach/76-vw-zevinvest-ws-ADIBNwMzUjcHLAY3.pdf

Original File Name: 2016-12-16 VW California ZEV Investment Letter.pdf

Date and Time Comment Was Submitted: 2016-12-16 16:02:16

## **Comment 70 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Ben Last Name: Ellenberger Email Address: EllenbergerC@sbcapcd.org Affiliation:

Subject: Volkswagen ZEV Investment Commitment Public Input Workshop Comment:

Plug-In Central Coast is submitting comments on the Volkswagen ZEV Investment Commitment Public Input Workshop, which occurred on December 2, 2016.

Attachment: www.arb.ca.gov/lists/com-attach/77-vw-zevinvest-ws-WytVMFU3VVkFbwNm.pdf

Original File Name: PCC Letter VW Settlement.pdf

Date and Time Comment Was Submitted: 2016-12-16 16:07:27

# **Comment 71 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jacki Last Name: Bacharach Email Address: jacki@southbaycities.org Affiliation: South Bay Council of Governments

Subject: VW Settlement- California Investments Comment:

Attached is a document with our comments. Thank you for the opportunity to send in our thoughts.

Jacki

Attachment: www.arb.ca.gov/lists/com-attach/78-vw-zevinvest-ws-WmsBNVR7WDoENABf.doc

Original File Name: 12.16 comments to ARB re VW settlement.doc

Date and Time Comment Was Submitted: 2016-12-16 16:14:14

#### **Comment 72 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Keetha Last Name: Mills Email Address: kmills@foundationccc.org Affiliation: Foundation for CA Community Colleges

Subject: Volkswagen Settlement - California ZEV Investments Comment:

December 16, 2016

California Air Resources Board 1001 I Street Sacramento, CA 95815

Re: Appendix C: Volkswagen Zero Emission Vehicle Investment Commitment Development Process and Investment Areas

Dear California Air Resources Board Members and Staff, Thank you for the opportunity to provide comments on the Volkswagen's (VW) zero emission vehicle (ZEV) Investment Commitment development process and investment areas for California. The Foundation for California Community Colleges (Foundation) strongly supports the significant investment for ZEVs and infrastructure deployment that will help eliminate toxic mobile emissions, reduce greenhouse gas emissions, and benefit communities throughout the United States.

The Foundation is the non-profit organization supporting the California Community College system, the largest system of higher education in the nation. The Foundation implements several air quality programs that directly benefit communities, colleges, and students, contributing to cleaner air while expanding student career training opportunities in the automotive field. These programs include the California Automotive Resource Center, which provides resources to help automotive professionals advance their career and education; the Smog Technician Training Program, which delivers hands-on experience for automotive students to become high performing smog technicians; and the Replace Your Ride program to help low-income people trade their older, high polluting vehicles for a more fuel-efficient option. The Foundation also previously administered VRRRM (Vehicle Repair, Retirement, and Replacement for Motorists), an incentive program designed to reduce the number of high emitting vehicles on the road, and funded by \$20 million from the Reformulated Gasoline Settlement Fund. Recently, the Foundation was selected by the California Air Resources Board to implement innovative outreach strategies to expand participation of disadvantaged communities in California Climate Investments programs. The statewide presence of community colleges, particularly in disadvantaged communities, enables us to outreach to and partner with local communities to address air quality challenges while building tomorrow's skilled workforce by placing our diverse students at the forefront of new environmental initiatives.

As part of the VW Investment Commitment (Appendix C) in California, we strongly support significant investment in ZEV public awareness and infrastructure to accelerate the deployment of electric vehicles throughout California. Specific suggestions include: • Based on our experience implementing million dollar programs to clean the air and benefit communities statewide, the Foundation respectfully requests to be considered a partner in California's ZEV public awareness campaign implementation. • We encourage engaging the California Community Colleges as a partner in implementation. With over 2.1 million diverse students, the community colleges are California's largest provider of workforce training, particularly for technical and middle skills jobs. The system's 113 colleges are important community institutions throughout California, including in urban, rural, and underserved communities. • We encourage incorporating student training programs to install and maintain the ZEV infrastructure to provide hands-on experience to the next generation of automotive and other clean air technology professionals. We appreciate the opportunity to provide comments.

Sincerely,

Keetha Mills President and Chief Executive Officer

Attachment: www.arb.ca.gov/lists/com-attach/79-vw-zevinvest-ws-BnBUJQZYUWELbANc.pdf

Original File Name: VW CA Settlement\_Foundation.pdf

Date and Time Comment Was Submitted: 2016-12-16 15:50:20

## **Comment 73 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Robert Last Name: Ball Email Address: rball@kerncog.org Affiliation: Kern COG

Subject: ZEV Investments Comment:

The following categories should be considered that have a substantial benefit-cost ratio better an straight ZEV invstments.

1) Diversion of heavy duty diesel trucks to rail with rail infrastructure projects. For example, the Shafter Container Yard could provide significant HDD VMT/emissions reductions by diverting trucks to rail. The VW Settlement funds could be used to fund intermodal infrastructure, equipment and Zero and Low Emission Locomotives to run between the SJV and the Ports of L.A./Long Beach, removing HDD trucks from I-710, I-405, I-5 and I-580.

2) A significant portion of Electric Vehicles use electricity generated by fossil fuel natural gas. Three of the largest Gas fired power plants in California are near 2 clusters of dairies. Collecting and pipeing renewable NG from these dairies could reduce the CO2e from electricity used in EVs across the state. A category needs to be added for generation of electricity used by EVs.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-16 16:18:01

### **Comment 74 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Evan Last Name: Speer Email Address: evan.speer@dgs.ca.gov Affiliation:

Subject: Comments for VW ZEV Investment Plan Comment:

Good Afternoon,

On behalf of the California Department of General Services (DGS), I would like to thank the California Air Resources Board (ARB) for allowing the opportunity to weigh in with comments on the Volkswagen ZEV Investment Plan. Through the establishment of statewide policies and the installation of electric vehicle (EV) workplace charging infrastructure at state facilities, DGS has been involved heavily in the adoption of zero emission vehicles (ZEV) by state fleets and among state employees. To fund these projects, DGS relies heavily on outside sources such as, grant programs, investor owned utility subsidies, and settlement programs (such as NRG's). Recently DGS released an aggressive EV infrastructure goal, in Management Memo 16-07 (attached), to install workplace EV chargers in 5 percent of all state owned parking spaces by 2022. DGS estimates this will amount to approximately 4,500 new workplace EV chargers at state owned facilities. Critical to the success of this new mandate, is securing the funding necessary to complete these installation projects. Therefore, DGS is asking that ARB take the following comments into consideration when developing the guiding principles for the Volkswagen ZEV Investment Plan. As always, thank you for your dedication to ensuring a better and healthier future for our state.

ZEV Infrastructure

1. Give priority to workplace charging (to include "behind the fence" charging) initiatives, as it has been shown that access to workplace charging significantly increases electric vehicle (EV) adoption rates among employees (especially those who live in multi-unit dwellings).

2. Promote partnering with state and local governments to facilitate and/or fund EV charging installations at government locations that serve disadvantaged communities. State and local government agencies are uniquely positioned to both operate in and serve many disadvantaged communities throughout the state. By partnering with state and local government agencies to install dual-use (workplace/public) EV charging infrastructure, not only is the investment promoting adoption of EVs among employees at those facilities (many of whom live in the same disadvantaged community), but also among the local residents who seek services at these facilities. Additionally, many state and local governments already have plans (in various stages) to install EV infrastructure. Partnering with these agencies could potentially cut much of the planning costs and maximize the impact of the investment dollars.

3. Partner with public and private fleets to complement existing fleet EV charging/fueling infrastructure plans. Whether due to political initiatives or cost savings, many public and private fleets are at the leading edge of ZEV adoption and are installing the necessary infrastructure to support their growing ZEV fleets. Many of the EV charging stations needed to support fleet vehicles are being installed in "fleet only" locations - which are usually identified based upon cost of installation. Many of these chargers sit idle during working hours while fleet vehicles are out in the field and, if strategically located, could double as workplace chargers during working hours. We encourage ARB to provide guidance that would allow Volkswagen's ZEV Investment Plan to include incentives for fleets to expand the scope of planned EV charger installations to include workplace charging capabilities.

Attachment: www.arb.ca.gov/lists/com-attach/81-vw-zevinvest-ws-UD1XPAMzWD0CWwIy.pdf

Original File Name: MM16\_07.pdf

Date and Time Comment Was Submitted: 2016-12-16 15:59:58

### **Comment 75 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Nicole Last Name: Davis Email Address: ndavis@engr.ucr.edu Affiliation:

Subject: comments to the ZEV Implementation workshop Comment:

Dear CARB staff,

Thank you for hosting the December 2nd Volkswagen California ZEV Investment Commitment Public Input Workshop. The ARB guidelines for the ZEV implementation are a thoughtful addition to Appendix C that should maximize the benefits for Californians. We have a few additional suggestions that we feel would improve the guidelines further:

1. The guidelines should put a higher priority on non-IOU territories in addition to disadvantaged regions in the selection of Green Cities. The CEC has already committed over \$40 million to installing EV charging stations throughout the state, and almost none of it can be used for non-IOU territories. For VW funds to be complementary and additional, these funds should first go to non-IOU territories who cannot benefit from the majority of existing infrastructure funding.

2. The guidelines should maintain or more tightly qualify the highly disadvantaged regions in addition to disadvantaged regions in the selection of Green Cities, to ensure the maximum benefit reaches the most challenged areas.

3. The guidelines should prioritize true ZEV implementation meaning ZEV charging stations that provide renewable electricity are widely disseminated. You don't want ZEV charging stations that rely on non-renewable electricity.

4. The guidelines should provide more emphasis on establishing an integrated vehicle-grid implementation... establishing ZEV charging infrastructure without taking into account the fragility of the electric grid would lead to a sub-optimal deployment. In many cases, microgrid technology will be required to establish a largescale, robust ZEV charging infrastructure system.

We also have a couple questions regarding eligibility: 1) Is the University eligible for ZEV Implementation funds, and if so, what would be the appropriate category? (The only choices are Government, Trade association, Interest Group, Industry, or Individual) and 2) To be eligible to be selected as the green city, do you need to register at http://www.greencitiescalifornia.org/?

The City, UCR and County partners plan on submitting an application to VW for consideration as the Green City. Attached is a rough draft of that application for your information. We appreciate any feedback you may have and consideration of the points above.

Attachment: www.arb.ca.gov/lists/com-attach/82-vw-zevinvest-ws-UjYCdlExVWAEdgZZ.pdf

Original File Name: DRAFT Riverside Green City Proposal.pdf

Date and Time Comment Was Submitted: 2016-12-16 16:29:11

# **Comment 76 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Joel Last Name: Espino Email Address: joele@greenlining.org Affiliation: The Greenlining Institute

Subject: Charge Ahead California Campaign Comments to VW ZEV Investment Commitment Comment:

Please find the comments of the Charge Ahead California campaign attached.

Thanks,

Joel

Attachment: www.arb.ca.gov/lists/com-attach/83-vw-zevinvest-ws-AGMHaVQ0V3ZQMQVg.pdf

Original File Name: Charge Ahead Comments\_Volkswagen ZEV Investment Plan\_Final.pdf

Date and Time Comment Was Submitted: 2016-12-16 16:35:00

# **Comment 77 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Bernard Last Name: Kotlier Email Address: LMCCEnergy@gmail.com Affiliation: California IBEW-NECA LMCC

Subject: Volkswagen Settlement - California ZEV Investments Comment:

Please see our comments, attached.

Thank you.

Attachment: www.arb.ca.gov/lists/com-attach/84-vw-zevinvest-ws-UyVWJ1ULBCQEZwl9.pdf

Original File Name: VW Settlement Comment From CA LMCC, Dec. 16, 2016.pdf

Date and Time Comment Was Submitted: 2016-12-16 16:38:44

# **Comment 78 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jaimie Last Name: Levin Email Address: Jaimie@CTE.tv Affiliation: Center for Transportation and the Enviro

Subject: Comment on VW ZEV Investment Plan Comment:

Please see the attached comment letter

Attachment: www.arb.ca.gov/lists/com-attach/85-vw-zevinvest-ws-AmEAcgdjUV1WMwNs.pdf

Original File Name: CTE\_Comments\_CAZEVInvestmentPlan\_DRAFT.pdf

Date and Time Comment Was Submitted: 2016-12-16 16:26:33

# **Comment 79 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Steve Last Name: Sanders Email Address: ssanders@ca-ilg.org Affiliation: Institute for Local Government

Subject: Volkswagen Settlement - California ZEV Investments Comment:

Please find attached comments and recommendations submitted by the Institute for Local Government. If there are problems with accessing the file, please contact me.

Attachment: www.arb.ca.gov/lists/com-attach/86-vw-zevinvest-ws-VDVcKF0+UFxVKQBl.doc

Original File Name: ARB ZEV comment letter 12-16-16.doc

Date and Time Comment Was Submitted: 2016-12-16 16:21:52

## **Comment 80 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jaimie Last Name: Levin Email Address: Jaimie@CTE.tv Affiliation: Center for Transportation and the Enviro

Subject: Comment on VW ZEV Investment Plan Comment:

Please see the attached comment letter. I sent this same letter previously but incorrectly labeled the file as a "Draft."

Attachment: www.arb.ca.gov/lists/com-attach/87-vw-zevinvest-ws-UzBSIFUxWVVRNFM8.pdf

Original File Name: CTE\_Comments\_CAZEVInvestmentPlan2016-12-15.pdf

Date and Time Comment Was Submitted: 2016-12-16 16:26:33

## **Comment 81 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jessie Last Name: Denver Email Address: jessie.denver@sfgov.org Affiliation: City and County of San Francisco

Subject: CARB VW Settlement Comments: City and County of San Francisco Comment:

On behalf of the City and County of San Francisco and San Francisco Mayor Edwin M. Lee, I am writing to comment on the Volkswagen (VW) settlement plan for California. San Francisco remains deeply committed to our climate action strategy and taking measurable steps to address climate change by advancing our city's transformation towards zero emission vehicles. We applaud your staff in working with VW to ensure that their investments in California support these local efforts that are supporting the State's greenhouse gas reduction and vehicle market transformation goals.

Attachment: www.arb.ca.gov/lists/com-attach/88-vw-zevinvest-ws-ATAFMVV6AmAAMAkn.pdf

Original File Name: 12.16.16 CARB VW Settlement Comments-CCSF.pdf

Date and Time Comment Was Submitted: 2016-12-16 17:00:15

### **Comment 82 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Abas Last Name: Goodarzi Email Address: abas@ushybrid.com Affiliation: CA

Subject: US Hybrid Comments on Volkswagen California ZEV Investment Commitment Comment:

December 16, 2016

US Hybrid Comments on Volkswagen California ZEV Investment Commitment

Prepared for: California Air Resources Board

US Hybrid Corporation strongly supports the planned Air Resources Board's (ARB's) process aimed at using the Volkswagen (VW) California Zero Emission Vehicle (ZEV) Investment Commitment in a way that maximizes adoption of zero emission vehicles—to advance California's leadership in environmental policy. US Hybrid applauds ARB's strong encouragement for VW to include Zero Emission medium-duty (MD) and heavy-duty (HD) goods movement, hydrogen infrastructure and outreach efforts in its consent-decree investment plans.

USH encourages inclusion in these plans in particular: • Funding of public outreach efforts aimed at increasing California's awareness and comfortability with MD & HD fuel cell hydrogen truck-and-bus infrastructure and associated technologies. • Early expansion of the hydrogen refueling station network and supporting infrastructure to include commercial vehicles • Fuel cell powered medium and heavy duty trucks for supporting goods movement and transit buses for public transportation • Hydrogen production that enables primary renewable energy development, such as that of the expanding hydrogen infrastructure in ways that further the Green Cities Vision • Support for large-scale renewable hydrogen production facilities to enable cost-effective zero carbon fuel for transit and freight movements. US Hybrid believes strongly that ARB needs to insure that the settlement money is equitably used to fund a balanced portfolio of zero emission vehicle technologies with a focus on much needed MD & HD trucks-the dominant pollutant culprits for disadvantaging communities in proximity to port operation. US Hybrid, established in 1999 and located in Torrance, CA, is an industry leader in the design & production of zero emission transit and goods movement industries since 1999. We have every expectation that these projects will support ARB's current and long-term goals and will meet ARB's guidelines for consideration in VW's investment plan.

I look forward to working with the ARB and the Volkswagen Group as this process continues!

Sincerely,

Abas Goodarzi, Ph.D., PE. President, CEO | US Hybrid Corporation Tel: 310-212-1200 | abas@ushybrid.com

Attachment: www.arb.ca.gov/lists/com-attach/89-vw-zevinvest-ws-USRVIABeAjlSLQBi.pdf

Original File Name: US Hybrid Comments on VW ZE Investment.pdf

Date and Time Comment Was Submitted: 2016-12-16 17:05:10

## **Comment 83 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Jonathon Last Name: Segarra Email Address: JSegarra@oaklandnet.com Affiliation:

Subject: Input on ways to increase ZEV usage Comment:

Good afternoon Mark,

I hope this message finds you well. On behalf of the City of Oakland and Mayor Libby Schaaf, I am pleased to submit a letter providing comment and suggestion regarding Volkswagen's zero emission vehicle investment commitment, development process and investment areas. We attempted to submit the letter through your online form, noting the guidance provided in the meting notice, which provided a due date for electronic comments (December 16, 2016), but does not provide a specific final time for submittal. As such, it was our understanding that we could submit comments up until the end of December 16th, 2016.

Please advise - we really hope that you are able to take this letter into consideration, as it is our intention to provide input on ways to increase ZEV usage for all Californians. Please let me know if you have any questions or require additional information regarding our comments.

Thank you for your consideration, and we look forward to working with you.

Warmest Regards,

Jonathan Segarra

Citywide Grants Coordinator

City of Oakland

(510) 238-4906

JSegarra@oaklandnet.com

Attachment: www.arb.ca.gov/lists/com-attach/90-vw-zevinvest-ws-UzAAb1ciACpQCQFu.pdf Original File Name: City of Oakland\_VW Settlement Comment Letter\_12 16 2016.pdf Date and Time Comment Was Submitted: 2016-12-20 09:23:23 No Duplicates.

## **Comment 84 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Mark Last Name: Sheldon Email Address: msheldon.hb@gmail.com Affiliation:

#### Subject: Encouraging Hydrogen / Fuel Cell Education and Infrastructure Support Comment:

The inclusion of hydrogen and Fuel Cells in the VW ZEV investments commitment is to be encouraged. Furthermore, this should not be a token investment but ideally at a rate higher than the early estimates of fuel cell vehicles relative to battery electric vehicles, because of the infrastructure challenges involved. Fuel cells are a mature technology with their own advantages, but support for their growing fueling network and for the public education about them are critical to their potential for success.

Public Education and Outreach needs to address key points of understanding that hydrogen / Fuel Cell vehicles are on a par with other vehicles for safety; are rapidly becoming more available (particularly in California); and that a significant fraction of the Hydrogen to fuel them is already being produced from renewable sources (as mandated by California) with that more renewable hydrogen sources being developed towards a fully renewable hydrogen future.

Hydrogen Infrastructure is also important and whatever VW can do to support it in a way that is fair to the market competitors is of value. This support could include station and fuel delivery infrastructure. Support for the placement of more hydrogen fueling stations covering all parts of, and in areas (including those identified as disadvantaged) where initial station coverage is still sparse will help enable the viability of fuel cell vehicles for the entire public as they become more affordable and widely available.

Although I do not speak for any organization apart from my own business, I believe it is safe to say that the professional hydrogen / fuel cell organizations stand ready to lend their expertise to help making a mature hydrogen infrastructure and an a program deployed to educate the public a reality.

Attachment:

**Original File Name:** 

Date and Time Comment Was Submitted: 2016-12-20 09:31:51

## **Comment 85 for Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) - 1st Workshop.**

First Name: Samveg Last Name: Saxena Email Address: ssaxena@lbl.gov Affiliation:

Subject: VW comment Comment:

Please find the attached proposal concept, which describes the application of Berkeley Lab's MyGreenCar tool to accelerate ZEV adoption. MyGreenCar provides drivers with a personalized tool to eliminate EV range anxiety and uncertainty in required charging as obstacles to EV adoption. As the attachment explains, MyGreenCar simultaneously advances the objectives of the VW Settlement while also advancing several of VW's strategic business directions.

Attachment: www.arb.ca.gov/lists/com-attach/92-vw-zevinvest-ws-AjAHMQAwB2IKIQMy.pdf

Original File Name: 2016-12-16 - MyGreenCar - VW.pdf

Date and Time Comment Was Submitted: 2016-12-20 14:03:03

There are no comments posted to Volkswagen Settlement - California ZEV Investments (vw-zevinvest-ws) that were presented during the Workshop at this time.