

## **Comment 1 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jim  
Last Name: Stack  
Email Address: jstack6@juno.com  
Affiliation:

Subject: ZEV vehicles  
Comment:

The only true ZEV vehicles are pure electric that charge on renewables Today 96% of the hydrogen is made from fossil fuels. This can be improved on but will take a long time.

Today we already have very good Electric Vehicles like the RAV4 with NiMH batteries that have lasted over 100,000 miles. Too bad Toyota stopped making it. We also have the Tesla and Ebox.

Please do what is right.  
Jim

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-02-16 11:19:59

No Duplicates.

## **Comment 2 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Star

Last Name: Irvine

Email Address: irvineland@sbcglobal.net

Affiliation: NEV Owner

Subject: MSV in ZEV regulations

Comment:

I as a NEV owner (use my OKA NEV ZEV about 3,000 miles annually) would like to see MSV (Medium Speed Vehicles) included in ZEV mandate so they can be available in California.

I own two other vehicles FORD FOCUS and FORD Crown Vic.

I my OKA NEV could go 35 MPH I would drive it at least twice as much as I currently do, and I would feel much safer doing so.

25 MPH top speed for NEV seriously limits its use and practicality for every day commuting.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-02-19 23:07:01

No Duplicates.

### **Comment 3 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Miro  
Last Name: Kefurt  
Email Address: mirox@aol.com  
Affiliation: OKA AUTO USA

Subject: MSV definition and inclusion in ZEV 2008  
Comment:

We believe that it is important that the ZEV regulations should be more specific in definition of "CITY" ZEV as to its capabilities and equipment.

NEV (LSV) is well defined by FMVSS#500 as well as by California Vehicle Code.

CITY ZEV could be both important and cost-effective solution to California effort to both reduces "pollutant" emissions as well as reduction of CO2 emissions by increased use of PURE ELECTRIC VEHICLES in local city traffic.

Current Lead-Acid Sealed Battery technology can provide 20 to 40 mile range per charge and recharge times of under 4 hours using standard 15A 120V AC household source.

NEV (LSV) due to their Federally mandated maximum speed of 25 MPH on level surface over one mile distance are perceived by majority of public as "too slow" to be safe in typical traffic patterns in California cities where most major streets have speed limits of 35 MPH or more.

Several states (Oregon, Montana, Washington) have already adopted MSV (Medium Speed Vehicle) regulations permitting PURE ELECTRIC VEHICLES to attain maximum speed of 35 MPH and otherwise confirm to FMVSS #500 (LSV).

We are asking that MSV "definition" is included in the proposed ZEV regulations, so that further steps to include it in California Vehicle Code and also get new class (MSV) established on a Federal level by NHTSA can be undertaken.

CITY MSV capable of 35-MPH top speed in typical traffic would be far more attractive to California consumers as second and/or third in family vehicles.

Since MOST pollutants are emitted during COLD START and RE-START of conventional vehicles, the emission reduction contribution of MSV would be substantial.

Also the economic facts can not be ignored, if MSV is substantially less expensive (under \$10,000) than a small economy car (now in \$12,000 to \$16,000 range) then far more consumers will seriously consider its purchase especially with addition of any grants and or tax credits.

Full function electric vehicles in costs ranging from \$30,000 to \$100,000 are just small niche vehicles which will never achieve any great market volume to make any measurable impact on the California environment.

However low cost MSV could gain substantial popularity and reduce the real annual gasoline vehicle miles driven by average California family by from 3,000 to up to 7,000 miles annually.

This is significantly more annual miles than is logged by current owners of NEV's in California.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-02-19 23:10:57

2 Duplicates.

## **Comment 4 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Christopher  
Last Name: England  
Email Address: cengland@electrochimica.com  
Affiliation: Electrochimica Laboratories LLC

Subject: ZEV Future Prospects  
Comment:

Our company is developing a battery that meets USABC long-term goals for specific energy and cost (220 Wh/kg, \$100/kWh). Such a development enables mid-sized all-electric vehicles. We wish to inform the State that this development will be made public about June 2008 after intellectual property issues are established. We ask the State to maintain its incentives for all-electric vehicles so that, when our technology is available, the business environment for manufacturing our batteries is favorable in California.

Our computer models indicate that batteries based on our technology later may be developed with 380 Wh/kg and \$60/kWh. A 75 kWh battery of these characteristics could drive a full-sized vehicle from Los Angeles to Las Vegas without recharging, the battery costing \$60x75 or \$4500.

We expect implementation of our batteries first in transport vehicles such as airport and port buses where pollution levels dictate reduced emissions, and where safety can be monitored. We ask the State to encourage the use of ZEVs for these applications.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-02-20 10:29:42

No Duplicates.

## **Comment 5 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Skip  
Last Name: Acquaro  
Email Address: nelson@kep.com  
Affiliation:

Subject: Viability of BEV's  
Comment:

To Mary Nichols and fellow members of CARB:

Am resending this comment to the ARB in the ZEV proposals of 2008, but much of it still applies. Regarding the disclosure of ZEV Credit data and automakers construing it as a "trade secret", there is one thing that has not been mentioned.

As the government provided millions of dollars to automakers to develop BEV's in the 1990's, it is not unfathomable that the general public should be able to see how this money was (and is being) spent. Was it used purely for BEV development? As some automakers currently claim, they used their BEV development experience of the last decade, to create today's Hybrid Electric vehicles, or AT PZEV's. Therefore, that money has, if somewhat indirectly, allowed automakers to capitalize on the sale of the current (and future) crop of Hybrid Electric vehicles.

Also, the comparison by ARB of releasing the ZEV Credit data, to that of releasing our own tax records is not quite the same. If the government allocated large sums of monies to automakers to spur BEV development, we as the general public should be able to see how it was (and is being) spent. Is a certain automaker building just a handful of Fuel Cell vehicles, that ordinary citizens will not be able to afford to buy or operate for 10 to 20 years from now, in order to get the most ZEV credits in the Alternative Path? Or is that same automaker truly committed to helping the environment by making real BEV's now, that we can buy now?

It was done 10 years ago, and technology moves on. I hear quotes in the media from the same schlep who always says, "Battery technology isn't there yet." Well, battery technology was there with the Toyota RAV4EV, with its 125 mile range with NiMH batteries. These same vehicles are still going strong, in both the hands private citizens, and in that of large fleets (Southern CA Edison), with many over 100,000 miles and still with around a 100 mile range between charges.

Imagine what we can do today, with those same old Panasonic EV-95 NiMH batteries used in the Toyota RAV4EV, or -gasp- the advanced high power Li-Ion Nanophosphate batteries being made by A123 and used by plug-in Prius conversion shops. These same A123 Li-Ion batteries are also under consideration for use in the proposed Chevy Volt, as well as the Saturn Green Line Vue plug-in hybrid SUV. Or the Li-Ti batteries from Altairnano being used in Phoenix Motorcars BEV's, which normally charge in 5 to 6 hours, but may be

possible to recharge safely in 10 minutes, if you park in an electrical utility sub-station.

Make the right choices!

Regards,

+ Skip Acquaro

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-02-20 14:39:45

No Duplicates.

**Comment 6 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Stanton

Last Name: Ireland

Email Address: irelandSL@hotmail.com

Affiliation:

Subject: Stanton and Lisa Ireland

Comment:

Please see attached

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/6-zev0001.pdf'

Original File Name: zev0001.pdf

Date and Time Comment Was Submitted: 2008-02-22 15:56:49

No Duplicates.



## **Comment 7 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ant

Last Name: Cimino

Email Address: Anthony@cimino.us

Affiliation: Schenectady City School District

Subject: The EVs

Comment:

I have enjoyed owning and operating my 2000 Ford Ranger EV since late June. Each oil free mile drives us away from terrorism, wars, and pollution. Why did CARB back down to the oil companies and give them 10 more years to hide the truth about EVs? The NiMH batteries in my vehicle are very durable and capable of all the driving needs I have in Upstate NY.

My 4th grade students love the idea of a vehicle that does not require gasoline to propel itself. Their enthusiasm in my "ride" is a testament to the future of EVs. President W has done some very confusing things to our country in the past 7 years, his fight with CA is not one of them. As my 4th graders see their parents hurting from all the troubles of our economy, this administration seems to profit from it.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-02-25 05:42:04

No Duplicates.

## **Comment 8 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Noel

Last Name: Adams

Email Address: noela@prodigy.net

Affiliation:

Subject: 2008 Amendments to the ZEV mandate

Comment:

After reviewing the staff proposals for modification of the ZEV mandate I am pretty disappointed that the steps proposed are further weakening the legislation and further delaying the actions that are essential to preserve quality of life in California.

The fact that CARB was hoodwinked into thinking that fuel cells would be commercially available in 2008 is history and CARB should acknowledge that the 2003 amendments were a mistake and find a way to get ZEVs onto the roads in California in large numbers by the end of the 2009-2011 model year period.

It is my opinion that if the manufacturers were allowed to meet the 25,000 car requirement with some combination of battery electric, Plug in hybrid and fuel cell vehicle, even including NEVs using a small multiplier as part of the ZEV requirement it would do a lot more to promote ZEVs than letting the six largest manufacturers get away with producing as little as 450 fuel cell vehicle.

I also think that the ability to sell ZEV credits would be a big boost to some of the up and coming BEV manufacturers like Phoenix Motors and Tesla. The ability to sell ZEV credits should also be given to the manufacturers of three wheel ZEVs like ZAP and APTERA also, again using a smaller multiplier depending on range and likely utilization of the vehicles.

We need to get alternative fuel vehicles on the roads and we need to get them on the roads quickly. There are a multitude of reasons for this including Peak oil, global warming, dependence on foreign oil, and the need to breathe clean air. I hope that CARB will do the right thing in the end.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-02 09:36:31

No Duplicates.

**Comment 9 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Iris

Last Name: Edinger

Email Address: Non-web submitted comment

Affiliation:

Subject: Plug-In Cars

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/9-zev0003.pdf'

Original File Name: zev0003.pdf

Date and Time Comment Was Submitted: 2008-03-04 13:49:35

280 Duplicates.

**Comment 10 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Z.

Last Name: Enos

Email Address: zenos@milesev.com

Affiliation: Miles Electric Vehicles

Subject: MSV definition and inclusion in ZEV 2008

Comment:

Miles Electric Vehicles urges the adoption of amendments to the 2008 amendments to the California Zero Emission Regulation.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-05 14:27:19

No Duplicates.

**Comment 11 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Taryn

Last Name: Sokolow

Email Address: Taryn@EnVironmentalMotors.com

Affiliation:

Subject: Included MSEV in ZEV mandate

Comment:

As a dealer for NEV's in Southern California I would like to see MSEV (Medium Speed Electric Vehicles) included in the ZEV mandate. I believe more people will buy electric vehicles if they could be classified at MSEV's and go 35mph.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-05 15:15:57

No Duplicates.

## **Comment 12 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Trudy

Last Name: Sclar

Email Address: trudy@environmentalmotors.com

Affiliation: PIA, EAA, EnVironmental Motors, etc.

Subject: PLEASE create a MSV class of electrics

Comment:

Hi there,

I work at EnVironmental Motors - we are busy but don't sell enough cars because the top speed is only 25 mph max for 4-wheel NEVs. We would definitely sell more if the speed was 35 mph per just about every inquiry. We would have many more electric cars on the road today with zero emissions if we could sell more of these cars and this would get the masses ready for a freeway electric mentality.

The "green" community is bigger than you realize and growing rapidly - even in a drought, so to speak. PLEASE take this request seriously because the demand is high and laws need to be changed and/or written to accommodate new ideas and technologies so that we can save our planet.

I will be happy to speak with whomever and also encourage you to speak to organizer Russell Sydney of the Sustainable Transport Club as well for more details. This issue will not go away. The more gas prices go up, the greater interest there will be. Government incentives will help pave the path for a healthier future. We need serious action not just words.

Sincerely,

Trudy Sclar  
EnVironmental Motors  
818.549.0000

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-05 15:29:18

No Duplicates.

## **Comment 13 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Carlton W.  
Last Name: Terry  
Email Address: dcwttao01@yahoo.com  
Affiliation: US Citizen

Subject: Do not kill the Electric Car AGAIN  
Comment:

To whom it may concern,

Stop lying to us, and strengthen the ZEV mandate. It must be not only adhered to, but accelerated.

Since we know that EVs work, the 2015 numbers must be moved up. GM now admits that it will produce an EV (plus range-extender) in 2010: there should be no questioning that it must be forced to make that EV available for sale, with no numerical "quota" limiting production or allowing them to stop. No leasing of batteries, no "boomerang" leases, let GM determine the technology.

Abandon the "ZEV credits" mistake. Rather than quotas, the simple thing is to just make proven EVs available for sale. Let the manufacturers figure out what batteries; we know that NiMH works, so let them figure out how to get permission from Chevron; we know that lead-acid works, so let them find the right Panasonic battery; we hope that lithium will work, so let them do research while they produce regular, existing plug-in EVs.

Please do this Now.

Carlton W. Terry

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 01:20:37

No Duplicates.

## **Comment 14 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Francois  
Last Name: Choquette  
Email Address: gnss\_engr@yahoo.com  
Affiliation: None

Subject: Fuel cells ZEV credits should be dropped altogether  
Comment:

Hello,

As an aerospace engineer, it is my well researched opinion that fuel cells and the associated hydrogen highway are simply unrealistic and unworkable goals, both in the short and long terms.

Hydrogen is simply an energy carrier, much less efficient than other much simpler choices such as batteries. It take a lot of energy to produce hydrogen (now primarily from fossil fuels) and there is no infrastructure to distribute it. It is very difficult to store, fuel cell technology is very expensive and finally it is dangerous.

Hydrogen, for use in transportation simply makes no sense and it is a failure. The ZEV credits for hydrogen cars need to be dropped immediately and the CARB staff needs to concentrate on much more workable solutions that are likely to produce results in the short term (less than 5 years)

Our energy and air quality situation are critical. Electric vehicles have been proven effective (Toyota RAV-4) and need to be brought back to the marketplace.

For example, the combination of solar rooftops and an plug-in cars (PHEV or BEV) would drastically cut pollution, reduce our foreign oil dependency, help stabilize the electric grid and produce local California jobs.

Specifically encouraging people that combine NEV's, plug-in hybrids and electric cars with sufficient solar panels at home should be highly praised and rewarded. Small innovative builders of electric vehicles must be given the highest encouragement, with the least encumbrances. Consider the GOLD credits for locally produced transportation energy such as home solar and wind.

On a positive note, I would like to thank CARB and encourage further help to university projects like the SAE Formula Hybrid. The recent grant to this project was an excellent choice. Such sponsorships are likely to produce excellent results for very little cost.

Regards,

Francois Choquette  
Garden Grove, CA.



Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 06:29:50

No Duplicates.

## **Comment 15 for ZEV 2008 (zev2008) - 45 Day.**

First Name: John

Last Name: Silva

Email Address: johnsilvasr2000@yahoo.com

Affiliation:

Subject: Electric Cars

Comment:

We need electric cars now. Their making electric cars in other countrys. Why Not here.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 07:27:51

No Duplicates.

## **Comment 16 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Elan  
Last Name: Melamid  
Email Address: elanmel@aol.com  
Affiliation:

Subject: CARB must REQUIRE ZEVs and Expand CNG  
Comment:

CARB's cowardly actions to PREVENT public access to Electric Vehicle Technology reflects terribly on your organization--STAND UP for Clean Air using battery technology available now.

CARB must INVESTIGATE CHEVRON Corp for RESTRAINT of TRADE in not allowing use of NiMH Battery technology by Electric Vehicle builders. CHEVRON POISONS OUR CHILREN.

CARB must work with CA DMV to EXPAND access to clean-burning CNG vehicles--allow HOV permits for ALL pure-CNG and HYBRID CNG/Gas vehicles to support faster adoption of CNG, America's Clean, available here and now fuel alternative.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 07:48:53

No Duplicates.

## **Comment 17 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Leo  
Last Name: Galcher  
Email Address: leo4marg@cox.net  
Affiliation: EVAOSC, inc.

Subject: ZEV Regulation  
Comment:

This is all ARB needs to know in order to reinstate the mandate  
---NOW! 18 YEARS OF VALUABLE EV MILES HAVE BEEN DENIED TO CA.  
BECAUSE ARB CAVED IN TO GM. THE PROMISE OF FUEL CELLS. THE  
MYTH OF FUEL CELLS BY 2010 REVEALED!  
IT IS THE BATTERY, STUPID!

March 5, 2008  
GM, Toyota Doubtful on Fuel Cells' Mass Use

GENEVA -- Top executives from General Motors Corp. and Toyota Motor Corp. Tuesday expressed doubts about the viability of hydrogen fuel cells for mass-market production in the near term and suggested their companies are now betting that electric cars will prove to be a better way to reduce fuel consumption and cut tailpipe emissions on a large scale.

Speaking at the Geneva auto show, GM Vice Chairman Bob Lutz told reporters that recent advances in lithium-ion batteries indicate that future electric cars might be able to travel 300 miles, or nearly 500 kilometers, before they need to recharge, making them much more practical as a mass-market product.

"If we get lithium-ion to 300 miles, then you need to ask yourself, Why do you need fuel cells?" Mr. Lutz told reporters. He added that fuel-cell vehicles are still far too expensive to be considered for the mass market. "We are nowhere [near] where we need to be on the costs curve," he said.

At a separate event at the show, Toyota President Katsuaki Watanabe echoed the concern about the high costs of fuel cells and noted the lack of an infrastructure to produce and distribute hydrogen fuel to

a wide swath of consumers. These factors leave him with the impression that "it will be difficult to see the spread of fuel cells in 10 years' time," Mr. Watanabe said.

The comments indicate a shift in the auto industry's tone regarding fuel cells, especially at GM, which has spent the past two years highlighting its fuel-cell technologies as one of many initiatives it is pursuing to reduce petroleum consumption.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 09:55:44

No Duplicates.

## **Comment 18 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mike

Last Name: Burgess

Email Address: mike\_burgess@yahoo.com

Affiliation:

Subject: hydrogen woes

Comment:

Hydrogen and fuel cells are in the far future, and cracking hydrogen from water is electrically expensive.

There is existing, currently, battery technology to provide short & medium range vehicles. I would like to see a return of mandates for purchasable (not rental) battery cars. Even Better would be to pull out the blueprints and return the GM EV-1 back to production.

Thank you.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 10:52:44

No Duplicates.

**Comment 19 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Doug

Last Name: Korthof

Email Address: Non-web submitted comment

Affiliation:

Subject: ZEV mandate needed now, not in decades

Comment:

Please see attached.

Attachment: '<https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/19-dougkorthof.pdf>'

Original File Name: dougkorthof.pdf

Date and Time Comment Was Submitted: 2008-03-06 11:27:03

No Duplicates.

## **Comment 20 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Brian

Last Name: McDonough

Email Address: brrrian1@yahoo.com

Affiliation:

Subject: Instead of weakening the ZEV mandate, CARB must strengthen it!

Comment:

Instead of weakening the ZEV mandate, CARB must strengthen it!

1. FUEL CELLS ARE A FRAUD AND A LIE. The Board must admit and acknowledge that its April, 2003 vote to crush battery EVs and rely on fuel cells was based on false information and wishful thinking. Lobbyists from GM and Ford just plain lied and misled CARB about the reality of fuel cells, despite public comment and professional engineers warnings that it was bogus and lacked reality.

2. ELECTRIC CARS WORK, ARE STILL WORKING, AND MUST BE MADE AVAILABLE FOR SALE. No quotas, no lies, the ZEV mandate must be not only adhered to, but accelerated. The problem is, CARB is relying on the flawed 1996 Memorandum of Agreement, which only forced auto makers to produce a certain number of oil-free cars as a demonstration project. Now, that EVs are proven successful, CARB must insist that they be OFFERED FOR SALE ON THE FREE MARKET without trick or artifice, at a fair price and without lengthy delivery delays.

3. BANKED ZEV CREDITS ARE A MATTER OF PUBLIC RECORD, not trade secret; the CARB legal department must be reproved for failing to clarify this issue, and upbraided for failing to release the banked ZEV credits. According to the response from one Public Records Request (PRR) I submitted, they don't even know how many fuel cell cars are on the road, by manufacturer! This is an agency that spends \$300M per year, and they don't even know these vital, but perhaps embarrassing, numbers.

4. Since we know that EVs work, the 2015 numbers must be moved up. GM now admits that it will produce an EV (plus range-extender) in 2010: there should be no questioning that it must be forced to make that EV available for sale, with no numerical "quota" limiting production or allowing them to stop. No leasing of batteries, no "boomerang" leases, let GM determine the technology.

5. Abandon the "ZEV credits" mistake. Rather than quotas, the simple thing is to just make proven EVs available for sale. Let the manufacturers figure out what batteries; we know that NiMH works, so let them figure out how to get permission from Chevron; we know that lead-acid works, so let them find the right Panasonic battery; we hope that lithium will work, so let them do research while they produce regular, existing plug-in EVs.



Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 11:31:10

No Duplicates.

## **Comment 21 for ZEV 2008 (zev2008) - 45 Day.**

First Name: mark

Last Name: schmiedlin

Email Address: mark.schmiedlin@csa-international.org

Affiliation:

Subject: Electric Cars

Comment:

ELECTRIC CARS WORK, ARE STILL WORKING, AND MUST BE MADE AVAILABLE FOR SALE. The ZEV mandate must be not only adhered to, but accelerated. Now, that EVs are proven successful, CARB must insist that they be OFFERED FOR SALE ON THE FREE MARKET without trick or artifice, at a fair price and without lengthy delivery delays.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 11:31:39

No Duplicates.

## **Comment 22 for ZEV 2008 (zev2008) - 45 Day.**

First Name: james  
Last Name: williams  
Email Address: jimmyjames519@hotmail.com  
Affiliation: ?

Subject: I PLEDGE TO NEVER BUY A GM OR OTHER NON\_ELECTRIC VEHICLE  
Comment:

I HAVE 20,000 CANDAIN that I have had for SEVEN (7) years waiting to but an electric vehicle... I REFUSE to buy anything less than ZERO(0) emmissions! thats right NONE

I am discusted with the US government and The canadain government, for allowing this go keep going on!....

The technology has been around since the early 1800's in small towns everywhere!!!!200 YEARS LATER....and I still cannot purchase an electric car!....THIS IS LUDACRIS AND ABOVE ALL SLAVERY.....THIS IS ONE ON THE SUPER POWERS MAJOR FALWS IN OUR SO CALLED DEMOCRATIC SOCIETY! A Government Which Holds technology from its citizens, IS NOT A DEMOCRATIC SOCIETY! PERIOD.

WHY ARE WE IN A WAR FOR OIL? which is altimatly killing Ourselves,Our children, GrandChildren,Great Grand children, OUR PLANET!.WE WOULD BE IN AFRICA IF IT WAS A HUMANITARIAN MISSION...AFRICA IS MISSING ONE THING...OIL! a.k.a Profits...

If you are apart of this PLEASE QUIT your job and spread the word! If its too late for you, tell your children...IT WILL BE THEIR PROBLEM!

TAKE OFF YOUR BLINDFOLD! We're driving around in automobiles that should be in museams!!cars could run on our feces if we wanted them too!

PS...FUCK YOU G.M YOU ARE EVERYTHING THE WORLD MUST RIDD OF!

If you work with/for GM or any other car company your a Tool,a Toy, A SLAVE...

IF You want to save your soul...SPREAD THE WORD...

COMING UP TO 8 Years now still waiting! STILL RIDING MY BIKE

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 12:05:04

No Duplicates.

**Comment 23 for ZEV 2008 (zev2008) - 45 Day.**

First Name: David

Last Name: Silver

Email Address: dpsilver@gmail.com

Affiliation: NorCal ZENN Owners Group

Subject: MSEV adoption

Comment:

As a NEV driver I wholeheartedly urge the adoption of MSEV amendments to the 2008 amendments to the California Zero Emission Regulation.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 12:32:42

No Duplicates.

**Comment 24 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Bill

Last Name: Shott

Email Address: w2zvmgws@ntelos.net

Affiliation: EV Group out of Richmond

Subject: My next auto will be Electric.

Comment:

I have read much about electric autos. The straw that broke to camel's back was the reading of the book "Internal Combustion". If all car owners read it we would have Electric Vehicles.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 13:32:42

No Duplicates.

## **Comment 25 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Robert  
Last Name: Stelling  
Email Address: stelling@napanet.net  
Affiliation:

Subject: Battery Electric Vehicles.  
Comment:

I have no more faith in my government. I watched as CARB destroyed the battery electric vehicle, based on lies told by US automakers. They completely ignored testimony after testimony from people like me who drive EVs every day, thousands of miles a year. They believed that batteries were not ready, even though testimony assured them that they were. They believed that hydrogen was the answer to the future of energy, even though testimony after testimony assured them it could never be the answer. I saw CARB selling the soul of the California voters, who only wanted more energy independence, cleaner air, less war debt, but somehow got run over by the Hummers, the Magnums, the Excursions, the cars that auto makers insisted we want. There is no choice. There is no future. CARB does not support the voters. The governor does not hear the people. Government does not protect the individual. Government is bought and paid for by corporations. And we die because of it. I have no more faith. Robert Stelling, EV driver for 5 years.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-06 13:49:22

No Duplicates.

## **Comment 26 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Howard

Last Name: Spruit

Email Address: frog55@rattlebrain.com

Affiliation:

Subject: MSEV

Comment:

I am also a NEV driver I wholeheartedly urge the adoption of MSEV amendments to the 2008 amendments to the California Zero Emission Regulation.

It is a fact that when i drive at 25 mph i become a hated obstacle in the way of all the people that insist on driving 35 or more mph in the 25 mph zone.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-07 13:24:53

No Duplicates.



## **Comment 27 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Nick

Last Name: Magel

Email Address: nick@globalexchange.org

Affiliation: Global Exchange

Subject: Global Exchange calls for CARB to hold true to the ZEV commitment

Comment:

Greetings

I am writing on behalf of Global Exchange and our Freedom from Oil campaign. I first want to commend your work on the strenuous Pavely proceedings, protecting the health of every CA resident from the auto industries ill concern for public safety, and laying out steps to achieve a clean and healthy transportation paradigm. It is in this same vain that we again look to CARB to re-institute the commitment made to the state of CA, mandating the introduction of at least 25,000 ZEV's on CA roads between 2012-2014, as agreed upon by the auto industry. In addition, CARB can play, once again, a pivotal role in jumpstarting a zero emission transportation future. We call for CARB to create a separate requirement for plug-in hybrids that allows PHEV's to replace the dirtiest vehicles in CARB's regulations, and secondly, create incentives that prioritize plug-in hybrids that have the most on-board electricity storage.

While these are only steps in creating an emission free transportation future, it will again show that CARB and the state of CA are leaders in creating a pathway to clean vehicles and creating climate plans that continue to be adopted nationally. As we continue to see, the decisions we make for CA transcend far beyond just our state's borders.

Thanks you for your time and consideration

Sincerely,

Nick Magel

Campaign Director

Global Exchange

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-07 14:04:55

No Duplicates.

## **Comment 28 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jerry  
Last Name: Caplan  
Email Address: jcaplan@rain.org  
Affiliation: Moorpark College

Subject: California Zero Emission Vehicles  
Comment:

Dear CARB,  
Please  
(1) re-commit to the full 25,000 ZEVs that automakers had agreed to produce in 2012-2014  
(2) create a separate requirement for plug-in hybrids that lets them replace the dirtiest vehicles in CARB's regulations.  
(3) incentivize plug-in hybrids that have the most on-board electricity storage  
Sincerely,  
Jerry Caplan, Ph.D.  
Instructor in Philosophy, Moorpark College

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-07 17:13:49

345 Duplicates.

## **Comment 29 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Yong

Last Name: Wang

Email Address: dyagonw@yahoo.com

Affiliation:

Subject: Give us back the electric car

Comment:

Please, give us back the electric car. We have all the technology right now for electric car. Stop wasting money on the so called "hybrid" "fuel cell" or whatever fancy stuff. Also, stop making those huge SUVs to let consumers compete with each other on their safety of driving.

Small electric cars for everyone is good for the economy, the earth, and everyone.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-07 19:53:38

No Duplicates.

## **Comment 30 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Barrington  
Last Name: Daltrey  
Email Address: basd1 @ fastbk.com  
Affiliation:

Subject: failure to pursue electric vehicle mandate  
Comment:

As a former EV-1 driver, I know that electric vehicles work. CARB staff knows that as well, based on the many whitepapers and other research they have produced.

Were it not for GM's decision to terminate my EV-1 lease, crush the car and place it on a pyramid of crushed EV-1s in the desert of Arizona, I would still be driving an EV-1. The car was in essentially the same condition the day it left my garage as the day it arrived. But again, CARB knows this too. It knows that the necessary electricity was clean, efficient and cheap (\$1.50 to charge the car).

Toyota RAV-4 electrics are known to have achieved 100,000 miles on a single NiMH battery pack. And yet, those batteries are "no longer available" due apparently to Chevron's decision to sit on the patent(s). Would it not be appropriate to use an eminent domain type action to secure the use of these patents -- and batteries -- in this time of public need? Society created intellectual property rights solely to benefit the public and encourage invention of new technologies -- it was never intended that patents be used to prevent the public from having access to new technologies.

Alternatively, CARB and government agencies could encourage "Open Source" patent develop in the future. The public funds a great deal of research, and then magically, the patents developed always seem be "belong" to private interests apparently unable or unwilling to put them on the market.

In any event, as a purely political decision, CARB decided to run with the bamboozlement of the vehicle companies by which they assured us the future was all about fuel cells. Of course, this was part of the standard industry delaying tactic -- and we all knew it. The "grail" of better vehicles is always 10 years away. Better batteries are "10 years away." Fuel cell technology is "10 years away." Ten years away, so that in the meantime, it is unencumbered business as usual.

In the meantime, Hummers, luxury pickup trucks and very large SUVs are the hardware du jour. This is not a "good faith" industry response -- it is laughing in the face of anyone who wishes to improve the environment (which to some degree is the vast majority of the public, despite their love for living-rooms on wheels).

I understand the overall fuel mileage of the US fleet has gone down in the past 10 years. Simply discouraging these giant

vehicles would do more for the economy and the environment than any of the other "just wait for fuel cells" nonsense that is used to divert attention from the real issues. The US need not import any oil -- if drivers merely made sane choices.

Fuel cells, of course, never made any sense as a dodge away from intelligently designed electric vehicles. Why? Because fuel cell design is essentially a hybrid electric vehicle. It has a battery pack and electric motor for its drive system, and adds an exotic additional system to generate additional electricity. Functionally, no different then adding a small gas or diesel powered generation system. Even in its most wistful, forward-looking version, no proposed fuel cell generate sufficient "on-demand" electricity to accelerate the car, meaning that a battery powered motive system was always intended.

Again, CARB staff knows all of this, since some of the very best studies and literature have been produced by CARB and/or are available from CARB.

Somewhere between the CARB staff and the CARB actual board members, all pretense of intelligent decision-making evaporates and we enter a spin-zone of nonsense. Good heavens, let's get rid of all those domestic fireplaces and California will be safe for Hummers! It must be astoundingly difficult to work as a CARB staffer, knowing that your best efforts and research will go out the window because you do not have the support of the actual Board and the real decisions will be based on hackneyed political maneuvering.

And, in a rather significant irony, many regulations raise the bar for entry into the vehicle business -- which prevents any but the established vehicle companies from offering new technologies in a production form.

The saddest part of all this is that both the economy and the environment are suffering the consequences of leaving decision-making to industry "mavens" who think they (and manipulated "market forces") should decide the course. The short term gains for their individual stock portfolios is now translating into long term damage to their own companies and the US economy in general.

Had CARB followed the path it charted in the early 90s, we would have perhaps avoided both a few wars and the impending economic meltdown.

But, naturally, the new argument will be, "maybe we could have afforded these things back then -- but now it's economically impossible!"

CARB has adequately established the consequences of lack of vision and constant nay-saying. Perhaps it's time for a new dynamic.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-08 07:48:36

No Duplicates.

## **Comment 31 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mark

Last Name: Jensen

Email Address: me.jensen@comcast.net

Affiliation: Electric Auto Association

Subject: ZEV mandate

Comment:

Now that GM and Toyota have pulled the plug on fuel cell vehicles, it is time for the ARB to reinstate battery electric vehicles and plug in hybrids as the choice to fulfill the ZEV mandate. I own a Rav4EV, and it is powered by electricity from solar panels. I run my house and car grid tied to PGE, and I have a zero electricity bill. I have had no maintenance to speak of in 5 years and 60,000 miles of EV operation and no noticable degradation in the nickel metal hydride batteries that Toyota developed for these cars. Electric vehicles are clearly the answer for our future transportation needs.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/33-dsc00149.jpg'

Original File Name: DSC00149.JPG

Date and Time Comment Was Submitted: 2008-03-08 13:12:25

No Duplicates.

## **Comment 32 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Michael

Last Name: Palmer

Email Address: palmer\_md@iwon.com

Affiliation:

Subject: ZEV

Comment:

I would like California to stop pursuing hydrogen vehicles and put more pressure on car makers to develop battery powered cars. Plug in cars are the future. There are many battery technologies being developed in the labs and we need funding from the automakers to get some of these out of the lab and into production. The California mandate will force some funding to go into batteries and technologies to get a battery powered car are much closer to realization than any hydrogen car and without the need for spending money on infrastructure once it is available.

Thanks for listening,  
Michael

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-08 13:19:26

No Duplicates.



## **Comment 33 for ZEV 2008 (zev2008) - 45 Day.**

First Name: David  
Last Name: Brenann  
Email Address: contentt@yahoo.com  
Affiliation: CA Citizen

Subject: zev2008  
Comment:

Dear CARB,  
If you ever hope to meet your stated mission for "effective and efficient reduction of air pollutants" you should focus on existing battery technology rather than hydrogen solutions that may never exist.

GM and Toyota proved years ago that EV technology is good enough and ready today. The existing RAV4 ZEV that has proven to get more than 100 miles on 10 year old battery technology is more than a viable option.

No public company waits for the perfect product before they start selling it, nor should you allow the car companies to ask you to wait for the perfect ZEV before mass production begins.

You need to mandate that auto manufacturers start to reproduce the technology they have already created and proved could work.  
Accelerate the ZEV mandate!

Stop debating about future technologies, credits and quotas, stop spending my money on hydrogen fantasies and start focusing on getting proven technology on the road today.

Dave

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-08 16:03:14

No Duplicates.

## **Comment 34 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Waidy

Last Name: Lee

Email Address: waidy@waidy.com

Affiliation:

Subject: The new ZEV proposal is awful

Comment:

The number of ZEVs proposed in your February staff report is far too low. You've already delayed clean air for a decade. How much longer must our lungs wait? Between 1996 and 2002, 5600 ZEVs were put on the roads of California and the other adopting states. Instead of building upon this success, CARB allowed most of these vehicles to be removed from service. Now you propose to allow 840 vehicles a year to suffice from 2012-2014, a number that would not even approach what you have previously shown to be possible. Startups alone could sell 840 ZEVs a year; surely the major automakers can do better. I ask that:

- (1) the full 25,000 per year be pure ZEVs;
- (2) PHEVs, which the automakers will build anyway, not reduce pure ZEVs;
- (3) you implement a level playing field between all types of ZEVs instead of trying to pick winners.

With California's larger population, greater consumer awareness, better technology, and a more pressing need, anything less would be a pittance.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-08 17:01:13

No Duplicates.

## **Comment 35 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Candace

Last Name: Yeung

Email Address: cyeung@gmail.com

Affiliation:

Subject: Please give us a real ZEV program

Comment:

The ZEV goals were once 2% in 1998, 3% in 2001, and 10% in 2003, but later the program was put off a decade. Now as the end of that decade draws near, CARB staff proposes to delay another decade. Staff calls for 0.04% in 2012 through 2014. The old 1998 target is fifty times what is now being proposed for 16 years later. In 2015 CARB proposes only 0.4%. Your goals do not even approach the number of vehicles you have previously shown to be possible. I ask that you put 25,000 pure ZEVs on California's roads between 2012 and 2014. Even that is a step backward, but at least it is a start. Staff's proposed 840 vehicles a year is a joke, not a start.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-09 03:43:02

No Duplicates.

## **Comment 36 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Rod

Last Name: Miller

Email Address: thubten@directcon.net

Affiliation:

Subject: Please require 100% battery power vehicles

Comment:

The social and environmental problems being addressed through this regulation could be eliminated with 100% battery powered electric vehicles. The economic system associated with automobiles without regulation produces externalities such as, climate change, PM pollution, national security problems and smog. Requiring that a portion of the market is 100% ZEV begins the change to a personal transportation market without these externalities.

If CARB had not removed the requirement for 100% ZEV then we would have been in a position now where 100% ZEV technology is more advanced and more thoroughly adopted in the marketplace. The acceptance of hybrids had nothing to do with CARB. Please don't make the same mistake twice.

Require a portion of the market be 100% ZEV. Once these vehicles are on the market they can be subsidized by assessing a fee on diesel and gasoline engines that are below average efficiency.

Battery powered vehicles are the best automobiles at storing electrons. They are more efficient than hydrogen powered vehicles. A 100% battery powered vehicle can be powered by photovoltaic panels. This scenario should be the highest priority for CARB because most externalities are eliminated through this type of transportation.

An interim goal for CARB could be to require plug-in hybrids.

Battery technology is advanced enough to support 100% ZEVs. This is a fact that your rulemaking record should assert. If you do not assert this fact then you are not in compliance with the authorizing statute.

If there was 100% electric vehicles available with a range of 60 miles readily available then I would buy it as a commuter vehicle.

This is a prudent purchase for a consumer because they could commute even in an oil crisis because of solar panels.

Please require 100% battery power vehicles for standard transportation needs in your ZEV rules.

Rod Miller  
6170 Oak Ridge Circle  
El Dorado, CA 95623  
530-295-1695

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-09 12:19:50

No Duplicates.

## **Comment 37 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Stephen

Last Name: Pew

Email Address: paradigmshift@lovebeing.org

Affiliation:

Subject: The ZEV Program

Comment:

I happen to own and drive a Chevy S10 ELECTRIC automobile, made in 1998. It works great! Why aren't these cars available now? Why can't I get another one? Because CARB capitulated to the auto companies and their hype regarding Fuel Cell technology. Recent statement by some of the major foreign automakers admit that fuel cell technology is many, many years from being practical. And it's obvious why - PEM fuel cells don't last very long and they use very expensive materials. The alternative rejected by CARB, BATTERY electric vehicles, worked then, works now, and my S10E (with the EV1 drive train) proves it, still going strong after 10 years!

CARB missed it's chance to really stimulate the R&D and the production of real, practical ZEV cars last time around. Because of this mistake, Californians have continue to contribute to air pollution and global warming at an accelerating and alarming rate, during the 10 years since my S10E was made. And because of this mistake, the technology development in battery electric vehicles is less than it could have been, were the resources that were WASTED on fuel cell technology instead invested in far more proven technology. When are you guys going to wake up, and tell the auto companies to respect people's lives and the life of the planet? When are you going to show some spine?

Because of the delay in brining something real to market, the situation has gotten worse and worse. Now, the chickens are coming home to roost, and far more drastic action is needed - to reduce greenhouse gas emissions and reverse global warming. I urge you to accelerate MANDATED levels of battery electric cars and ZEVs.

So foreget about "ZEV credits". They are not getting the job done.

Since we know that battery electric cars work, and because we know that the global warming tipping point is 350ppm CO2 (with levels already at 377), the 2015 numbers MUST be moved up. Mitsubishi is going to be selling an EV in Japan next year. GM now admits that it will produce an EV (plus range-extender) in 2010. The auto companies, having been given all the rope in the world by CARB in the past, has failed to produce a single ZEV for sale in California in the last 6 years. Now they must be made to do so. So forget about ZEV credits - make them make real cars for sale! And don't allow them to limit the quantities, stop producing, or just lease the cars. Make them SELL and support the cars and the technology.

You're not fooling anyone with bullshit designed to appease the

auto and oil companies. Please do your job!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-09 16:53:24

No Duplicates.

## **Comment 38 for ZEV 2008 (zev2008) - 45 Day.**

First Name: tina

Last Name: juarez

Email Address: visualeyesh108@yahoo.com

Affiliation:

Subject: clean air

Comment:

California Air Quality Board...

May I suggest the following activity for you March 27th meeting:

To test the success of California's Air Quality board, let's everyone kneel behind our vehicles and breathe the "fresh" air. The ones who get up are the winners. The ones who get up will be the folks building and driving their own electrical vehicles and a couple of big corporates standing behind mutli-milliion dollar fool cell vehicles..

I am for clean air, kids without asthma, folks without lung disease and weird allergies, pancreatic cancer and such.

I am for politicians and bureaucrats with a backbone to work for the public well being.

I am board with backsliding boards.. Which one are you???

What have you done for the people of the State of California lately???

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-10 08:44:27

No Duplicates.



## **Comment 39 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Elizabeth  
Last Name: Thagard  
Email Address: betsythagard@yahoo.com  
Affiliation:

Subject: please support electric vehicles  
Comment:

Hello Members of CARB:

I am writing to urge you to adopt the strongest possible amendments to the ZEV regulations.

I am the owner of a solar-powered RAV4-EV. I haven't pumped gasoline in five years!

Everywhere I go, people stop me and ask where they can get a car like mine. They are so frustrated when I tell them that Toyota only sold them for a few months.

My personal experience is that there is HUGE demand for EVs, especially now that the state of California is encouraging development of home solar systems that can power them.

Please do everything you can to encourage the sale of electric vehicles and plug-in hybrids in California. My children are counting on your strong actions to help to reduce global warming emissions and reliance on foreign sources of energy. Solar-powered electric vehicles like mine can make a significant contribution toward that goal -- if you make the auto-makers sell them.

Thank you for doing the right thing.

Betsy Thagard  
1937 Carleton Street  
Berkeley, CA 94704

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-10 12:01:12

No Duplicates.

## **Comment 40 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Erin

Last Name: Brickley

Email Address: 31redd@gmail.com

Affiliation:

Subject: zero emission requirements

Comment:

Reinstate the zero emission vehicle regulation that was taken off the books in 2003! Take out the loop hole the auto manufacturers used to their advantage in the past in regards to no zero emission requirements if there is no public desire to purchase these vehicles. There clearly was a desire on the consumers side to purchase electric cars but the auto makers like GM skewed results and insisted there was no market for these electric cars. Stop letting money and large corporate profits dictate what is good for the people of this state. Do the right thing. Period. Isn't it about time?

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-11 11:08:56

No Duplicates.

**Comment 41 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Robert  
Last Name: Hanson  
Email Address: bobdubob@hotmail.com  
Affiliation:

Subject: ZEV's  
Comment:

Hello,  
Please, Re-commit to the full 25,000 ZEVs that automakers had  
agreed to produce in 2012-2014

Thank You!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-11 12:03:47

No Duplicates.

## **Comment 42 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Darren

Last Name: Yeung

Email Address: darrenyeung@hotmail.com

Affiliation:

Subject: ZEV vehicles!!!

Comment:

ZEV's and/or EV's are the way of the future!!! If no one can see that, then he/she is ignorant. Ignorant of the fact that our ecosystem is going into shambles. Ignorant of the fact that gasoline cars are ruining our lives. The health of our children are in our hands. If there is no mandate to pursue ZEV's, then we might as well kill our children. How can we neglect the environment that we live in? We must have change NOW!!!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-11 15:18:27

No Duplicates.

**Comment 43 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Anne

Last Name: Gaffney

Email Address: gaffney123@netzero.net

Affiliation:

Subject: CA Zero Emission Vehicle Regulation

Comment:

I just watched WHO KILLED THE ELECTRIC CAR? and I simply cannot believe that CARB missed that important opportunity in 2003 to seriously impact the affect California, and ultimately the whole country, has on the state of our environment. I urge CARB to do what they can to repair this unbelievable mistake and make the right decision this time. We, as caretakers of this planet, NEED this change NOW.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-11 19:05:00

No Duplicates.

## Comment 44 for ZEV 2008 (zev2008) - 45 Day.

First Name: Mr. David J Palmer  
Last Name: Palmer  
Email Address: daveandsherida@bellsouth.net  
Affiliation: private citizen

Subject: Plug-in hybrid cars  
Comment:

Dear Sirs and Ladies:

03/10/08

I wish to encourage you to vote for the adoption of Amendments to the 2008 Amendments to the California Zero Emission Vehicle Regulation.

I am a conservative republican in South Carolina. My wife and I make a combined modest living. As fuel prices have risen to more than double of what we paid just a few years ago, we have been forced to make lifestyle and family budget changes. We have always had two cars; now we have one. We used to make unscheduled trips to the supermarket or other stores when we needed one or several items. Now all our shopping is carefully planned for the same trip, mindful to plot out the most cost/fuel efficient route. The use of our automobile has been curtailed by roughly 75%. The "Sunday drive" is a thing of the past. Fortunately living close to our jobs, we now walk or bicycle to work most of the time. Long trips to see old friends or relatives have ground to a virtual halt.

Our family is not the exceptional case, but rather, more and more, the usual or common case. We are just one of many in the United States: every state.

Please do the citizens of California the justice of (1) being free of the strangle-hold of OPEC and the like. We should be ashamed to have ever put-up with it. Let's face it. Oil stinks:literally. Drive behind a city bus for a few miles if you doubt it.

(2)Give the folks in your state a chance to breathe some fresh air in their own towns.

(3) Review the previous decision your board made on this proposal; which seems to have put the nails into the coffin of GM's EV1 (ExxonMobil built the coffin - GM owned the cemetery.) By now I could be driving an electric, non gas and oil car in South Carolina.

Your decision adversely affected everyone, coast-to-coast.

Personally, I will be voting with the only thing this country seems to understand: my wallet. And will I buy a Plug-in Hybrid if they ever make it out of the factory? I'll certainly go out of my way to get one if I can afford it (or anything)in the future. If I have to wait to buy a "pre-owned" Plug-in after they have been out a few years, that is what I will do. Remember: oil stinks-literally. Electricity is what you smell in the air after a thunderstorm. Big difference.

I am not a person involved in politics; I work too many hours. But I can put my money where my mouth is.  
Thank-you for your time. I appreciate your willingness to allow me

to express my viewpoint.

Yours Truly:  
DjPalmer

Jn. 3:16

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-11 20:38:29

No Duplicates.

## **Comment 45 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jeff

Last Name: Brody

Email Address: brody10902@wavecable.com

Affiliation:

Subject: Zero emission mandate

Comment:

With the federal EPA refusing to take action to enforce the Clean Air Act and the court mandate to consider the health impacts of greenhouse gas emissions, it becomes even more necessary for state entities to stand up for clean air and take actions that will require car companies to explore and develop technology for zero emission cars. They proved they could produce such technology when they were once before required by your agency to do so, and as soon as they were given regulatory relief, they killed that technology – even going to the cowardly extent of rounding up all the electric cars that the leasor/drivers wanted to keep and destroying them so no one could challenge their claims that the cars were unwanted by consumers and technologically undeveloped. You have an opportunity to make up for the mistake of eliminating that zero emission rule. Please don't make the same mistake again by turning your back on this technology that is available now.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-11 21:14:57

No Duplicates.



## **Comment 46 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Michael  
Last Name: Barkley  
Email Address: koibuff@yahoo.com  
Affiliation: TexomaEV

Subject: EV's are NOW! Not later  
Comment:

C.A.R.B, needs to get with the program. Even BUSH, just recently said the Battery Electric Vehicles are the way to go. It's such a shame that the rest of the country uses California in many ways to set standards. It's very obvious that C.A.R.B is merely fueled by lobbyists, oil, and big money. We need ELECTRIC VEHICLES right now, you blew off the chance to get them started 10 years ago, don't ruin it for the rest of us again.....

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 06:18:10

No Duplicates.

**Comment 47 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Paul  
Last Name: Olson  
Email Address: paulholson@embarqmail.com  
Affiliation: EAA

Subject: Changes in ZEV goals  
Comment:

TO: CARB  
Please take a more active role in protecting our air and don't let the automakers off the hook over more ZEV cars. California is looked to for leadership in this area but, alas, you've given this leadership up. ZEV goals were once 2% in 1998 and 10% in 2003...then delayed a decade. 10% for 2013 should stay a GOAL!  
Thanks.  
Paul Olson

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 09:43:25

No Duplicates.

**Comment 48 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ben

Last Name: Ford

Email Address: ben.ford@member.ams.org

Affiliation: California voter

Subject: ZEV program changes

Comment:

Please: Continual backpedaling from ZEV standards - because manufacturers do not want to meet them - sends entirely the wrong message! Technology exists now to produce reliable battery EVs, and only governmental pressure will force their production in large enough quantities to bring prices down and to make a real difference in emissions.

Please STOP postponing ZEV requirements!

Ben Ford  
Cotati, CA

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 10:18:54

No Duplicates.

**Comment 49 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Frank

Last Name: John

Email Address: johnfamily1@bigfoot.com

Affiliation:

Subject: ZEV2008 comments

Comment:

Please do not reduce the number of EV's required to be produced by auto manufacturers! California has always led the nation in progressive technology and the technology exists today. Please do not back down from the existing requirement.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 12:21:57

No Duplicates.

## **Comment 50 for ZEV 2008 (zev2008) - 45 Day.**

First Name: James

Last Name: Adcock

Email Address: jimad@msn.com

Affiliation:

Subject: Please do not delay ZEV mandates AGAIN!

Comment:

Please do not delay ZEV mandates AGAIN! We are on the verge of having viable ZEV and near-ZEV vehicles from Nissan and GM. Please do not pull the plug on these vehicles, like the plug was pulled on the EV-1, by once again delaying the mandates. We need to have you step up to the plate and show leadership so that we will have a planet left to support our children and our grandchildren. Please show courage!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 12:30:12

No Duplicates.

## **Comment 51 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Lars

Last Name: Johansson

Email Address: larsjhome@hotmail.com

Affiliation:

Subject: ZEV Mandate

Comment:

I'm contacting you to strongly urge you to keep the California Air Resources Board (CARB) mandate for Zero Emission Vehicles (ZEVs) at a high level. The proposed reduction of those mandates to a miniscule level is simply unacceptable. We need these vehicles for clean air and to reduce the pending climate crises.

As you do so - please include Plug-In Hybrid Electric Vehicles (PHEVs) that can travel a minimum distance, say 20 miles (covers the average commute and then some), in electric only mode in your definition of ZEV. This would allow car manufacturers to chose the technology that works best for them and their customers while achieving huge reductions in CO2 and other emissions.

Thanks for your attention to this critical matter.

Lars Johansson

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 13:42:11

No Duplicates.

## **Comment 52 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Robert

Last Name: Seldon

Email Address: seldon@speakeasy.net

Affiliation:

Subject: Don't Roll The ZEV Program Back !

Comment:

Please don't roll back the Zero Emission Vehicle Program again! I would think you'd be embarrassed enough by your last capitulation, which has gotten us no closer to clean vehicles.

Other states follow your lead. Show some leadership, please!

Thank you.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 13:57:15

No Duplicates.

## **Comment 53 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jeff

Last Name: Shanab

Email Address: jshanab@earthlink.net

Affiliation:

Subject: ZEV amendments

Comment:

I have gotten tired of waiting and at great expense with no help from California, converter a car to electric.  
( <http://www.evalbum.com/747.htm> )

I feel strongly that I was cheated out of an opportunity to drive electric the last time the mandate was relaxed, and in my own backyard!

While I think a much better solution would be to provide funds to companies that want to create EV's, if the government only thinks the big 6 are the right way to go, we can't let them off the hook now. All momentum currently discussed with the chevy volt for example, would stop.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 19:01:26

No Duplicates.



## **Comment 54 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Matt

Last Name: Schneider

Email Address: insolation@mac.com

Affiliation:

Subject: Mandate ZEV's - Don't allow H2 to be a Show Stopper

Comment:

We need ZEV's Now - I strongly urge ARB to force the auto manufacturers to sell more than 10,000 ZEV's per year in California. History showed us that when pushed the auto manufacturers were able to produce extremely viable ZEV's that were highly desired and used by the public. Please don't pass up this opportunity to allow them to do this again.

Don't Wait for H2 - Fuel cells have proven themselves technically difficult to be economically viable in the next decade. Besides issues with the fuel cells themselves, no clean source of H2 has been clearly identified.

Battery EV's are Ready Now - With the emergence of lithium battery chemistries in the past few years, the success of EV's such as the EV-1 will be just the start for the next wave of EV's. Companies such as Tesla and Phoenix Motor Cars are proving that technology is ready NOW - no further research necessary.

So I urge you to do the right thing for our planet and the human race - force the auto manufacturers to sell lots of ZEV's in California. If you do, the world will follow.

Thanks much,

Matt Schneider

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 20:46:36

No Duplicates.

## **Comment 55 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Linda

Last Name: Nicholes

Email Address: LindaGraff@roadrunner.com

Affiliation:

Subject: Please support all-electric cars

Comment:

On March 27 the Board will vote on a new ZEV Program. I encourage CARB to support the automotive technology that works NOW and can quickly be mass-produced to help address global warming gasses as well as air quality issues. That, of course, would be the battery electric vehicle. Electric cars have proven to be hardy, dependable, clean and able to plug into renewable sources of electricity like solar. They can be produced affordably and they can certainly meet the average consumer's needs. I ought to know:

I have driven an all-electric car for almost eight years with absolutely NO issues, other than the delightful "issue" of being disconnected from the gas pump. CARB is not a research organization. You are tasked with making sure your citizens breathe clean air. Electric cars can help NOW. Please see to it that at least 10,000 EVs are produced in phase II.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-12 21:00:07

No Duplicates.

## **Comment 56 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mark D

Last Name: Larsen

Email Address: yanquetino@casteyanqui.com

Affiliation:

Subject: Please don't KILL the electric car again!

Comment:

I have written to you before about this matter, but it is so important --so absolutely crucial-- that I must reiterate my feedback.

Let me begin by stating that I support Governor Schwarzenegger's goal to reduce greenhouse emissions 25% by 2020. As I'm sure you are aware, the most efficient and timely way of reaching said goal is through the use of Zero-Emission Vehicles (ZEVs) --like the pure electric Tesla Roadster that the Governor has purchased for Maria.

You can therefore understand why I am deeply shocked to learn that CARB is proposing to REDUCE the number of ZEVs required for 2012-2014 from 0.4% to 0.04%, i.e., a mere 2,500 cars, 1/10th the original goal of 25,000!

This is unconscionable! What in the world is CARB thinking?

With so many EVs on the horizon, said recommendation makes no sense whatsoever. Not only is Tesla producing its electric Roadster, but by 2012 Phoenix Motorcars (in Ontario) and Aptera (in Carlsbad) will also be selling their electric vehicles. Then there are the models anticipated from Think (the City and the Ox), Subaru (the R1e and G4e), Mitsubishi (the iMiEV and iMiEV Sport), Nissan (the electric Cube), Miles Automotive (the Javlon XS500), and Venture Vehicles (the VentureOne). ZENN and Zap have also indicated that they intend to produce highway-capable EVs by that time. At this very moment Toyota is testing plug-in versions of the Prius. And even General Motors has announced its Volt series hybrid.

In short, CARB staff members appear woefully unaware of what solutions are available. Please INCREASE the number of ZEVs required by 2012 --NOT decrease it to even lower than what was mandated a decade ago!

For the sake of future generations and the planet in general, let's do the RIGHT THING here!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 09:14:41

No Duplicates.

## **Comment 57 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Scott

Last Name: Rodamaker

Email Address: srodamaker@structint.com

Affiliation:

Subject: Bold Steps backwards

Comment:

This board at one time made bold steps forward in the fight for a cleaner environment by mandating ZEV's. Once this one bold step was erased the board has been in a tail spin taking back once meaningful measures to near microscopic numbers. Maybe with gas at near \$4/gallon and the economy on the rocks this board may realize some blame in the overall picture for the last half decade of cowardice. This board has to fight for clean air, the federal government nor the 100 million SUV's on America's roads make this an easy fight, step up and make a difference for all of us.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 09:15:07

No Duplicates.

## **Comment 58 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ken

Last Name: Olum

Email Address: kdo@cosmos.phy.tufts.edu

Affiliation: Electric Auto Association

Subject: We need electric cars

Comment:

Please don't cut the electric car mandate. Automaker claims that they cannot build battery-electric cars that people want to drive is ridiculous. I've been driving one myself for years. It's probably true that they can't build fuel cell cars, but fuel cells aren't what we need anyway. What we need are battery-powered cars, and those are easily built with today's technology.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 10:04:51

No Duplicates.

**Comment 59 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Judy

Last Name: Selleck

Email Address: superg252@yahoo.com

Affiliation: none

Subject: Wish you were here.

Comment:

I wish every state would take up the challenge to require carbon emission reduction from our car makers. Personally I would love to have an electric car for my longer than typical commute.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 10:15:23

No Duplicates.

**Comment 60 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Pam

Last Name: Brushaber

Email Address: vball3pam@aol.com

Affiliation:

Subject: Don't Kill it!

Comment:

Please do not kill the electric car a second time!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 11:01:40

No Duplicates.



## **Comment 61 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jerald

Last Name: Koenig

Email Address: koenigjm@earthlink.net

Affiliation:

Subject: March 27 Vote

Comment:

When I was in high school and college and then working in CA I was always proud to be a resident because it was always CA that set the highest standards and showed the rest of the US the way to go.

Even though I no longer live there it is time for CA to once again rise to the forefront and vote out hydrogen dreams and insist the automakers produce the electric vehicles they are capable of producing.

Show the world that CA still has politicians who know when its time to take the right stand.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 11:22:06

No Duplicates.

## **Comment 62 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Kelli  
Last Name: Kelly  
Email Address: kelli@kelly.ws  
Affiliation:

Subject: ZEV 2008  
Comment:

Please continue moving California into a clean future by supporting ZEVs.

ZEVs are a viable source of transportation and the most economic answer to California's pollution problems. Currently, average Californian drivers do not have this option available to them.

As a board who is being watched by a nation with a faltering economy and unhealthy air, please act responsibly. Allow Californians the choice of driving ZEVs.

Vote responsibly on March 27th. Do not decrease the required number of ZEVs. Allow me to experience driving a production electric vehicle.

-Kelli Kelly

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 11:36:37

No Duplicates.

## **Comment 63 for ZEV 2008 (zev2008) - 45 Day.**

First Name: John

Last Name: Alexa

Email Address: dollster68@mac.com

Affiliation:

Subject: I want an electric car

Comment:

I want to purchase an electric car. My job demands that I drive around the city for a living (I'm in sales). Please help mandate electric cars; I want one and I'm not going to be able to get without your help in mandating them.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 15:29:07

No Duplicates.

**Comment 64 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Stefano

Last Name: Tabascio

Email Address: ankhmaat@aol.com

Affiliation:

Subject: MSV inclusion in ZEV mandate

Comment:

I would IMMEDIATELY purchase an electric vehicle like OKA (www.okaauto.com) or ZENN if they would have speed of at least 35 MPH. Driving NEV at below 25 MPH in Burbank or Van Nuys CA on streets with 35 MPH and 45 MPH limits is just plain dangerous !

Please DEFINE and INCLUDE MSV (Medium Speed Vehicle) in your ZEV mandate and work with NHTSA to make such vehicles legal in USA !!!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 17:04:39

No Duplicates.

## **Comment 65 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Gary

Last Name: Patton

Email Address: gapatton@stanfordalumni.org

Affiliation: Planning and Conservation League

Subject: ZEV Program Decisions

Comment:

I saw the movie, "Who Killed The Electric Car?" I hope members of the ARB did, too. I concluded from the movie that various parties played various roles. The ARB put in the final knife.

Now, the Board is once again considering weakening changes to the already watered down ZEV requirements.

PLEASE don't do it! I was once a member of the ARB, and was fortunate to be able to vote to get lead out of gasoline. I'm proud of that vote. But those "in the industry" said it "wasn't fair." They cared more about their interests than the public interest. The ARB should not cave in to the car manufacturers.

Please maintain the ZEV program. NO MORE weakening amendments! Thanks for taking my concerns seriously.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 17:11:38

No Duplicates.

**Comment 66 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Brian

Last Name: Clare

Email Address: btclare@gmail.com

Affiliation:

Subject: ZEV 2008

Comment:

"Be the change you wish to see in the world." Ghandi Please  
continue to set a great example to the country and the world in  
terms of car emission standards and pollution standards.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 19:18:57

No Duplicates.

**Comment 67 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Scott

Last Name: Sheffield

Email Address: scott270r@yahoo.com

Affiliation:

Subject: Please Bring Back EV mandate to Auto makers

Comment:

California is the leader in air quality control and technology in general. Please be strong and lead the way for other states to join up. The future of America is at stake, if not now, it might be too late a generation from now.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 19:20:07

No Duplicates.

**Comment 68 for ZEV 2008 (zev2008) - 45 Day.**

First Name: John

Last Name: Farinacci

Email Address: jfarinacci@gmail.com

Affiliation:

Subject: all electric plug-in vehicles

Comment:

Please support all amendments that would successfully promote research, development and implementation of all electric vehicles for California roads and highways. Thank you.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-13 20:40:57

No Duplicates.



## **Comment 69 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Robert

Last Name: Duncan

Email Address: rsduncan@yahoo.com

Affiliation:

Subject: We need ZEV's NOW

Comment:

We've waited too long and endured too many delays and excuses. The auto companies are capable of building a ZEV car, and there is a robust market of buyers out there for them (witness Tesla). Each day we wait to fight global climate change, we leave a larger and larger problem to our children. It's unthinkable for the State of California to do anything less than blaze a sustainable path for the future of our state and for the world, and letting the auto companies off the hook to deliver what they've been promising for years and years would be unconscionable.

Please pave the path to the future by supporting ZEVs in California ASAP.

Robert Duncan  
137 Hillview Ave  
Redwood City, CA 94062  
650-369-0360

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 07:19:32

No Duplicates.

## **Comment 70 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Joe  
Last Name: Medvecky  
Email Address: jmedvecky@exitflexusa.com  
Affiliation:

Subject: March 27th Meeting  
Comment:

I am supporting the goals of PIA!

But even a more important goal is to become energy independent.  
We are enabling those in the world who are bent on our destruction  
by our purchases of foreign oil.

Your decision goes far beyond clean air for California. It is a  
vital step in making America independent and in control of our own  
fate.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 08:36:49

No Duplicates.

**Comment 71 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Morgan L

Last Name: Washburn

Email Address: altru213@comcast.net

Affiliation:

Subject: Retain ZEV requirements

Comment:

I urge you not to change the current requirement for automobile manufacturers to produce ZEV in the immediate future. Please do not back down now. Thank you, Morgan L. Washburn, M.D.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 09:01:24

No Duplicates.

## **Comment 72 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Robert

Last Name: Bundy

Email Address: b2drlb@yahoo.com

Affiliation:

Subject: Smart Metering or V2G

Comment:

Global Warming is a fact of life and time is the enemy. We need Smart Meter as mandatory law tied to the PHEV options now to give it life. I can see, in the near future, solar pannels priced at a \$1.00/watt, making the home as the net energy PROVIDER as is demonstrated by the website called Architecture 2030. Now remember that the PHEV must be plugged in at the work site as well as the home site!

robert bundy  
Concord, NH

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/130-080314\_\_act\_iv\_haywire.doc'

Original File Name: 080314\_ ACT IV\_Haywire.doc

Date and Time Comment Was Submitted: 2008-03-14 09:19:58

No Duplicates.

## **Comment 73 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Nathan

Last Name: Mitten

Email Address: mittenater@gmail.com

Affiliation:

Subject: please provide needed leadership

Comment:

I am writing from Florida, a state lagging behind CA in renewable energy and efficiency measures in all energy sectors including transportation. With that being said, our nation looks to CA for leadership in this area and I believe more and more states will follow behind CA in its progressive and desperately needed efforts. Please make a strong stand for ZEV's which are one of the only true solutions to the drastic reduction of GHG's that is needed. Please hold the automakers to their promise...and one day the nation will look to CARB as the one that got us on the right path.

Sincerely,  
Nate Mitten

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 10:14:21

No Duplicates.

## **Comment 74 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Douglas

Last Name: Davies

Email Address: scottmdavies@hotmail.com

Affiliation:

Subject: zero emission vehicles

Comment:

To whom it may concern,

It is imperative that zero emission vehicles are a part of America's future transportation needs. Unlike standard current vehicles, these vehicles provide to our society a real answer to a sustainable and forward moving American culture, one that is not mired in a dwindling resource and eventual dead end...oil. Please retain this option for our present needs and the needs of the future.

Douglas Davies

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 11:21:16

No Duplicates.

## **Comment 75 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Giselle  
Last Name: Garcia  
Email Address: giselleg@gmail.com  
Affiliation:

Subject: Please Adopt This!  
Comment:

Dear Air Resources Board,

I am a resident in Washington State, I am affected by your decisions about the ZEV. I firmly believe that a zero emissions vehicle is extremely important to the fate of our industrialized civilization, the environment, and possibly the human race. Every step that we can take to reduce our greenhouse gas emissions is extremely important and vital, and the BEV and ZEV can allow us to make an important dent in our transportation-related greenhouse gas emissions.

I implore you to set a high standard for zero emissions vehicles and for the amount required to be sold in California (and in conjunction other states in the United States). Only by starting now will we have a chance to reduce greenhouse gas emissions by low enough to stave off environmental catastrophe. You and I both know that it's true. Please, please, listen to the voices of the people -- your fellow Americans and human beings -- asking and begging you to make this step and give ZEV a foot in the door. It is for your and my futures, and our childrens futures, that I ask this. It may seem radical, or "gloom and doom", but scientists around the world have affirmed that anthropogenic climate change threatens our environment and much more than our way of life.

Furthermore, setting high standards and production requirements for ZEV will boost a dying, decrepit industry and spur innovation badly needed in the automobile industry's ranks. If you hesitate for fear of hurting automakers, please think again. Automakers have so many resources and brainpower in their hands. If you set the goals, they can meet them. And people will buy the cars. Look at how BEV did - people were lining up at the door to recieve them. Please trust in us that if you make the decisions to push more ZEVs on the road, we will buy them. We are ready and able to invest in ZEVs. But the automakers have little to no incentives to make this push without you - they are invested in their history and the past, in doing what has always worked for them.

I ask you to do what your hearts tell you is the right thing to do. Please think of your children and your children's children. This decision impacts so much more than the present. And it is a very important one.

Together, we can do this. We can meet the challenge of climate change. Trust in us.

With love and blessings,

- Giselle Garcia

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 13:10:52

No Duplicates.



## **Comment 76 for ZEV 2008 (zev2008) - 45 Day.**

First Name: John

Last Name: Holroyd

Email Address: backpacker2@earthlink.net

Affiliation: Sierra Club

Subject: Zero Emission Vehicles

Comment:

Reducing our dependance on petrolem products by use of renewable sources would help with a variety of of problems that are facing the United States. To list a few:

- Our green house gases and global warming.
- Our dependance on foreign petrolem products.
- Our balance of payments.

Also creation of a large green energy program would employ a vast number of people in technical position here a home rather the abroad.

We must remember that the US is one of the major contributors to green house gases, so correcting our problem here at home would be a big step lin the right drrection.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 13:26:28

No Duplicates.

**Comment 77 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Gordon

Last Name: Green

Email Address: ggreensprint1@earthlink.net

Affiliation:

Subject: ZEV Amendment Change Recommendation

Comment:

Attached is a Letter in PDF format to be placed in the public record for the March 27, 2008 CARB board meeting.

This letter recommends several changes to the proposed ZEV amendments that are being addressed during this meeting.

Thank you  
Gordon Green

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/140-8-arb\_letter-2.pdf'

Original File Name: 8-arb\_letter-2.pdf

Date and Time Comment Was Submitted: 2008-03-14 15:12:59

No Duplicates.

## **Comment 78 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jeremy

Last Name: Newlin

Email Address: jer\_newlin@yahoo.com

Affiliation: Republican

Subject: Challenge Automakers with proper limits.

Comment:

Your March 27th meeting can have profound influence on our immediate future. I'm sure you've received several e-mails regarding BEVs and PHEVs with respect to the original 2012 vehicle numbers (25k). I believe we should challenge the automakers with that original goal. We wouldn't have made it to the moon in the late 60's if someone hadn't challenged us.

Regardless of your belief in human-induced global climate change, you must admit that reducing the need for foreign oil is also a homeland security issue. It would also keep the money here in the US as well.

I once worked for Xcellsis, owned by Ballard Power systems, developing PEM fuel cell engines for DC and Ford. In fact, I was one of the engineers on the Focus FCV and Nectar 4A. DC and Ford sold off dbb fuel cell engines to Ballard and they shuttered our plant. That was 7 years ago. The entire technology hasn't made the strides I was hoping for since then.

But with large developments that have occurred in the last two years in battery technology, we could all be driving a battery powered BEV or PHEV in excess of 300mi/charge. The fuel cells are expensive, not robust, and have minimal life spans. Only Honda and Toyota have viable systems and it has yet to be shown their longevity.

Please send a message to Detroit. Vote on a challenge...not on a boondogle.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 15:13:04

No Duplicates.

## **Comment 79 for ZEV 2008 (zev2008) - 45 Day.**

First Name: alexandra

Last Name: paul

Email Address: aep@alexandrapaul.com

Affiliation: Plug in America

Subject: MORE zevs!

Comment:

It is terrifying that CARB is thinking about accepting the staff's recommendation to mandate only 150 ZERO EMISSION CARS PER YEAR PER AUTOMAKER from 2012 -2012! That is less than was mandated 10 years ago. How can we backslide like this when we know even more about global warming and when California has several bills with tough greenhouse gas reducing targets? Transportation is the leading cause of CO2 emissions, and automakers have known for over a decade that cleaner cars must be made for California, yet CARB continues to coddle them and in the process subject our children and grandchildren to the effects of global warming. MORE ZEVS and less backfill with partial gasoline cars. WE DONT HAVE TIME to coddle the car companies - our future is at stake!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 16:32:00

No Duplicates.

## **Comment 80 for ZEV 2008 (zev2008) - 45 Day.**

First Name: bryan

Last Name: swansburg

Email Address: bryantheresa@canada.com

Affiliation:

Subject: Zero Emission Vehicles

Comment:

Like it or not your organization is THE MOST IMPORTANT IN THE WORLD!

Canada's 30 million people is "too small a market" to legislate unilateral standards. But somehow California - with about the same number of people - has managed to implement it's own environmental standards for the past 20 years or so.

The 1980's ZEV rules gave the rest of the world (eg, me) some hope that there might be an alternative to my smokey, polluting and expensive petroleum powered car. The withdrawal of those requirements put the entire system back 20 years. Now GM is talking about 40 mile range, Toyota's plug in will go 8 miles. Big advances after the EV1 design, huh?

You can pass the rules to make the big US manufactures produce the cars for California that they will have to try to sell elsewhere to recoup their costs - that will beat the rest of the world and allow US engineers to design German automobiles & save the US economy - no big deal, right?

Or you can let Toyota import piles of cars to the US.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 18:02:11

No Duplicates.

## **Comment 81 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Paul  
Last Name: Scott  
Email Address: paul@pluginamerica.org  
Affiliation: Plug In America

Subject: We want EVs!

Comment:

We are tired of waiting for the car makers to provide vehicles that use cleaner, cheaper, domestic electricity instead of dirty, expensive, foreign oil. They are not capable of building fuel cell cars in any quantity over the next several decades and we don't have time to wait.

Please hold the car makers to the numbers of ZEVs they promised to make 5 years ago. You were scammed by the car makers in 2003. Don't let them fool you again!

Sincerely,

Paul Scott

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 18:45:44

No Duplicates.

## **Comment 82 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Robert  
Last Name: Siebert  
Email Address: eesolar@sbcglobal.net  
Affiliation:

Subject: Zero Emission Vehicles  
Comment:

In 2003 we listened to CARB and the "Autos" depend-on and, respectively, assure us that fuel cell-powered transportation was just five years away for "thousands" quantities and really serious production would happen by 2015. We argued then, as now, that as transportation necessarily becomes more electrified—in order for California and the nation to comply with international treaties to reduce combat global warming—it is essential that we not be burdened by the fuel cell's inefficient use of electrical power, i.e., from hydrogen manufacture to power at the vehicle's wheels requires very nearly 4 times the electrical power of electric vehicles. At present, this is a fundamental fact of hydrogen production and use.

Of course other practical problems, e.g., cost, durability, complexity, lack of infrastructure, also argue against the fuel cell approach.

Remember too, that we are not simply arguing about the ultimate best technology. Rather, we are arguing about what can be done almost immediately to improve air quality and reduce the production of GHGs. We lost valuable time in 2003, let's not fail to produce a practical answer in March 2008.

Thank you.

Robert Siebert  
Orange, CA

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 20:04:52

No Duplicates.

## **Comment 83 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Michael

Last Name: Colburn, P. E.

Email Address: mcolbur1@san.rr.com

Affiliation: Individual California Working Commuter

Subject: ZEV Requirement Must Be For BEV's

Comment:

Over the last six years, I have been fortunate to drive a ZEV, which is also a BEV; a 2002 RAV 4 EV. During my ownership of this 10 year-old design vehicle, 98,000 miles have accumulated on the odometer, and 5000 gallons of gasoline have NOT been burned. By avoiding the use of this amount of gasoline, the resultant 100,000 pounds of carbon dioxide emissions have been avoided. Yes, a far lesser amount has been released from power plants in the region, but this is minimized, as I set the charge timer to activate well after 12 midnight, in preparation for my daily commute at 6:00 am. My grand total for unplanned maintenance the last six years is \$1044.13. My total expense for planned maintenance (brakes, tires, other very minor items) is far less than that for a comparable fuel-burning vehicle. My life has been enhanced and simplified due to the elimination of weekly trips to pump an expensive, smelly, toxic petroleum fluid into my car. The elimination of oil changes, smog checks, tune ups, and other hassles common to a fuel-burning car have been a plus. Thanks to a number of public charging stations in the next county to the North, there have been days I have completed almost 200 miles of EV driving, arriving safely back at home without burning a drop of gasoline.

It is almost impossible to park this car without having other Californians ask "where do I get one, how far does it go, where do you charge, etc.". It's really a shame I have to tell them these cars are not available except on a very limited basis, only on the used market. I imagine if one is fortunate enough to be in a position to write a \$100K check for a Tesla roadster, that would be an option; our Governor and certain celebrities are, but most of us are not. Certainly the majority of working California commuters are left without a real option of zero-emissions driving.

The fantasy of the Fuel Cell Vehicle (FCV) is just that. It would seem the manufacturers also know this, and see it as a ploy to continue the chant "not ready yet, need better technology, need breakthrough, need improved batteries, people won't buy it, etc." In my years of driving since 1975, I have NEVER seen a FCV on the road. I HAVE seen several other BEV's, which is remarkable, given their scarcity. Practically every home in the state has electric power, but none that I know of have pure Hydrogen plumbed to them. It isn't even available anywhere in my neighborhood. Let's not forget Hydrogen is not itself a fuel; it is merely an energy carrier that must be manufactured inefficiently through the use of natural gas, or enormous amounts of electricity. Both these methods leave vast amounts of Carbon Dioxide behind. Please do not be distracted by the myth of the FCV!



My letter won't be complete without mentioning the vehicle-to-grid concept. Given the lingering effects of the California Electricity "Experiment" earlier this decade, lets do something different, and show real, world-class technology leadership. With the right interface applied across a meaningful number of BEV's, the CAISO-grid can be operated in a far more effecient manner, further reducing power plant emissions of all types, while improving reliability. Owners of BEV's will benefit as well, being allowed to particpate financially in this arena. Don't let the industry tell you it can't be done, when we have Pay Pal, Fast Pass, and many other examples of automated monetary transactions in our electronic economy. Be sure to let the real technology experts, not the "Free Market" determine the best interface standard to use. A statewide standard is imperative to make this work.

I hope my position is not ambiguous. Make the requirement for ZEV's meaningful beginning with the next model year, and don't be distracted by the smoke and mirrors offered by the automotive and oil industries. Assemble the best technology minds (NOT Commercial Minds) to design the vehicle-to-grid interface that will help solve another problem we suffer from in this state. We can do it, and be the envy of the world, if we really want to.

Michael J. Colburn, P. E.  
Californian since 1958  
Working California commuter since 1975  
Gasoline-free commuter since 2002

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 20:22:40

No Duplicates.

## **Comment 84 for ZEV 2008 (zev2008) - 45 Day.**

First Name: R.\_Christopher

Last Name: Yoder

Email Address: chris\_yoder@caltech.edu

Affiliation:

Subject: We need pure ZEV vehicles

Comment:

Please do not back down on requiring the auto manufacturers to build pure battery-powered, highway capable, electric vehicles. My wife and I have had at least one pure electric vehicle that was able to keep up with traffic on the freeway for the last 17 years and have loved every mile of driving those vehicles.

Our air in California needs it so that our children can breath clean air. Our planet requires that we stop emitting carbon dioxide as quickly as possible or global warming will produce catastrophic consequences.

We cannot allow GM and the other auto makers to fool us again.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 21:03:34

No Duplicates.

## **Comment 85 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Malcolm

Last Name: Field

Email Address: malfield@aol.com

Affiliation:

Subject: Cal ZEV Regulation

Comment:

ZEV's work. I've had three of them. Two EV1's from General Motors and a RAV4 from Toyota. My current RAV4 has operated flawlessly for the past 6 years with ZERO maintenance. There is absolutely no reason that all the automakers cannot make ZEVs today with existing technology.

The way to clean our air, is to reinstate the original ZEV standards. Supposedly, that's your job. As an added bonus you will help us get over our national oil addiction.

Malcolm Field

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 21:33:28

No Duplicates.

## **Comment 86 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mary

Last Name: Kadzielski

Email Address: maryk@rivetentertainment.com

Affiliation:

Subject: Please make EVs available for all

Comment:

Dear CARB,

Please pass the legislation that would make it so car companies would be required to make some electric vehicles. There are so many people who want them, so many people who'd buy them if they saw them on the street as viable options. With the world facing the challenge of climate change and the price of oil, electric vehicles would be a big step in the right direction. We have the technology. Let's put it to use to benefit all - reduce pollution, reduce climate change impacts, reduce the cost of driving, and reduce dependence on foreign oil.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-14 21:48:02

No Duplicates.

## **Comment 87 for ZEV 2008 (zev2008) - 45 Day.**

First Name: christy

Last Name: brugh

Email Address: cmbrughnews@hotmail.com

Affiliation:

Subject: Zero Emission Vehicles Now

Comment:

On March 27, the California Air Resources Board will revise the history-making program that put more than 5,000 Zero Emission Vehicles (ZEVs) on the road.

But their staff has issued a proposal that, instead of propelling our country ahead toward a pollution-free future, will profoundly weaken the program once again. This proposal would require automakers to produce only about 150 ZEVs each per year through 2015—which amounts to less than what these influential regulators mandated in 2003.

Please put more ZEVs on the roads, and help move California toward the future.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 00:14:54

16 Duplicates.

## **Comment 88 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Grant

Last Name: Cornish

Email Address: grant\_cornish@yahoo.com

Affiliation:

Subject: We want EVs!

Comment:

Please help bring as many electric vehicles to the marketplace as possible! 25,000 ZEVs is a drop in the bucket for California, but so vital to our future! Big Auto must adapt or die.

Please move CA into the vanguard!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 01:00:24

No Duplicates.

## **Comment 89 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mark

Last Name: Clifford

Email Address: beach.cliffs@roadrunner.com

Affiliation: Citizen/Consumer

Subject: 2008 Amendments to the ZEV Regulation

Comment:

As a consumer anxiously awaiting the arrival of an affordable and practical ZEV or Plug-in-Hybrid (my eye is on the Th!nk Ox), I implore the board to consider and implement the following recommendations as proposed by Chelsea Sexton, Executive Director of Plug in America:

1) HOLD FIRM ON "GOLD" ZEV NUMBERS - The "Staff Proposal- Initial Statement of Reasons" notes that the 18-year history of the ZEV Program has yet to make ZEVs commercially available- reducing the number of ZEVs required yet again will not accomplish this goal. The current proposal would require an average of fewer than 140 ZEVs per year from any individual automaker until 2015 - few enough that several automakers can use banked credits for the next decade to meet this requirement. Those with fewer banked credits can easily accomplish these numbers through credit trading with small automakers, like Tesla. Worse, the lower numbers ensure that ZEVs will never leave hand built production volumes, and that costs will remain too high for commercial viability.

Plug In America therefore asks that CARB hold firm on the current 25,000 ZEVs required in Phase III, and 50,000 ZEVs required in Phase IV. These are the numbers previously committed to by automakers, and are appropriate to bridge the gap between R&D and commercialization.

2) ENHANCED AT-PZEVs - these enhanced vehicles are incredibly promising, both for their ZEV-enabling properties, and for the near-term air quality benefits. Several automakers have expressed their enthusiasm for these vehicles, with at least two models committed for production during Phase II. However, these vehicles should not come at the expense of ZEVs, and merit requirements of their own to support their commercialization.

a) PZEVs NEED TO GROW UP - To the extent that allocation is taken from another category to make room for Enhanced AT-PZEVs, it should be taken from the dirtiest category in the ZEV Program, not the cleanest. While PZEVs have served as an air-quality victory for the Program, they no longer need commercialization support, and lend no ZEV-enabling value. Therefore, we propose that the percentage of the Program requirements allowed to be met by PZEVs be reduced to 4% in Phase III, 2% in Phase IV, and phase out completely after 2018. In each Phase, the reduced PZEV requirement would be transferred up to the Enhanced AT-PZEV category, creating a stand-alone requirement for these vehicles without distracting from commercialization efforts of true ZEVs.

As noted above, Plug In America understands that PZEVs play an important role in achieving California's air quality goals. However, they don't support the specific goals of the ZEV Program; PIA's proposal provides adequate time for a PZEV requirement to be shifted to a more appropriate program such as LEV III.

b) PHEV DEFINITION METRICS- Plug In America strongly encourages the Board to reconsider defining and crediting Plug-in Hybrid Vehicles (PHEV) by a more straightforward metric such as kWh (either onboard or net usable) rather than miles.

Using kWh provides more flexibility to the automakers to build PHEVs in both propulsion configuration (serial, parallel, etc.) and body style what they think will sell in the marketplace and will result in more overall cars on the road. Because a kWh of electricity offsets roughly the same amount of petroleum in a large vehicle as a small one, it is more important to encourage maximum electrification of all vehicles more than any one particular vehicle. Defining by miles unfairly biases toward small PHEVs, and will result in more similar vehicle models competing for the same market share, while providing few options to the significant segment of CA consumers who want a larger vehicle. Using this metric will still encourage smaller, more efficient vehicles because they are more cost-effective to build, but also rewards manufacturers who choose to electrify larger vehicles.

c) BATTERY WARRANTY - Plug In America recommends a temporary reprieve in this requirement for PHEVs using lithium batteries only, in order to encourage automakers to commercialize vehicles sooner. The following warranty schedule still provides sufficient consumer protection and ensures a low emissions profile for a reasonable amount of time.

Phase II: Five (5) years/ 60,000 miles

Phase III: Seven (7)/100,000 miles

Phase IV: Ten (10)/150,000 miles

3)BACKFILLING- Plug In America opposes the use of Enhanced AT-PZEVs to backfill for any portion of the ZEV requirement and prefers to see separate, appropriate requirements created for ZEVs and Enhanced AT-PZEVs.

However, to the extent that CARB is wedded to the idea, Plug In America proposes raising the bar on both the quality and number of vehicles required to backfill:

Only PHEV20s or better can backfill (PHEV10s can still get credit in Silver) Enhanced AT-PZEVs of any kind would backfill at half the credit they would otherwise earn in the Silver category.

This would result in roughly 5-6 Enhanced AT-PZEVs for each ZEV instead of only 2-3, providing compliance flexibility for automakers while still encouraging development of ZEVs.



Additionally, to the extent that EAER must be used, Plug In America requests that CARB base evaluations on the US06 test cycle, not UDDS, which again favors vehicles "blended" at lower speeds and doesn't represent "real world" driving.

4) PUBLIC FLEET REQUIREMENTS- while there is certainly retail demand for ZEV and near-ZEV cars, fleets can play a significant role in assuring a market for automakers compelled to build them, as well as in producing air-quality results for the areas in which they're deployed. We therefore encourage CARB to consider requiring public fleets to purchase ZEVs and Enhanced AT-PZEVs when available and where practical for their intended use. However, because these vehicles are purchased with public funds, we propose that fleets must choose the most economical vehicle technology (lifetime cost) for a given air-quality benefit.

5) CREATIVE ZEV ECONOMICS- It makes sense for staff to consider the economic impact of the regulation on the automaker, however, citing 2003 battery cost estimates and projected 2012-2014 fuel cell costs to determine the incremental cost of each technology (ISOR, pg. 33) paints an inaccurate economic scenario that biases the reader against plug-in vehicles. Plug In America is watching this trend with increasing alarm since these flawed assumptions are appearing in a variety of documents relating to various ARB regulations. The two technologies need to be evaluated on an even economic playing field.

6) TRAVEL PROVISION - Plug In America opposes any travel provision in combination with decreasing the number of ZEVs required in any phase. We are very aware of how this issue has been "gamed" in the past, with vehicles being removed from service after a few years and placed in another state for credit. However, sanctioning the idea of building fewer ZEVs not only for one state, but eleven, will not lead to the market-building volume that we need.

7) EFFICIENCY MATTERS - Vehicles in the ZEV Program should be defined and credited based on their overall energy efficiencies using a wells-to-wheels or lifecycle analysis. Plug In America encourages the Board to look toward the future by considering overall efficiency today.

Thank you for your consideration of all of the above.

Sincerely,  
Mark D. Clifford  
Hermosa Beach, CA

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 04:52:53

No Duplicates.

## **Comment 90 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Greg

Last Name: Burrus

Email Address: gregburrus@chevettes.com

Affiliation:

Subject: please ask CARB to do the right thing!

Comment:

Governor Schwarzenegger, please ask Mary Nichols to recommit to the full 25,000 ZEVs that automakers had agreed to produce in 2012-2014, and also to create a separate requirement for plug-in hybrids that lets them replace the dirtiest vehicles in CARB's regulations rather than the cleanest ZEVs. It would also be great to incentivize plug-in hybrids that have the most on-board electricity storage.

I feel we as a People really have to start making some difficult choices in order to help prevent waste and environmental damage. Whether or not one believes in global warming, I feel steps to help bring about ZEVs are very wise, not only because they help citizens pollute less, but also because it helps reduce our reliance on foreign oil.

Thank you very much for reading this and for helping. -Greg Burrus

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 07:04:20

No Duplicates.

## **Comment 91 for ZEV 2008 (zev2008) - 45 Day.**

First Name: John

Last Name: Fields

Email Address: jfields@ossonline.com

Affiliation: Parent

Subject: Hold Firm on Phase III and Phase IV

Comment:

I ask that CARB hold firm on the current 25,000 ZEVs required in Phase III, and 50,000 ZEVs required in Phase IV. These are the numbers previously committed to by automakers, and are appropriate to bridge the gap between R&D and commercialization. I will buy and electric vehicle as I just put a solar system on my house. I am doing my part, not only to reduce energy consumption, but to be able to charge my future electric car at my home. By you holding firm on the decision, it will ensure me of being able to purchase an electric car like I would purchase any other gas vehicle.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 08:26:35

No Duplicates.

## **Comment 92 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Edward

Last Name: Matula

Email Address: epmatula@aim.com

Affiliation:

Subject: Save the Electric Car

Comment:

For the good of the enviroment, and to help our dependence on oil, I urge you to support the electric car movement. There is a big cottage industry in the shadows of not only California but nationally, just waiting for favorable legislation to develop reasonably priced urban cars, that would not only help greenhouse gas reduction, but also reduce traffic congestion in cities by providing electric vehicle transportation as an alternate to using large cars and SUV's to run short trips and commutes.

This electric car industry could provide thousands of new jobs to manufacture, sell and service these new urban vehicles.

I am one of these small electric car builders. Please look at my company web site [www.eroadsters.com](http://www.eroadsters.com).

I thank you for your attention on this important matter.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/157-eroadster\_5-10-06\_014.jpg'

Original File Name: eRoadster 5-10-06 014.jpg

Date and Time Comment Was Submitted: 2008-03-15 09:14:28

No Duplicates.

**Comment 93 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jon

Last Name: Davis

Email Address: jon3ddavis@comcast.net

Affiliation:

Subject: Vote For Support Of EVs

Comment:

I live in Oregon but see potential for Oregon to be inspired by actions you take to support electric vehicles in your state. Please help keep energy sanity hope alive for the rest of us too by having the courage to act on the opportunity you have before you in support of electric vehicles.

Thanks ,  
Jon Davis

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 09:15:16

No Duplicates.

## **Comment 94 for ZEV 2008 (zev2008) - 45 Day.**

First Name: JERRY

Last Name: ALLEN

Email Address: jerallend9@yahoo.com

Affiliation: Attorney at Law

Subject: Support for Full Electric Vehicles

Comment:

For three years I drove a Chevy S-10 total electric vehicle. During that time I used only \$150 in gasoline on average A YEAR for my total business and personal road travel.

This vehicle was never in the shop during those three years. Furthermore, there was no need for oil changes or service at all.

All of this was done with General Motors 1998 technology. It is now nearly 10 years later and CARB has done nothing to serve the public interest in requiring or encouraging further development of this technology.

Your failure is well known and your motivations highly questionable. Your performance overall has been disgraceful and it is simply unfortunate that we are not able to legally hold you individually responsible for your failures.

Obviously, the only alternative is for each of you to accept individual responsibility and accountability for your own decisions and those of the members of CARB who are no longer playing decision-making roles by taking action to encourage and require more ZEVs on California Highways and to offer this alternative to the public now that oil is over \$100 and gasoline approaching \$4 a gallon. All of this has been foreseeable since the "ancient" times of the Arab Oil Embargo. Yet, what have you people been doing. How many people have also suffered and died from the medical consequences of your lack of supporting Zero Emission Vehicles. I really don't see how you can live with yourselves.

Please, do the right thing for the public good for a change.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 09:35:15

No Duplicates.

## **Comment 95 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ronald  
Last Name: Cochran  
Email Address: rcochran@ec.rr.com  
Affiliation:

Subject: California ZEV Mandate  
Comment:

The California ZEV Mandate of the late 90's prompted major automakers to develop electric vehicles. The delay of ZEV requirements in that law in 2003 caused the US great harm! EV's development and production was halted and existing EV's were crushed. If the US now had five years of EV's available, we would be much better prepared for the current oil crises. The weakened ZEV Mandate has cost the US people and the US economy dearly! Do not repeat your 2003 mistake!

I do not live in California. I live in North Carolina. But what California does with regard to electric vehicles and plug-in hybrid vehicles greatly affects the rest of the US. For that reason I am very interesting is urging you to stick to the current ZEV timetable.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 10:16:16

No Duplicates.

## **Comment 96 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jeff

Last Name: U'Ren

Email Address: Jeffuren@mac.com

Affiliation:

Subject: Please Save the Electric Car!

Comment:

Dear Mrs. Nichols,

I urge you to do all you can to strengthen the ZEV mandate for good this time.

We are in a national crises now and you must act in a timely manor.

I drove an EV1 for three years 10 years ago. I didn't buy gas for 3 years.

I'm now waiting to buy a new production electric car as is the rest of America.

EVs are the answer to many of our problems. Time will tell and now you are part of that history.

Only you can really make a difference in this matter.

We suffer at your whim.

Please, do the right thing for America.

Inspire the automakers to make EVs and put as many EVs on the road, sooner than latter.

Jeff U'Ren

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 10:47:43

No Duplicates.



**Comment 97 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Tim

Last Name: Williams

Email Address: abbottim@yahoo.com

Affiliation:

Subject: Please save the electric car

Comment:

I ask that you support whatever efforts there are to make available and promote plug-in vehicles. Thank you!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 12:10:53

1487 Duplicates.

## **Comment 98 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Quin  
Last Name: Garcia  
Email Address: qgarcia@stanford.edu  
Affiliation:

Subject: I want an Electric Car!  
Comment:

Hello CARB,

I am in the market for an electric car as of last week, but there are no viable (less than \$30k, seating for 4, mass produced) options for a daily driver electric car. I know that these cars can be produced by manufacturers, but we need to give them an extra push. Please do all you can to bring these cars to market ASAP.

Regards,  
Quin Garcia  
Palo Alto, CA

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 14:11:08

No Duplicates.

## **Comment 99 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Paul

Last Name: Olenski

Email Address: opaul1002@qwest.net

Affiliation: Former Resident of California

Subject: SAVE THE ELECTRIC CAR

Comment:

I was a U.S. Marine in Southern California from 1967-1970 (with occasional visits to Southeast Asia). I remember when the air was clean and skies around Anaheim were clear. When I returned in 1987 for a conference in Anaheim, I was bothered by the air pollution. When I returned in August, 2006 for a 1st Marine Division reunion via LAX, I became sick due to the air pollution.

I live in Arizona near the foot of Superstition Mountain. The air is clean and the sky is clear. I would like for it to remain like this and I would like you to take steps to return the air of Southern California to what I remember.

Have the courage to stand up to the lobbyists of the oil industry and gas guzzling automotive industry. Allow home grown companies like Tesla to flourish under CARB Zero Emission Vehicle Program.

This is not only a huge financial benefit to the people of California, it is also a huge health benefit. I pray you do the right thing.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 14:12:15

No Duplicates.

## **Comment 100 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Sally  
Last Name: Ahnger  
Email Address: sahnger@yahoo.com  
Affiliation:

Subject: ZEV 2008  
Comment:

There is no good reason why every household in CA with two cars shouldn't have one of them be an EV.

I have only an EV and am very happy with it. When I go on long trips I rent a gas-powered car. It's much cheaper than owning one. It's completely feasible today.

It was appalling when the CARB gave in to the auto companies and gave up on our ZEV program. We should be increasing our requirements on auto companies to produce ZEVs.

At the very least CARB needs to:

1. Require the full 25,000 ZEVs that automakers had promised for 2012-2014, and
2. Create a separate additional requirement for plug-in hybrids.

Sincerely,  
Sally Ahnger

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 14:15:45

No Duplicates.

## **Comment 101 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mat

Last Name: Zulauf

Email Address: zoolooniner@yahoo.com

Affiliation:

Subject: Electric Cars

Comment:

You have the opportunity to set major policy changes in the U.S. that have been lacking for the past 8 years. Please take advantage of this huge opportunity to help the U.S. become more energy efficient and independent. Requiring electric cars will spur investment and drive consumer interest in transportation solutions that will finally help us become independent from importing energy from other countries, driving down the value of the dollar and our economy as a whole. Thank you for allowing me to input my opinion.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 14:35:20

No Duplicates.

## **Comment 102 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Charles

Last Name: Henry

Email Address: ChasCam580@gmail.com

Affiliation:

Subject: Plugin Cars

Comment:

Their in Japan. We need them here and not just for the collectors.  
There is a BIG market for this type of vehicle in this country.  
Stop the stalling and don't loosen up on the present restrictions  
on gas powered cars.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 14:49:11

No Duplicates.

**Comment 103 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Linda

Last Name: Tabor-Beck

Email Address: cane\_elder@yahoo.com

Affiliation: Plug In America

Subject: ZEV Program

Comment:

I so want to get a new car that will lesson my carbon footprint, and I want a plug in hybrid, or a decent electric car that I can afford. The Tesla sport car is a bit too pricey for me by a long shot. PLEASE help me get a new car!

Thank you for your support

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 14:59:21

No Duplicates.

**Comment 104 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Gerald

Last Name: Pease

Email Address: gerbar92@msn.com

Affiliation: HPVA, IHPVA

Subject: Keep the ZEV program strong

Comment:

I fully support the Plug-in America recommendation to not adopt the flawed amendments to the 2008 Amendments to the California ZEV regulation.

Respectfully,  
Gerald Pease

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 14:59:21

No Duplicates.



## **Comment 105 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Chris  
Last Name: Cross  
Email Address: criscrs@msn.com  
Affiliation:

Subject: Zero Emission Vehicle Regulation  
Comment:

Dear CARB Representatives,

This is an opportunity to be political leaders in the energy industry. We need alternatives such as electric vehicles. I have a penchant for these vehicles because they can be mass produced at a reasonable cost and the infrastructure already exist to support electric vehicles. Electric vehicles will fulfill most consumers transportation requirements and can be manufactured to be attractive vehicles. Electric vehicles will help improve our air quality now. This technology is here!

Millions of americans and myself are concerned at the direction CARB is going in support of ZEV's. We need to regulate and encourage clean air products. We need you to stand up to political forces and not be influenced by automobile lobbyist or threats.

We the people have interest too. That would be our childrens future as well as our own. We would like to start breathing clean air once again.

To sum it up:

I would prefer to use an electric vehicle then a gas vehicle. We need a program in place that works starting now, not tomorrow. Let's be the leaders together and support the manufacture of electric vehicles in the thousands now. Please vote yes on moving the ZEV industry forward. We know the automobile industry can produce thousands of electric vehicles and exceed these requirements. Please DO NOT WEAKEN the policy but increase the program requirements to get this industry moving now.

Now, "take a deep breath of air and think about it".

Yours Truly,  
Chris Cross

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 15:11:41

No Duplicates.

## **Comment 106 for ZEV 2008 (zev2008) - 45 Day.**

First Name: jean

Last Name: herndon

Email Address: hsherndon@webtv.net

Affiliation: john crotty associates

Subject: living lightly upon the planet

Comment:

2008/3/15 gentle persons my family was connected to the automobile industry and the aerospace industry, and before that to the railroad industry.

even if we had the luxury of an unlimited supply of fossil fuel, which we do not, our crowded planet can no longer support the burning of so much oil based fuel.

solar power and hydro-electric power have been joined by plug-in power and i urge everyone to consider evfinder and evworld where more information can be obtained.

1957 sputnik went up and rocket science took hold of our economy. one very valuable by-product has been the internet. telepresence is possible through holographic video conferencing and audio only communications have been improved through eagle teleconferencing.

being in more than one place at the same time is becoming real. telegraph. telephone. radio. television. teleportec and personal transport via the electric motorcycle from myers motors dubbed nmg for no more gas.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 15:21:42

No Duplicates.

## **Comment 107 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Tom

Last Name: Manley

Email Address: tmanley@ieee.org

Affiliation:

Subject: Zero Emissions Vehicle Program

Comment:

The automotive industry, GM specifically, has already proved that these vehicles can be built. It is unconscionable that the EV-1 program was ended but it is still a springboard for greater things. The technology was reasonably viable then and more so now. The need is acute, both for air pollution reasons and other reasons that are obviously hurting our country more deeply every day.

Lead once again!

Tom Manley

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 15:29:27

No Duplicates.

## **Comment 108 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Stephen

Last Name: Weitz

Email Address: weitzs@earthlink.net

Affiliation:

Subject: ZEV 2008; strengthen yes, weaken no

Comment:

I am disappointed to hear that CARB is about to weaken the ZEV mandate with regard to mandates for electric vehicles. I urge you to greatly strengthen the electric vehicle portion of the ZEV mandate for 2008.

I drive an all electric Chevy S10 pickup that was part of the original electric vehicle ZEV mandate. I love the truck, it works flawlessly and was made in 1998. I keep hearing that the automakers can't make electric vehicles that people want. I hear that the batteries are not ready. My truck, made by Chevy in the factory back in 1998 with nickel metal hydride batteries, is proof that there is hope and that change is possible.

If CARB is willing to have some guts and help be a sponsor of change, then we will move forward with electric vehicles. Change will happen. It will be interesting to see who will be the ultimate authors of that change to EVs, this board, or a future one more in tune with the scientists, engineers, and people of California. I hope this board will act in a very positive EV way.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 15:48:46

No Duplicates.

## **Comment 109 for ZEV 2008 (zev2008) - 45 Day.**

First Name: John  
Last Name: Spradley  
Email Address: ab6oh@arri.net  
Affiliation: none

Subject: Restore the ZEV mandate to its original intent  
Comment:

Please ask your appointed CARB chair, Mary Nichols,  
to prove that her loyalty is not to the oil company stocks she  
owns, but to the people of California:

The solar charged electric car I drive 35 miles daily has not used  
a drop of gasoline in its 27 years of existence.

Those of us who drive electric cars know what can be done. Ask  
us!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 15:50:04

No Duplicates.

## **Comment 110 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ashay

Last Name: Chaudhary

Email Address: ashayc@hotmail.com

Affiliation:

Subject: Mandate for cleaner air via ZEVs & PHEVs

Comment:

I support an agenda to reduce greenhouse gas emissions in order for us and our future generations at least the same (if not better) quality of life in the future.

The most promising way to reach this goal is to give consumers the choice to buy Zero-Emission Vehicles (ZEVs) or Plug-in Hybrid Electric Vehicles. Even though most of the technologies required are already available (and have been for a while), these need the support of mass production to make them economically feasible.

As history has shown, the automakers and the energy companies would rather compromise the future of our progeny and make a profit today, than make the correct choices.

If the California Air Resources Board reduces the number of ZEVs/PHEVs required of automakers, this is a significant step backwards. This country needs a progressive state like California to continue to lead the way rather than relegate itself to a follower.

While I would love to have a long range ZEV, I have realized that I really don't need it most of the time. So I am taking the step to make the right choice today - and will be selling one of my ICE vehicles and replacing with a ZEV. But I need a viable option for a long range vehicle. My situation is not unique, most of American households are in the same situation.

We need CARB to make the right choices in fulfilling its mission!! Don't change the mandate by reducing requirements, increase them instead!!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 16:43:10

No Duplicates.

## **Comment 111 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jerry  
Last Name: Pohorsky  
Email Address: Pohorsky@comcast.net  
Affiliation: Electric Auto Association

Subject: California needs more Electric Vehicles  
Comment:

Hello,

I am deeply disappointed with the direction the ZEV mandate has taken. There have been \*ZERO\* zero emission vehicles for sale at dealer showrooms since the ZEV mandate was gutted in 2003.

I was lucky enough to buy one of the few 2002 Toyota RAV 4 EVs and have over 75,000 trouble-free miles logged so far. I drive over 1,000 miles a month - so it is obvious that an electric car of this type will meet the needs of most drivers.

I am often asked by people how they can get one of these electric cars and I have to tell them that Toyota no longer sells them. They were taken off the market the day after CARB changed the ZEV mandate in 2003. Coincidence? You tell me.

Let's stop playing games with the ZEV mandate. No more multipliers. One freeway-capable ZEV gets one credit since it displaces just one gasoline or diesel vehicle. No credits for NEVs. No credits for PZEVs or hybrids that run exclusively on gasoline.

If an automaker can't produce the emission-free cars they need to comply, they can buy credits from Tesla or Phoenix MotorCars. One credit per car - not 7 or some other multiplied number. If they need 7 credits, then 7 ZEVs must go on the road in California - not New York. You are not going to make an impact on air quality with a few hundred cars - you need many thousands.

The automakers have lots of unsold SUVs and large pickup trucks. They are building the wrong products for the market. Let them make some green machines that people are asking for and they will be pleasantly surprised to see their sales take off. With today's gasoline and diesel prices consumer demand for electric vehicles is on the rise. Unfortunately, the supply is not there to meet the demand. CARB can do something about that. Please do.

Thank you.

Adios,

Jerry Pohorsky  
Electric Auto Association  
Silicon Valley Chapter President

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 16:50:25

No Duplicates.



## **Comment 112 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Gerry  
Last Name: Gaydos  
Email Address: gerry.gaydos@hotmail.com  
Affiliation: EAA member

Subject: ZEV mandate  
Comment:

To whom it may concern,  
As a Canadian I watch and hope for forward thinking action on the part of Californian legislators regarding environmental preservation especially in the area of auto emissions. Our political leaders take their cues from the advanced social movements in your state. Many Canadians share my hopes that you will demonstrate your courageous and responsible nature by strengthening your demands for auto manufactures to produce Zero Emissions Vehicles, as an ever increasing percentage of their output. Your actions reach far beyond California state lines. The atmosphere knows no boundaries and The Golden State is still the promised land for many of us in the great white north.

Please show the rest of the United States what is possible and set an example for our Canadian legislators to follow. Electrification of personal transportation is a key part of the solution to climate change and the reduction of global conflict.

Good luck,  
Gerry Gaydos,  
Victoria, Canada

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 18:20:49

No Duplicates.

## **Comment 113 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Richard  
Last Name: Gillock  
Email Address: r.r.gillock@ieee.org  
Affiliation:

Subject: Retain the ZEV Mandate  
Comment:

As an Aerospace Engineer and an owner of a Prius Hybrid I appreciate the technical advances that make plug-in electric vehicles viable today. Battery technology has advanced enormously as high volume demand has been created by the Prius and other electric based vehicles. The energy grid is the most efficient energy delivery system we have, so plug in electric vehicles are not just viable, they are the correct solution for the next decade and beyond.

We have all heard that "Hydrogen is the future," and it always will be. Why replace one costly distributed fuel with another? Those who lobby for hydrogen are not interested in a new fuel technology, they are interested in controlling distribution. Hydrogen is not really even a fuel so much as an energy storage mechanism, manufactured at low efficiency. Hydrogen fuel cells are still a marginal technology, and add another layer of technical challenge to an all electric vehicle. Internal combustion hydrogen power carries with it all of the inefficiencies of the ICE including waste during idling.

Plug-in Hybrids are another intermediate step, but they should not be used to offset pure electric vehicles. Rather they should offset low power, high mileage, ICE vehicles of similar or worse performance.

If we set a technological stake in the ground, the research funding will follow. There is no reason to twist the ZEV Mandate to accommodate makers of buggy whips. It is time for those who have vision to step forward with 21st Century transportation solutions, and for those who only see the ICE to be left behind.

Please maintain an aggressive ZEV mandate for California.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 19:51:51

No Duplicates.

## **Comment 114 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Andrew

Last Name: Conlyn

Email Address: acconlyn@comcast.net

Affiliation:

Subject: Save the Electric Car

Comment:

It is now possible for you to contribute to solving two of California's, the United States', and even the world's biggest problems in one single action. Please overlook the powerful interests of the oil and automotive interests in favor of the far more important interests of the citizens of the world. By supporting the development of electric cars, you will make it possible to greatly reduce air pollution, especially greenhouse gasses while at the same time reducing the power the OPEC nations have over the United States and the rest of the world.

I have promised myself that my next automobile will not use petroleum products to drive the wheels. I greatly fear that if you do not take the right action now, my car will not be available when I need it.

Please do everything you can do to force the automotive industry to make electric cars or serial hybrids realistically available to the public as soon as possible.

I am not a California resident, but I look for California to continue to lead the way for us all to recover.

Thank you

Andrew Conlyn  
1239 Walden Dr.  
Fort Myers, Florida 33901

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 19:53:44

No Duplicates.

## **Comment 115 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Gardner

Last Name: Harris

Email Address: ev1driver@msn.com

Affiliation: Electric Vehicle Assoc. of So. Calif.

Subject: Make 'em build them!

Comment:

Dear Ms. Nichols and the ARB in general,

The time has come to switch off the power to the gas pumps. Please do not let the automobile manufacturers lobby convince you to put off the manufacture of the full number of electric vehicles originally agreed to.

Now even George Bush has joined the chorus of voices to get people out of the petroleum habit by saying that the city dwellers should be driving electric vehicles. It's up to you to enable the provision of these vehicles that will be SOLD, not leased and crushed like the wonderful but ill fated EV1. Not a single person who had one that does not want it back. But alas GM made sure that every last one of them was shredded save those few in museums and educational institutions. Even those are not being permitted to be driven on public roads as part of their donation agreement.

Strangely those of us who were fortunate enough to have purchased the S10e electric pickup have never been challenged but for the discontinuance of replacement body parts which are now on the "unobtainium" list.

Our garage holds two EVs, one a RAV4-EV and the other the aforementioned S10e. Unless a better EV is made, they will have to pry them from our cold dead fingers. Please give us a better choice.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-15 21:50:32

No Duplicates.

## **Comment 116 for ZEV 2008 (zev2008) - 45 Day.**

First Name: peter

Last Name: fletcher

Email Address: fletchfilms@hotmail.com

Affiliation:

Subject: We Want more EV's on the road! We support all Ev's

Comment:

If it is the automakers great.

I also think we should give breaks an in sentives to converted gas cars to Electric. In stead of penalizing them at the DMV for not paying road tax. Give EV drivers the benifit guess What more people will do it, and well have cleaner air that much quicker! We support EV's Family of four.

Even my 2 year old and my 6 year old know I drive a Converted EV....GO EV's

Attachment: '[https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/316-forcepeople\\_1.mpg](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/316-forcepeople_1.mpg)'

Original File Name: forcepeople#1.mpg

Date and Time Comment Was Submitted: 2008-03-15 22:28:17

No Duplicates.

## **Comment 117 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Michael

Last Name: Byram

Email Address: mmishatexas@aol.com

Affiliation:

Subject: ZEV is a big message to US and Texas, too

Comment:

There are two reasons to mandate all automakers to build electric cars. We want to own long range electric cars to reduce our dependance on Arab oil and It is time to step boldly and tell those automakers to build more battery-operated cars, not only California, but Texas and other states need to step in to reduce our dependence on foreign oil. I ain't give Middle East Terrorists no money! We are tired of their terrorisms everyday. It is good way to cut financial supply to terrorism is by making electric cars. Those electric cars including Chevy EV1 did not need Arab oil. it means no more US dollar for arab oil. The second, low income and middle income families should take advantage of electric cars in a long, long run. It is time for automakers to reshape themselves into 21th century.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-16 00:21:17

No Duplicates.

## **Comment 118 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jerry

Last Name: Ellingson

Email Address: jellings2@pacbell.net

Affiliation:

Subject: Electric Vehicles

Comment:

I do not know the details of the proposal before the Board but I would like to offer comments and an opinion based on my personal experience. I have been driving an electric vehicle--a Toyota Rav4/EV--for more than 5 years. It is exclusively battery-powered (using NiMH batteries), and I recharge it at home or at various charging stations around the L.A. Area (where I live).

In more than 5 years and more than 60,000 miles so far I have not used one drop of gasoline. The vehicle has required no maintenance or repair, and it runs today at about 98% of the capacity it had 5 years ago. This car is a perfect demonstration that battery-powered EVs do work, and they work very very well. In my opinion this is one of the best vehicles ever built because it combines the virtue of being virtually pure green with the features of every other "normal" car (i.e. internal combustion engine auto) we've grown used to. It drives smoothly and easily within all types of traffic, including considerable freeway driving when I commute to and from work. It will go 75-100 miles on a charge and for your typical urban/suburban commuter or stay-at-home mom/dad that translates into a day or two of driving before recharge is needed. I personally charge my vehicle about 3 times per week in order to drive about 250 miles per week. The cost of electric power to operate my EV is much less than I would be paying for gasoline. My vehicle generates no emissions whatsoever, and the L.A. DWP says that factoring in the fossil fuel consumption needed to generate the electricity I consume for the car results in about 3-4% of the atmospheric emissions of a conventional vehicle.

I believe vehicles like this are perfect for the urban/suburban driving environment. If an automaker tells the CARB that it cannot build an efficient battery-powered vehicle that is--excuse the blunt language--utter crap. The GM EV-1 may have had some problems regarding operating range/battery life (with a lead-acid battery system initially, I believe) and but those surely would have been overcome by now had the company continued to invest minimally in R&D to improve it. Instead they withdrew the EVs and complained that the public would not accept EVs. Had GM spent the same budget to improve and market EVs that they spent on the Hummer, what do you think we would see on the highways today?

Toyota's EV is a great vehicle and it is a shame that they discontinued production. I consider myself very very fortunate to have acquired one of them during their limited period of availability. If Toyota did not find the program to be profitable, again it was a problem of marketing and economies of

scale and not any defect inherent in the EV technology. They did nothing to educate the public to the virtues of this superior automobile or there would have been a significant demand for the vehicles, production would have expanded, and they would have shown a profit eventually.

The CARB should do everything in its power to pressure the auto companies to resume EV production, resume R&D, and invest in the necessary marketing to make EVs a success. Don't "let them off the hook" again. The CARB's original program to force the automakers to put EVs on the road was an environmentally responsible and right-minded idea. Don't back down again, please!

How can anyone say that EVs don't work, that they are not practical, that the public doesn't want them? My Toyota is proof that they do work, and frequently people ask me about the car--how far can I go? how much does it cost to operate? etc.--and they are amazed to hear how practical, economical and green it is. Many say they wish they could get one, too.

Thank you for listening. I hope you find my first-hand description useful. I believe I am a pretty typical urban/suburban resident in terms of my driving habits and needs.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-16 17:05:56

No Duplicates.



**Comment 119 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ze'ev

Last Name: Drori

Email Address: theceo@teslamotors.com

Affiliation: Tesla Motors, Inc.

Subject: Statement on Proposed Changes to ZEV Regulation

Comment:

See attachment.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/452-mary\_nichols\_letter\_12march08.pdf'

Original File Name: Mary Nichols Letter\_12March08.pdf

Date and Time Comment Was Submitted: 2008-03-16 22:51:35

No Duplicates.

## **Comment 120 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mikael

Last Name: Ballan

Email Address: globalclimate@yahoo.com

Affiliation: EV Clubs and OREG.ca

Subject: Amendments towards ZEV and ICE compatible clean air goals

Comment:

Governor Arnold Schwarzenegger  
State Capitol Building  
Sacramento, CA 95814  
Phone: 916-445-2841  
Fax: 916-558-3160

Greetings Governor, Board members and Folks of California

As a west coast neighbor in BC Canada, we share a vision of clear skies and clean waters. We also have a ways to go. Recent pieces of the renewable, clean energy cycle have shown a means to convert our vehicles and homes in a few hours from fossil fuel use. Knowing this, would you encourage residents and businesses as well as legislation to adopt these practices?

When the colors of the skies become the color of soils, we know something is wrong. The elements of both air and water are destined to continue being the fuels of vehicles. It makes sense to replace the cancerous PAH's, and leave petroleum for longer lasting purposes of mankind besides fuel.

One of the technologies to assist the transition from fossil fueled environments comes in the way of electric vehicles. PLUG-IN America believes electric vehicles are one answer and wishes legislation to enhance this option.

Our goals for Life, beyond oil eras, needs your focus and attention. California can gobble up a month of BC's commuter impact in a single few hours daily commute in Los Angeles, as you know, yet we have recently finished Globe2008 with a realization... that it could take less than 7.5 hrs. for the average one house one car resident to transition off of fossil fuels. That means turning the home natural gas line off at the valve and never needing gasoline, propane, diesel or bio's at the pump, through retrofitting their present internal combustion engine. Just 7.5 hours from one energy system to a cleaner, purer, GHG-free energy cycle. Seems too amazing to believe.

The next step is to gather these five basic technologies under a common licensing agreement satisfactory to the patent holders and technology development companies.

We are living in exciting and wonderful times. If your economy is based upon biblical precepts, Leviticus 25:23. The Lord always owned the land. Man was only a steward. As a social responsibility to enhance this stewardship role, expand economies and extend

health potentials for the people and planet, possibly the states interests to respond to global climate changes is incentive enough to license these technologies as a package?

Traffic congestion even with clean fuels is another issue. Your governments income sources from petroleum fuel taxes will require substitutes as this transition takes place. Road use taxes based upon the time an engine operates within urban boundaries, comparable to Swedish systems, are one way.

To conclude ... with travel, traffic and coffee breaks, a ten hour changeover is a viable possibility. Could life be so fantastically real, that history records your roles both as actor, Governor and terminator of the fossil fuel age?

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/456-vancouver\_air\_with\_cityview.jpg'

Original File Name: Vancouver air with cityview.jpg

Date and Time Comment Was Submitted: 2008-03-17 00:08:17

No Duplicates.

**Comment 121 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Christopher  
Last Name: Bostwick  
Email Address: cb41@chrysler.com  
Affiliation: ZEV Large Volume Manufacturers

Subject: ZEV Rulemaking Issues for March 27, 2008  
Comment:

Dear Chairman Nichols and Members of the Board:

On behalf of the Large Volume Manufacturers of the ZEV Mandate,  
please see the attached letter with regards to issues of the ZEV  
Rulemaking.

Best Regards,

Chris Bostwick  
Chrysler LLC

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/490-air\_resources\_board\_ltr\_3\_14\_08.pdf'

Original File Name: Air Resources Board Ltr 3\_14\_08.pdf

Date and Time Comment Was Submitted: 2008-03-17 09:21:42

No Duplicates.

## **Comment 122 for ZEV 2008 (zev2008) - 45 Day.**

First Name: James

Last Name: Beedie

Email Address: jamesbeedie@yahoo.com

Affiliation: California resident and taxpayer

Subject: Please don't repeat the mistakes of the past

Comment:

I strongly support CARB's efforts to reduce both pollution and greenhouse gas emissions.

Unfortunately, I have seen a long history of repeated weakening of ZEV requirements in favor of hydrogen fuel cell technology that all agree is extraordinarily expensive (at least 10x if not 100x more expensive than BEV technology), and is likely years away. I have one ZEV sold to me by Toyota thanks to CARBS efforts before the last time the ZEV regulation was watered down. The others were taken away by Ford and GM. However my RAV4-EV is getting OLD, has over 100,000 miles (based on battery technology that is now over 10 years old) and has many signs of wear and tear that, despite my best efforts to abate and control, simply add up after so many miles and years.

I would like a new one. I would like one sold by a major automaker, that I will not have to go to a specialty shop many miles away for repair. I would like one ASAP. I think it only fair that after paying taxes in California for over 20 years that CARB would give my interests priority over the out of state automakers and the oil companies.

I will not buy another gasoline vehicle. If I have to I will buy a Tesla or a Phoenix Motorcar, but they are available in spite of CARB's efforts, not because of them. When will the California taxpayer finally be rewarded for keeping CARB up and running for so many years?

Please do not do something as shortsighted and foolhardy as reducing the number of ZEVs required of automakers by 90%, settling for only 2,500 from 2012-2014. This approach has not worked in the past and will not work in the future. In 2012, the automakers and oil companies, and their Astroturf support groups will be back knocking on your door asking for another delay. That is their history, that is their own self interest. I can not fault them for working in their own self interest. However, IT IS NOT IN THE INTEREST OF THE CALIFORNIA TAXPAYERS AND CITIZENS. Please do not forget whose interest you are charged to protect.

Thank you

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-17 11:17:31

No Duplicates.

## **Comment 123 for ZEV 2008 (zev2008) - 45 Day.**

First Name: John

Last Name: Hoffner

Email Address: drvkhharvey@adelphia.net

Affiliation:

Subject: Support commercial production of electric cars

Comment:

The Staff Proposal creates an "either/or" scenario between ZEVs and Enhanced AT-PZEVs that we find very disconcerting because it creates the appearance of "selling out" one technology for the other. While the near-term market potential may be different, only the market should determine to what extent each is successful. We therefore propose specific treatment for each category, as well as general suggestions for the program.

1) HOLD FIRM ON "GOLD" ZEV NUMBERS - Staff's proposal notes that the 18-year history of the ZEV Program has yet to make ZEVs commercially available- reducing the number of ZEVs required yet again will not accomplish this goal. The current proposal would require fewer an average of 140 ZEVs per year from any individual automaker until 2015- few enough that several automakers can use banked credits for the next decade to meet this requirement. Those with fewer banked credits can easily accomplish these numbers through credit trading with small automakers, like Tesla. Worse, the lower numbers ensure that ZEVs will never leave hand built production volumes, and that costs will remain too high for commercial viability.

We therefore ask that CARB hold firm on the current 25,000 ZEVs required in Phase III, and 50,000 ZEVs required in Phase IV. These are the numbers previously committed to by automakers, and are appropriate to bridge the gap between R&D and commercialization.

2) ENHANCED AT-PZEVs - these enhanced vehicles are incredibly promising, both for their ZEV-enabling properties, and for the near-term air quality benefits. Several automakers have expressed their enthusiasm for these vehicles, with at least two models committed for production during Phase II. However, these vehicles should not come at the expense of ZEVs, and merit requirements of their own to support their commercialization.

a) PZEVs NEED TO GROW UP - To the extent that allocation is taken from another category to make room for Enhanced AT-PZEVs, it should be taken from the dirtiest category in the ZEV Program, not the cleanest. While PZEVs have served as an air-quality victory for the Program, they no longer need commercialization support, and lend no ZEV-enabling value. Therefore, we propose that the percentage of the Program requirements allowed to be met by PZEVs be reduced to 4% in Phase III, 2% in Phase IV, and phase out completely after 2018. In each Phase, the reduced PZEV requirement would be transferred up to the Enhanced AT-PZEV category, creating a stand-alone requirement for these vehicles without distracting

from commercialization efforts of true ZEVs.

As noted above, PIA understands that PZEVs play an important role in achieving California's air quality goals. However, they don't support the specific goals of the ZEV Program; our proposal provides adequate time for a PZEV requirement to be shifted to a more appropriate program such as LEV III.

b) PHEV DEFINITION METRICS- We strongly encourage the Board to reconsider defining and crediting Plug-in Hybrid Vehicles (PHEV) by a more straightforward metric such as kWh (either onboard or net usable) rather than miles.

Using kWh provides more flexibility to the automakers to build PHEVs in both propulsion configuration (serial, parallel, etc.) and body style what they think will sell in the marketplace and will result in more overall cars on the road. Because a kWh of electricity offsets roughly the same amount of petroleum in a large vehicle as a small one, it is more important to encourage maximum electrification of all vehicles more than any one particular vehicle. Defining by miles unfairly biases toward small PHEVs, and will result in more similar vehicle models competing for the same market share, while providing few options to the significant segment of CA consumers who want a larger vehicle. Using this metric will still encourage smaller, more efficient vehicles because they are more cost-effective to build, but also rewards manufacturers who choose to electrify larger vehicles.

c) BATTERY WARRANTY -We recommend a temporary reprieve in this requirement for PHEVs using lithium batteries only, in order to encourage automakers to commercialize vehicles sooner. The following warranty schedule still provides sufficient consumer protection and ensures a low emissions profile for a reasonable amount of time.

Phase II: Five (5) years/ 60,000 miles

Phase III: Seven (7)/100,000 miles

Phase IV: Ten (10)/150,000 miles

3)BACKFILLING- Plug In America opposes the use of Enhanced AT-PZEVs to backfill for any portion of the ZEV requirement and prefers to see separate, appropriate requirements created for ZEVs and Enhanced AT-PZEVs.

However, to the extent that CARB is wedded to the idea, we propose raising the bar on both the quality and number of vehicles required to backfill:

Only PHEV20s or better can backfill (PHEV10s can still get credit in Silver)



Enhanced AT-PZEVs of any kind would backfill at half the credit they would otherwise earn in the Silver category.

This would result in roughly 5-6 Enhanced AT-PZEVs for each ZEV instead of only 2-3, providing compliance flexibility for automakers while still encouraging development of ZEVs.

Additionally, to the extent that EAER must be used (again, we prefer kWh over any mileage metric), we request that CARB base evaluations on the US06 test cycle, not UDDS, which again favors vehicles "blended" at lower speeds and doesn't represent "real world" driving.

4) PUBLIC FLEET REQUIREMENTS- while there is certainly retail demand for ZEV and near-ZEV cars, fleets can play a significant role in assuring a market for automakers compelled to build them, as well as in producing air-quality results for the areas in which they're deployed. We therefore encourage CARB to consider requiring public fleets to purchase ZEVs and Enhanced AT-PZEVs when available and where practical for their intended use. However, because these vehicles are purchased with public funds, we propose that fleets must choose the most economical vehicle technology (lifetime cost) for a given air-quality benefit.

5) CREATIVE ZEV ECONOMICS- It makes sense for staff to consider the economic impact of the regulation on the automaker, however, citing 2003 battery cost estimates and projected 2012-2014 fuel cell costs to determine the incremental cost of each technology (ISOR, pg. 33) paints an inaccurate economic scenario that biases the reader against plug-in vehicles. We are watching this trend with increasing alarm since these flawed assumptions are appearing in a variety of documents relating to various ARB regulations. The two technologies need to be evaluated on an even economic playing field.

6) TRAVEL PROVISION - Plug In America opposes any travel provision in combination with decreasing the number of ZEVs required in any phase. We are very aware of how this issue has been "gamed" in the past, with vehicles being removed from service after a few years and placed in another state for credit. However, sanctioning the idea of building fewer ZEVs not only for one state, but eleven, will not lead to the market-building volume that we need.

7) EFFICIENCY MATTERS - Vehicles in the ZEV Program should be defined and credited based on their overall energy efficiencies using a wells-to-wheels or lifecycle analysis. We encourage the Board to look toward the future by considering overall efficiency today.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-17 11:41:52

No Duplicates.



## **Comment 124 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ann Catherine  
Last Name: Keirns  
Email Address: annckeirns@hotmail.com  
Affiliation:

Subject: Clean and Green  
Comment:

What battery electric vehicles (BEV) can address:

### **NATIONAL SECURITY:**

Electric fuel is produced in the USA - no movement of or money to conflict-ridden regions with anti-American policies

### **ENVIRONMENT:**

Reduction of greenhouse gasses. No tail pipe = no exhaust. US electricity is the only fuel source that keeps getting cleaner. In Ca, our electricity mix is much cleaner generally due to significant installations of wind! , solar, geothermal and hydro power. No need to drill in wildlife preserves - such as Alaska. Fueling infrastructure is already EVERYWHERE.

### **PUBLIC HEALTH:**

Reduction in pollutants from million of cars in our communities = cleaner air for us to breathe and less asthma exacerbations. Remember, each internal combustion car is its own mini powerplant. We depend on each car owner to maintain their vehicle so it pollutes the least amount. Does this happen? How many gross polluters have you been behind?

### **HUMAN RIGHTS:**

Many oil rich countries have regressive and deadly policies towards women, minorities and their own people in general. How much of our money goes to implementing these policies?

### **SOCIAL JUSTICE:**

Many impoverished communities are located in urban areas and next to freeways. Think no idling vehicles and tailpipes. Also, with investment into this technology the prices for vehicles will decrease. Electric motors are hugely less complex than internal combustion motors. Maintenance (not including tires and wipers) can be VERY inexpensive.

### **ECONOMIC:**

We all know the US' auto companies are losing market share to other competitors. It was announced earlier this week that Honda just overtook Chrysler on the list of top 5 automakers for example. These requirements will push them to innovate and

compete in a direction the market is going - especially given gas prices. Plug-in hybrids and battery electric technology are one piece of the sustainable and renewable energy equation this nation needs to move into an economic renaissance.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-17 12:53:35

No Duplicates.

## **Comment 125 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Gilbert  
Last Name: Hendren  
Email Address: mrc7734@aol.com  
Affiliation:

Subject: possible electric vehicle CARB cutbacks  
Comment:

Dear CARB

Please don't limit the benefits of electric transportation again. This has been a difficult thing as CARB has consistently cut down on the most practical (electric) transportation and tried to encourage the most impractical (hydrogen) transportation that costs 20 times as much to work.

Generally I agree with you on your decisions to improve air quality, especially when it is a good choice and helps us make better decisions on our own. I was very disappointed when the EV1 & EV2 along with many other non-polluting vehicles were removed from the road but this problem was somewhat offset by the idea that CARB would require more of these vehicles on the road based upon the existing 'rules' it had set at the time. Now they are threatened to be eliminated and the benefits of electric transportation will be eliminated from us again.

I am EXTREMELY UNHAPPY about your decision to consider a new law that changes the rules IE zev2008. I have looked forward to the possibility of myself and many people I know being able to purchase an electric vehicle if they wish. There are thousands who would buy one now as the technology exists and battery technology has finally reached the ability for vehicles to drive over 200 miles until charging is necessary. Most of us would LOVE to have a car that is able to drive in such a manner, yet zev2008 would limit the vehicles and eliminate anyone I know from being able to afford one. This is accomplished by cutting back on electric car 'benefits' and replacing them with hydrogen vehicle benefits. Hydrogen vehicles will perhaps never be practical and are certainly not even close to being reasonable now.

Shame on you for taking away this technology from the thousands of people who would love to cut down on air pollution NOW by buying an electric car rather than driving polluting vehicles now because we have no choice. We then must wait 5-10 years for the Hydrogen vehicles from coming available (at over \$500,000 as we see them now). WE WANT TO CUT POLLUTION NOW.

Please don't damage the development of the electric car again!

Thank you for listening

Gilbert Hendren

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-17 13:09:35

No Duplicates.

**Comment 126 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ben  
Last Name: Knight  
Email Address: bknight@hra.com  
Affiliation: Honda

Subject: Honda proposal for transitional Enhanced AT-PZEV credit for NGVs  
Comment:

Honda proposal for natural gas vehicle qualification as Enhanced  
AT-PZEV for transitional period

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/547-honda\_proposal\_-\_ngv\_as\_enhanced\_at-pzev.pdf'

Original File Name: Honda Proposal - NGV as Enhanced AT-PZEV.pdf

Date and Time Comment Was Submitted: 2008-03-17 13:27:57

No Duplicates.

## **Comment 127 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Monica

Last Name: Ramone - CEO Synergy

Email Address: SynergyProds@yahoo.com

Affiliation: Media

Subject: Your constituents want you to Save the EV!

Comment:

Now is our chance to save electric cars and revive California's popular Zero Emissions Vehicle Program. In only two weeks you, the California Air Resources Board will vote on a proposal that would allow automakers to delay meaningful EV production for years. Proposed revisions will profoundly weaken the program again instead of propelling our country toward a pollution-free and petroleum-free future. WE EXPECT BETTER!

We support Plug In America who is spearheading the campaign to demonstrate widespread support for EVs. CARB needs to strengthen the Zero Emission Vehicle Program. Remember: in addition to California, ten states which together make up roughly half of the country's population follow California's auto policy. We have alerted Governor Arnold Schwarzenegger and now want to notify CARB Chair Mary Nichols. We must begin to deal with our addiction to oil and global warming now.

We urge the Governor and Chairwoman Nichols to SAVE THE ELECTRIC CAR.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-17 13:48:45

No Duplicates.



## **Comment 128 for ZEV 2008 (zev2008) - 45 Day.**

First Name: David

Last Name: Heacock

Email Address: davidjonh@earthlink.net

Affiliation:

Subject: California ZEV Regulation

Comment:

I'm writing to express my support of modifications to the regulation which encourages not only auto manufacturers to produce ZEVs but also to provide incentives to those individuals who convert gas vehicles to battery powered ZEVs. I am currently in that process and have a solar system on my residence to provide for charging so my conversion will be a real ZEV. As a senior I know of other seniors who need only short range ZEVs, mainly around town, and with the increasing cost of gasoline, the availability of a true ZEV, which is battery powered, would be of significant interest and financial assistance to those individuals who often can not afford the increase in gasoline costs.

I support incentives for hybrid vehicles which have electric only short range capacities, such as 20 miles or more. I also support creation of a separate requirement for plug-in hybrids which can replace the dirtiest vehicles in the CARB regulations, rather than the cleanest ZEVs. Some type of requirements for at least a limited number of ZEVs by auto manufacturers would be helpful. GM has already built, tested and produced the type of needed vehicle-it was called the EV1. It is time to ask them to start producing it again.

David Heacock

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-17 20:55:27

No Duplicates.

## **Comment 129 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Edward  
Last Name: Smallwood  
Email Address: dadlyedly@yahoo.com  
Affiliation:

Subject: Plug-in Hybrids make more sense  
Comment:

I understand that in a few days you will be looking at the commitments made to increase the number of ZEVs on the road in California in 2012. I urge you to make this number as high as possible, and at the same time require hybrid gas/electric vehicles to be plug-in rechargeable. Currently there are no production hybrid cars made by a major manufacturer that does not get all of its power from gasoline. None. In fact, the 2008 Toyota Prius gets the same gas mileage as a 1989 Geo Metro (46MPG combined.) I do not consider this a move forward. Currently, we as a nation are borrowing roughly \$1 Billion EACH DAY to buy oil. This is money we could be using for something else more important. California should be leading the country in this regard, and choosing to require ZEVs is the main way of doing this.  
Please stand firm in the commitment to increase ZEV sales in California.  
Thank you for your time.  
-Edward K. Smallwood  
<http://thepoliticaledly.blogspot.com/>

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-17 21:38:06

No Duplicates.

## **Comment 130 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Sean

Last Name: Parent

Email Address: designersean@hotmail.com

Affiliation:

Subject: Encourage The Electric Car

Comment:

Dear CARB,

The evidence is clear: we NEED to reduce greenhouse gas emissions. It is imperative that we take action now.

Electrified transportation (specifically electric cars) are a tremendously promising technology that WILL reduce greenhouse gas emissions with the added benefit of reducing vehicle pollution in cities.

Electric cars also provide benefit to citizens (saving money while not paying \$4 dollars a gallon for gasoline) and provide an even greater benefit to America (decreasing our reliance upon unstable Middle East oil imports)

It's clear, electric cars are a must!

So why is California Air Resources Board (CARB) considering a gigantic leap in the wrong direction? Why is CARB considering a reduction in the number of Zero Emission Vehicles (ZEVs) required of automakers by 90% in such a crucial time?

I am 24 years old, and I would like to ask you to consider the legacy you are preparing to leave to those in my generation (those from age 11 to 29). Electric vehicles have tremendous potential to help, but it will only be realized through action from those in position to demand it.

The manufacture of electric vehicles is not in the best interest of the profits of the automotive industry or the petroleum industry. This is why electric vehicles have ultimately failed widespread adoption over the last twenty years. Today, a switch to electric vehicles will happen only if an organized coalition demands it. CARB is an essential starting point.

I ask today that CARB be bold in it's EV declaration:

1. Require the full 25,000 ZEVs that automakers had promised for 2012-2014, and
2. Create a separate requirement for plug-in hybrids that lets them replace the dirtiest vehicles in CARB's regulations, rather than the cleanest ZEVs.

This is your future, my future, and the future of our children, grandchildren, great-grandchildren, and so on. Let's stand together for a greater future. Let's boldly demand a Return of the Electric Car.

Sincerely,  
Sean Parent

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 00:58:51

No Duplicates.

## **Comment 131 for ZEV 2008 (zev2008) - 45 Day.**

First Name: JoAnn

Last Name: Anglin

Email Address: joannpen@comcast.net

Affiliation: Sierra Club

Subject: Support zero-emission goals

Comment:

The auto makers, understandably, want the least requirements and profit in the short term. However, we as a state and as a society cannot afford to think only in terms of immediate monetary profit.

Our health concerns and our environment require that we do not renege on the commitment to increase the numbers of zero-emission vehicles [ZEV] on our road.

I ask please that the Air Resources Board live up to its name and its mission - both retain and strengthen its ZEV goals and the requirements on auto manufacturers.

As the most populous state in the union, California is logically and ethically the appropriate place to show leadership in this area which affects us, and all the states, and the planet.

Thank you.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 06:45:04

No Duplicates.

## **Comment 132 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Rick

Last Name: Durst

Email Address: k1yz7@gmail.com

Affiliation: Oregon Electric Vehicle Association

Subject: Please keep the Electric Car for consumers

Comment:

Dear Chairperson Nichols,

Although I live in Oregon, I grew up in California and my parents live in Walnut Creek.

California has the unique position to decide the options for consumers. This not only is a step for California, but for the whole nation in it's move to cut emmissions.

Please do not bend to the automanufacturers pressure.  
Do not reduce the ZEVs required of automakers.

Electric cars can be made as auto manufacturers have proven. 1998-2000 saw automakers producing electric cars and trucks, but when CARB changed the mandate back then, the manufacturers stopped.

GM has said stopping the production of the EV1 was one of their worst mistakes. The margin on sales of a FORD F-350 is much higher than the margin on a Ford Escort, so which vehicle do you think will be promoted. In 1982 I bought a Ford EXP. It got 35 mpg. In 2007, I looked to find an affordable car that got 35 MPG and couldn't find one. What happened in 25 years????

I have a 1985 Ford Escort that was converted to Electric. It gets 35-40 Miles per charge, and meets almost all of my driving needs. But the car is over 20 years old. I can't get weatherstripping to seal the doors and some parts are hard to come by. But, I charge it up by purchasing renewable energy, have no tune-ups or oil changes, no exhaust system, no water pump or belts to break, no radiator to overheat. It is much more environmentally friendly than any new car on the market today.

The US Bureau of Transportation shows that a typical round trip commute is:

29% of Americans- less than 10 miles a day.

51% of Americans- less than 20 miles a day.

68% of Americans- less than 30 miles a day.

78% are less than 40 miles a day.

If they could charge at work, 90% of Americans could use my converted ford Escort to commute to work if they could charge it at work.

My Ford Escort was converted in California when it was near the end of it's life at 75,000 miles. It has now gone over 155,000

miles with more than half on batteries. Please don't listen to the nay-sayers. Electric cars are a viable technology now.

But it is going to take mass production, like Henry Ford did for the Model-T, to get them into the hands of the consumer at an affordable price.

Please:

Don't change the requirement for ZEVs that automakers had promised for 2012-2014.

If you want to promote plug-in hybrids, set that as an additional requirement. But the plug in hybrid, still pollutes, needs emission controls, has hundreds of moving engine parts, requires specialized maintenance and parts, needs emissions testing, oil changes....etc.....

The country is looking to California to make a difference

Please provide consumers an affordable choice to buy Zero-Emission Vehicles (ZEVs) by keeping the current standards in place.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 07:16:11

No Duplicates.

## **Comment 133 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Noreen

Last Name: Weeden

Email Address: noreen@naturetrip.com

Affiliation:

Subject: Support zero emission vehicles

Comment:

The historic vote on March 27 may determine whether U.S. consumers get the choice to drive zero-emission vehicles soon or must wait another decade for that option.

With global warming threatening the planet and the cost of oil skyrocketing, we can't wait.

The Zero Emission Vehicle (ZEV) Program, which put more than 5,000 electric cars on the roads and avoided more than 1 million metric tons of carbon dioxide emissions (even when factoring in power plant emissions). In 2003, however, changes to the ZEV Program allowed electric cars to disappear as long as automakers promised to produce 25,000 ZEVs in 2012-2014 and 50,000 in 2015-2017. Now the automakers want out of that promise, and CARB will vote on a proposal to weaken the Program again.

California is the only state allowed under the Clean Air Act to set tougher limits on vehicle emissions than federal regulations. Other states can choose to follow California's standards, and at least 10 states hope to do so. The CARB vote has national implications. Support ZEVs.

Thank you

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 07:40:51

No Duplicates.



## **Comment 134 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Pat

Last Name: Rasmussen

Email Address: patr@crcwnet.com

Affiliation:

Subject: KEEP and INCREASE ZEVs

Comment:

The fact is smaller companies are producing electric cars that are running perfectly fine - yet the big auto makers complain that they can't do it. My friends in Bellingham, WA recently bought a Miles EV for \$18,400. It plugs into their house, they drive it every day. There is also a ZENN car and a ZIP car and others. The big auto makers are lying to you and to us. If the smaller companies can do it, they can to, they just don't want to. You let them almost kill the electric car, cars that people loved. Don't do it again! My grandchildren have a right to a life on a planet - and so do all the other creatures that live on this Earth. Global warming is killing the planet and my grandchildren's future. We know we have to change our ways.

Go to the Milesev.com website and call their Seattle, WA dealer Jim Johnson at 206-328-1750 if you want to learn more about a real electric car - not made by a lying big auto company. A REAL electric car that works!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 07:47:12

No Duplicates.

## **Comment 135 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Christina

Last Name: Smith

Email Address: smichrl@yahoo.com

Affiliation:

Subject: Please Support Higher Numbers of Zero-emission Vehicles

Comment:

With global warming threatening the planet and the cost of oil skyrocketing, we don't have time to wait. Please support higher numbers of zero-emission vehicles.

The California Air Resources Board (CARB) on March 27 will revise its Zero Emission Vehicle (ZEV) Program, which put more than 5,000 electric cars on the roads and avoided more than 1 million metric tons of carbon dioxide emissions (even when factoring in power plant emissions). In 2003, however, changes to the ZEV Program allowed electric cars to disappear as long as automakers promised to produce 25,000 ZEVs in 2012-2014 and 50,000 in 2015-2017. Now the automakers want out of that promise, and CARB will vote on a proposal to weaken the Program again.

California is the only state allowed under the Clean Air Act to set tougher limits on vehicle emissions than federal regulations. Other states can choose to follow California's standards, and at least 10 states hope to do so. The CARB vote has national implications. Please help clean our air and protect our environment.

Sincerely,

Christina Smith

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 07:57:14

No Duplicates.

## **Comment 136 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ernest

Last Name: Love

Email Address: leloves@comcast.net

Affiliation:

Subject: Please support additional electric cars

Comment:

To: Mary Nichols

Reducing greenhouse gas emissions 25% by 2020 is the very least that should be done. I intend to do my part in support of this goal by continuing to ride my bike, walk and take public transportation for 90% of my transportation needs.

Please make the GREATEST effort to reduce greenhouse gas emissions by requiring more electric cars and/or any ZEVS to be manufactured by automakers.

Automakers made manufacturing promises that should be kept. The time is NOW to insist by whatever means are in CARB's power to maximize automaker production of ZEVS.

Also, create requirements for the manufacturing of plug-in hybrids that places them at the top of the list to replace the "dirtiest vehicles" on CARB's list. Please, make decisions that enhances rather than stalls the proliferation of electric cars.

Thank you for your attention to this matter.

Sincerely,  
Ernie Love

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 08:03:42

No Duplicates.

## **Comment 137 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Kevin

Last Name: Gilot

Email Address: kevinemtid@sbcglobal.net

Affiliation:

Subject: ZEV 2008 Program

Comment:

CARB Members,

You folks have a very important job to do. Please DO the Right Thing and Keep this Program Alive and Well! Electric Vehicles are Sorely Needed if the US as a Whole is to rid ourselves of our dependence on Foreign Oil. But the Major Benefits are the REDUCTION in SMOG, i.e. Better AIR QUALITY for our Children and the Decrease in Fossil Fuel Usage. This will also lead to more Jobs in the US for the Vehicles to be produced here. It will give our Citizens a Great Sense of Pride knowing that they are Helping the Enviroment not just Using More of Mother Nature's Precious Resources. I myself drive a 2006 Honda Civic Hybrid. I do not have the option right now to purchase a electric vehicle because there are not any around here in New England! You Folks in California Always Seem to Start the Great Grass Roots Seeds of Change in this Country and I APPALUDE You for that! Please do this and the Rest of the COUNTRY WILL FOLLOW!

Thank You for your Efforts and Please Do the Right Thing!

Sincerely,

Kevin Gilot  
56 Cindy Ln.  
Mystic, CT 06355

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 08:22:05

No Duplicates.

## **Comment 138 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Michael  
Last Name: McLaughlin  
Email Address: briseboy@msn.com  
Affiliation: California resident

Subject: Strong increase in Zero Emission Vehicle requirements for automakers  
Comment:

Zero emissions vehicles have now become an extremely important tool for reducing smog and for combatting global warming.

I believe that a company based here in California is well on its way to mass-produce excellent vehicles, and such companies need subsidy.

Of course, without requirement, ZEVs will appear in sufficient quantities too late to prevent many catastrophic consequences to California and the world.

I regard the necessity for mandating an extremely large percentage of vehicles sold in Ca by EACH auto company, to be extreme. Thank you for adding a strong requirement mandating perhaps 500,000 ZEVs by 2012-2017.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 08:46:58

No Duplicates.

## **Comment 139 for ZEV 2008 (zev2008) - 45 Day.**

First Name: TIM

Last Name: MEEHAN

Email Address: MANTAPART@AOL.COM

Affiliation: CONCERNED AMERICAN

Subject: CARB PLANS TO REDUCE EV REQUIREMENTS IN CALIF.

Comment:

I WOULD LIKE TO CONTACT YOU TO VOICE MY CONCERNS OVER YOUR PLANS TO LOWER THE REQUIREMENTS FOR ELECTRIC VEHICLES IN CALIF. THOUGH I AM FROM OHIO, I FEEL THAT BOTH YOUR STATE AND OUR COUNTRY ARE DOING A GRAVE DISSERVICE TO THIS TECHNOLOGY BY GIVING UP ON THESE PREVIOUS GOALS! YES THEY ARE GOING TO BE DIFFICULT TO ACHIEVE, BUT THIS IS WHY IT IS SO IMPORTANT THAT WE NOT GIVE UP AND POSTPONE THIS DIRECTIVE. THE TECHNOLOGY IS THERE, AND WITH MORE WORK IN THE BATTERY FIELD THESE VEHICLES WILL BECOME EVEN MORE PRACTICAL ALTERNATIVES TO OUR INTERNAL COMBUSTION CARS.

GRANTED THEY WILL NOT COMPLETELY REPLACE THE REGULAR ICE CARS, WHICH HAVE THE ADVANTAGES OF LONGER RANGE AND POWER, BUT FOR THE GREAT MAJORITY OF COMMUTER AND LOCAL TRAFFIC WHERE REGULAR CARS ARE OVER-POWERED, OVER-POLLUTING AND OVER-USED, THE EV CARS ARE THE BEST AND SIMPLEST SOLUTION TO LOWERING BOTH POLLUTANTS AND OIL DEPENDENCY.

SO, AS A PERSON WHO HAS MADE HIS LIVING FOR 30YRS, DOING INTERNAL COMBUSTION ENGINES, I FULLY SUPPORT THE ORIGINAL GOAL YOU HAVE SET, AND THIS IS ALSO THE ONLY WAY TO MAKE IT A FINANCIAL INCENTIVE FOR THE LARGER AUTO MAKERS TO CONTINUE TO DEVELOP AND REFINE MORE ELECTRIC VEHICLES. SAYING THAT THE TECHNOLOGY ISN'T GOOD ENOUGH YET WOULD BE LIKE TELLING TH WRIGHT BROTHERS THAT THEIR PLANE PROBABLY WASNT VERY GOOD EITHER... WE NEED TO MAKE ALL THESE INITIAL STEPS, WHETHER THEY ARE THE BEST SOLUTION NOW OR NOT, THE ADVANCEMENT CAN ONLY CONTINUE WITH SUPPORT AND COOPERATION TO REACH ALL OUR ENERGY GOALS.

THOUGH THIS IS JUST A SMALL PIECE OF OUR ENERGY INDEPENDENCE PUZZLE, WE NEED TO USE IT AS AN INCENTIVE, NOT AN EXCUSE, FOR WHY WE CAN OR CANNOT IMPROVE BOTH OUR CLIMATE AND ENERGY CONSUMPTION. RESPECTFULLY YOURS,

TIM MEEHAN, PRES.  
WWW.MANTAPART.COM  
330-542-2698

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 09:48:08

No Duplicates.

## **Comment 140 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Benjamin

Last Name: Brown

Email Address: bbrown1of8@juno.com

Affiliation:

Subject: The Upcoming CARB standards update...

Comment:

March 18, 2008

To Whom It May Concern:

The upcoming CARB decision will play a more important role than the return on investment. It will affect the number of humans that will survive global change.

At least once before in Western civilization's history, profitable industries experienced a threat to their existence. Economists analyzing the paradigm shift before it occurred warned about a domino effect destroying civilization, the economy and society. This was the relinquishing of the slave trade by Europe.

As Americans we take pride in our societal legacy from Rome. Rome, developed civilization, democracy and accomplishments across several continents. Yet, they faltered and ultimately decayed from within. It wasn't the northern tribal people that destroyed imperial Rome. It was self-destruction. Ultimately their destruction was the result of disassociation from what it cost to provide Roman citizenship's benefits.

The CARB decision affects more than the survival of industry or a way of life. It is more than the collapse of a society, as we saw in the Katrina aftermath and in future climate change scenarios analysts inside and outside of the government tell us are coming. We, who contribute to a majority of gases altering our planet's balance, affect the fate of all mankind.

The rate of global change is a case for zero emission vehicles within 4 years using available technologies. We should do this not because its trendy or cheaper, but because there are not enough bullets, bombs, police or military to save our grandchildren in a civilization that will not remotely resemble the privileged one we live in today, if we don't do otherwise with this vote.

CARB has weakened its BEV stance several times at the automakers' proofs of industry collapse if the original standards were accepted. Europe had the luxury of changing its paradigm or not. On moral grounds it chose to end a commodity industry based on slavery and the continent did not collapse. Rome remained convinced of its own importance and self-protection. It put emphasis on political allegiances to the destruction of its civilization.

I know people who own battery only electric vehicles and are

extremely satisfied with them. It is a waste of time to discuss how most of them use wind and solar power to charge them or their commuting. What is crucial is moving CARB to set much higher standards than the original ones, requiring battery electric vehicles on the roads now rather than in incremental steps in a twilight future that will not exist for our children.

Respectfully,

Ben Brown

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 13:40:31

No Duplicates.



**Comment 141 for ZEV 2008 (zev2008) - 45 Day.**

First Name: KATHY

Last Name: SEAL

Email Address: KATHYSEAL@GMAIL.COM

Affiliation:

Subject: ZEV PROGRAM

Comment:

We need a much stronger ZEV program than the one being proposed. By 2020 We need more than 200 times the average of only 291,000 tons/year by 2017 that would be eliminated by the proposed change in the ZEV program.

PLEASE carry out the spirit of AB 32 by STRENGTHENING the ZEV program! California must lead the way to curb global warming, or catastrophe will result.

Thank you,

Kathy Seal

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 13:49:46

No Duplicates.

**Comment 142 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Al

Last Name: Lococo

Email Address: Non-web submitted comment

Affiliation:

Subject: CARB Zero Emissions Mandate, NuMh Battery Technology

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/704-zev0001.pdf'

Original File Name: zev0001.pdf

Date and Time Comment Was Submitted: 2008-03-18 14:00:19

No Duplicates.

## **Comment 143 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Brian

Last Name: Sipp

Email Address: brian\_sipp@yahoo.com

Affiliation: First Source Solar Systems

Subject: Needed: 100,000 zero-emission vehicles for sale in 2012-2014

Comment:

As a licensed California solar contractor and long time renewable energy advocate I strongly support California's goal to reduce greenhouse gas emissions by 174 million tons/year by 2020, which means cutting vehicle emissions by about 70 million tons/year. The California Air Resources Board is considering a plan on March 27 that will eliminate an average of only 291,000 tons/year by 2017 through its Zero Emission Vehicle Program. We need more than 200 times that progress by 2020! The plan also eliminates only a fifth of the smog-forming emissions from tailpipes that doom thousands of people to lung disease and death.

Please require automakers to offer 100,000 zero-emission vehicles for sale in 2012-2014 (less than 2% of the market) to get us moving in the right direction. That's fewer than 6,000 vehicles per year from each of the six largest car companies.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 14:11:40

No Duplicates.

## **Comment 144 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Devin

Last Name: Lussier

Email Address: idevin@gmail.com

Affiliation:

Subject: CARB should support EVs and Plug-in Hybrids

Comment:

As a proud citizen of this great state of California, I feel it is my duty to make my voice heard on this issue. All Californians deserve the right to clean air and the freedom to choose what kind of vehicles they purchase. Unfortunately, these two ideas tend to conflict with each other.

Today, however, we have the technology to make them work hand in hand. By adopting and supporting EVs and plug-in hybrids to fulfill the ZEV mandate and incentivizing plug-in vehicles based on the amount of liquid fuel they can displace, we can move California into the clean energy future that we all keep talking about.

But it's not just about clean energy and stopping air pollution. We can support our local economy by making it easier for California based companies like Tesla Motors, Phoenix Motorcars, or Miles Automotive to compete with the large automakers from Detroit and abroad. We can start to use cleaner energy produced in California by Californian companies instead of the dirty fossil fuels we import from dangerous nations in the middle east.

I am proud of my state and I am proud that California has done so much already to advance vehicle technology and become a leader in the fight for a cleaner environment. It is my hope that the Air Resources Board continues to work towards a better California for all, and I truly believe that EVs and plug-in hybrids can play a large part in achieving this goal.

Sincerely,

Devin Lussier

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 14:24:27

No Duplicates.

## **Comment 145 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Tim

Last Name: Sullivan

Email Address: tsullivan100@hotmail.com

Affiliation:

Subject: Zero Emission Vehicle (ZEV) Program

Comment:

To date, the Zero Emission Vehicle (ZEV) Program has put 5,000 electric cars on the road with a savings of more than 1 million metric tons of carbon dioxide emissions once power plant emissions are factored in. This savings and the health it represents for our planet is a tribute to the insight and forward thinking of the people who implemented this program.

When the California Air Resources Board (CARB) meets on March 27, you will again have an opportunity to build on what has already been done and further strengthen our resolve to live within the natural boundaries required for a sustainable future. Please act to maintain the standards set in 2003 that require automakers to produce 25,00 ZEV's in 2012-2014 and 50,000 in 2015-2017.

Global warming is a critical problem. If we are to maintain the environment within the boundaries we currently know and enjoy, we must act swiftly to stop polluting the air with more and more greenhouse gases. Maintaining the standards for ZEV's is a vital step for controlling our emissions.

Since California is free to impose stricter emission controls than the federal government, and because at least 10 states are keenly interested in following California in this matter, California has an opportunity to lead both the nation and the world towards a healthier and more sustainable lifestyle.

We owe it to every generation that follows us to pass on to them a healthy, intact environment.

Sincerely,  
Tim Sullivan

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 14:55:48

No Duplicates.

## **Comment 146 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Richmond

Last Name: Meyer

Email Address: richmeyer7@aol.com

Affiliation: Engineering Specialist Senior (software)

Subject: Incentives: yes to BEVs and PHEVs; no to FCVs

Comment:

Please continue and/or increase planned incentives for BEV (Battery Electric Vehicle) and PHEV (Plug-in Hybrid Electric Vehicle) production. Incentives should include minimum percentages of vehicles per year, tax credits for consumers, and expanding the HOV lane decal program (while congestion allows). Incentives should apply in this order of priority: BEVs, PHEVs, then strong (non-plug-in) hybrid vehicles.

Please discontinue incentives for FCV (Fuel Cell Vehicle) production. Production and distribution of fuel for the fuel cells is anticipated to be more costly than producing and distributing electricity through our existing infrastructure.

Battery technology for BEVs and PHEVs is increasing in capacity and life expectancy vs. cost, size and weight, and will likely improve at an accelerated rate with greater demand.

- Richmond Meyer  
Master of Engineering

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 15:10:51

No Duplicates.

## **Comment 147 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Fraser

Last Name: Smith

Email Address: fdms67@yahoo.com

Affiliation: ElectraDrive

Subject: Incentives for plug-in vehicles

Comment:

As a volunteer member of CalCars and CEO of ElectraDrive, I urge CARB to provide every available stimulus to the market adoption of plug-in vehicles. These vehicles contain an onboard energy store, such as a battery pack or ultracapacitor, that will not by itself contribute to atmospheric pollution. The electricity used to replenish this energy store can be provided largely from baseload generation, which is already scheduled for off-peak delivery, and which is also much easier to regulate (through your colleagues at the CPUC) than millions of small, mobile sources.

The most effective regulation would be one where plug-in vehicles are promoted at the expense of the most polluting vehicles on the road. It would not be necessary to make a distinction between pure electric vehicles, extended-range electric vehicles containing a small heat engine of some kind, or blended plug-in hybrid vehicles, because all plug-in vehicles contribute to the same goal of reduced automotive pollution.

Further, the technologies being developed for plug-in vehicles are becoming sufficiently adaptable to also be incorporated into the most egregious polluters already on our roads, allowing them to be reclaimed as clean vehicles, and thereby avoiding the resource costs associated with junking old vehicles and manufacturing new ones.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 15:22:05

No Duplicates.

## **Comment 148 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Terry  
Last Name: Ryder  
Email Address: rydterry@hotmail.com  
Affiliation:

Subject: zero emission vehicles  
Comment:

Don't listen to anything GM or the oil companies say like Mr. Lloyd did back in April of 2003. Too many people have health complications because of this. Too many Canadian and American soldiers are dead or wounded because of this. The price of energy is higher than would be otherwise because of this.

Please add a paragraph to your regulation that says:

'GM must release its patent on nickle-metal hydride batteries, (since they say this type of battery is no good), so that anyone who wishes may uae it'

Sincerely  
Terry Ryder

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 15:25:39

No Duplicates.



## **Comment 149 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Chris

Last Name: Neil

Email Address: cneil@csu.org

Affiliation:

Subject: Support for Plug-in Hybrids and ZEVs

Comment:

Please do not reduce the requirements for ZEVs. And please continue to support the development of plug-in hybrid vehicles.

Plug-ins offer the best hope for reducing emissions from the transportation sector. Plug-in hybrids in California would replace emissions on city streets with emissions from very clean natural gas burning combined cycle power plants.

Plug-in hybrids also offer the best opportunity for reducing the country's dependence on oil. With the price of oil going to \$110/bbl recently, plug-ins need to be commercialized and CARBs ZEV policies can have a big impact on this.

Thank you,

Chris Neil

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 15:30:55

No Duplicates.

## **Comment 150 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Michael

Last Name: Minich

Email Address: tascmail@verizon.net

Affiliation:

Subject: Build the EV, Power it any way you Must...[For Now]

Comment:

To bring EV technology to the fore front must happen. It is the only truly universal energy use medium that makes any sense. Any alternative medium must have an infrastructure built to be viable.

Even the Hydrogen power plants that CARB previously endorsed is built on an electric platform. It only makes sense to allow, encourage and endorse building the foundational technology that is the Electric Vehicle. Electric A/C, Steering, and Drive technologies must be built now. To wait will further delay the growth of these industries which MUST exist bringing down manufacturing and technology costs, to build truly economical, viable EV's. A Hybrid like the Chevrolet Volt is an excellent example of an EV technologically based vehicle. Current hybrid technologies are too rooted in existing ICE platforms and prohibit true EV technologies from being timely established. So what is the best way to encourage new technology? While mandating is one way to force EV technology, is it the best? It would seem some other initiative, tax credits, fuel/emission quota points similar to the Flexfuel quotas would be much preferred. Unless, of course, CARB believes that the manufacturers are truly stagnating the EV technology to take profits instead of promoting new, clean emission healthy technologies. Our dependence on fossil fuel, climbing prices, increasing costly complexity to control emissions, and frequent servicing to maintain them will end when alternative technologies are established. Why wait when we can begin to build the future, we have the ability and the need, all we need is the want to.

Thank you for your time.

Mike

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 16:00:46

No Duplicates.

## **Comment 151 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Joe  
Last Name: Galliani  
Email Address: mrjoe@mrjoe.com  
Affiliation:

Subject: Electric Cars for California - NOW  
Comment:

I understand that the CARB is considering reducing the number of zero emission vehicles that car makers will be required to produce in your latest regulations.

I want to register my strongest protest at any reduction.

Instead of reducing the number of zero emission vehicles you require the manufactures to produce, my family wants and needs you to greatly increase that number.

Unless you provide the necessary regulation requiring the automakers to give us the electric cars so many of us want they will not do so. They will continue to produce the cars that are contributing to global warming and harming my health and the health of my family and friends. They will not respond to the needs and desires of the market - they will just keep force feeding us the gasoline powered, greenhouse gas producing cars we are sick and tired of.

If the CARB reduces the number of ZEV cars required then CARB will be equally responsible - as far as I am concerned - as the auto makers are in doing exactly the wrong thing at this critical time for the future of our climate. It is clear automakers will not act responsibly on this issue unless you force them to. Please do not give them permission - through your reduction - to continue to deny us the latest renewable energy technology we want and need.

One sure way we can help reach our state's and nation's ambitious greenhouse gas reduction goals is to give us the viable purchase option of electric cars. When electric cars are recharged from solar panels, like my friends Dency Nelson and Paul Scott both do here in Southern California, that's the cleanest most renewable transportation possible. These two friends drive their electric cars every day. I want the same option. You have the power to give me that option or to crush that possibility.

So please require - at minimum - the total of 25,000 ZEVs that automakers had promised for 2012-2014 - then see if you can get them to triple that number.

And while you're doing the right thing on that subject, please also do the right thing for plug-in hybrids by making a separate requirement that lets plug-ins replace the dirtiest vehicles in your regulations, instead of the cleanest ZEVs - which makes no sense to anyone. That would make a lot more sense for the environment and do more good than harm.

My family and I do not feel like we are fairly represented by the actions Mary Nichols has taken thus far and we're very disappointed in her lack of leadership and the vision overall exhibited by the CARB - right when we need you to represent us most.

Please do everything in your power to give us the electric cars we want and need right away. Please put the interest and health of Californians ahead of the profits of automobile manufacturers.

Thanks for your time and consideration.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 16:30:22

No Duplicates.

## **Comment 152 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Edwin

Last Name: Perzinski

Email Address: garagesalemary@yahoo.com

Affiliation:

Subject: vote NO to electric vehicles!

Comment:

Oil companies have done a lot to improve America. How DARE we turn our backs on them now, at a point in history where we are about to win the ENTIRE middle east and have all the oil we want - much cheaper than electric and plug in hybrid vehicles can claim.

Electric power is not natural. It has to be made so it's not environmentally friendly. God gave us energy sources like oil, coal and natural gas that ARE natural. They are right there in the ground. There is nothing to "make" because it's already there.

Political manipulation to promote electric and plug in hybrid vehicles is a big mistake. As elected officials you should not be playing political games to suit your own agenda. You should be making laws that the PEOPLE want. And people work for corporations. It's how we pay our bills. So, yes, corporations DO have a say in how things should be managed.

Lastly, each time somebody buys an electric car or a plug in hybrid, a soldier somewhere in Iraq is feeling a direct slap to the face. Alternatives to oil are also like alternatives to heterosexual relationships and both are bad. When we buy an electric car we are really saying "soldiers, we don't need you". When we practice homosexuality and abortion in an effort to reduce populations we are saying "natural resources, we don't need you". This is a fatal error.

We should never try to manipulate procreation, natural selection, survival of the fittest just to "conserve resources". God gave us all we need. When we run out, we will be forced to use space exploration technology to look for a new planet - a new place to colonize. That is how nature really works.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-18 16:51:49

No Duplicates.

## **Comment 153 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Bob

Last Name: Sexton

Email Address: junkdrawer03@hotmail.com

Affiliation:

Subject: PLUG IN CARB.

Comment:

I've been on this planet for 46 years now. Thirty of those years have been in the automotive field. Now is our chance to change in what we use to power our cars. The public is much more aware and eager to move on to electric drive systems.

Back in '95 we were young and naive and thought that "bigger" was better. We've all grown a little and the reality of the world's future oil needs can't be eclipsed by what we have in our driveways. Please don't let this chance for change slip by us. We all know that California sets the pace of the rest of country. Blessing or curse? It doesn't matter! It's our responsibility none the less. I've worked for GM Dealers for the last 15 years and I've seen the disinterest in the Manufacturers and Dealers to embrace changes to their drive train systems in the past. The market is changing, customers are coming in to our Dealerships and asking for better than what we've built for the last one hundred years. Look at what's selling and what's not.

How far away is a \$6 gallon of gas going to be? What will we be willing to do to keep that from happening? Reducing? Rationing? War? Remember the early seventies and the lines to buy a few gallons of gas on odd and even days? Should we start that line again because we don't have the courage for change? Recycling that aluminum can or newspaper isn't enough anymore. We had to be taught to do those things and now is the time for the next step in our education of Reducing, Recycling and Reusing. Don't be naive, or worst yet, lazy and not hold ourselves up to the need of change. We have the technology and urgency to be successful at creating this change today. It's not worth the time debating if this was possible in 1995. That was a long time ago and in many ways we've created solutions to those short comings that are always point to.

I started out to say very few words and to feel a little better that I did my part for our planet today. Now I'm sitting here with tears of frustration and my head hurting from thinking how we took ten steps backwards in the past and might add a few more steps in the same direction today.

There are no hopeless situations; there are only people who have grown hopeless about them. Are we hopeless people?

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-19 00:28:46

No Duplicates.

## **Comment 154 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Thomas

Last Name: Wakefield

Email Address: wakefld@citcom.net

Affiliation:

Subject: Incentives for hybrid plug-ins and electric vehicles

Comment:

ZEV2008:

May we strongly urge you to provide significant incentives to auto manufacturers and potential buyers to encourage them to make the cars and encourage the public to buy these cars. Plug-in hybrids and ZEVS (all electric vehicles) are equally important and should be treated as such.

1. A \$5000 tax incentive should be provided for all purchasers of these cars for a 3 year time frame from the first car availability.

2. These cars should be provided with a special sticker for the rear window permitting the owner to ride in the carpool lane.

3. Shopping centers, sports venues, multi screen theatres, corporate, and government employee parking lots, and major retail outlets, such as, COSTCO, Sams Club, and Walmart should be required to provide convenient parking spaces with electrical outlets to charge these vehicles while the owner is shopping. The electricity should be provide by the local electric company free of charge for a period of at least 3 years while the program is being initiated. Corporations should then be encouraged to share the cost of the electricity for another designated period of time.

4. The manufacturers should provide a free 5-7 minute audio visual presentation on CD or DVD describing the benefits of plug-in hybrid or all electric ZEV vehicle. These DVDS should go to every new owner of these vehicles and should be provided to every prospective showroom buyer.

5. Auto dealers should share the cost of these DVDS with the manufacturers and send them by mail to a qualified dealer prospect list for viewing in the home, with an invitation to visit the showroom to receive a small gift and test drive or view these cars.

6. Dealers could also offer prospects a free one year lease of one of these cars for visiting the showroom and registering for a drawing.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-19 10:22:22

No Duplicates.



**Comment 155 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Chelsea

Last Name: Sexton

Email Address: evchels@hotmail.com

Affiliation:

Subject: Plug In America

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/833-pia-letter-gov-17mar08.pdf'

Original File Name: pia-letter-gov-17mar08.pdf

Date and Time Comment Was Submitted: 2008-03-19 12:13:18

No Duplicates.

**Comment 156 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Oliver

Last Name: Perry

Email Address: Non-web submitted comment

Affiliation:

Subject: Electechs

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/843-electechs0001.pdf'

Original File Name: electechs0001.pdf

Date and Time Comment Was Submitted: 2008-03-19 14:21:46

No Duplicates.

## **Comment 157 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Wilma

Last Name: Ralls

Email Address: wilmaralls@comcast.net

Affiliation:

Subject: Bettery Electric Vehicle Technology

Comment:

It is my understanding that the CARB staff have recommended to the Board that hydrogen technology, AGAIN, be treated with more credits and funding for automakers than battery electric vehicle technology. What this has lead to in the past is investment in hydrogen technology, which is less efficient, mostly is derived from fossil fuel s and, by its proponents, is labeled as "far off" in even small-scale implementation.

We need a solution NOW. Battery electric cars have been on the road and continue to serve thousands of drivers daily. We need to give automakers an incentive and push to invest in this PROVEN technology. ...

What battery electric vehicles (BEV) can address:

NATIONAL SECURITY:

Electric fuel is produced in the USA - no movement of or money to conflict-ridden regions with anti-American policies

ENVIRONMENT:

Reduction of greenhouse gasses. No tail pipe = no exhaust. US electricity is the only fuel source that keeps getting cleaner. In Ca, our electricity mix is muc h cleaner generally due to significant installations of wind! , solar, geothermal and hydro power. No need to drill in wildlife preserves - such as Alaska. Fueling infrastructure is already EVERYWHERE.

PUBLIC HEALTH:

Reduction in pollutants from million of cars in our communities = cleaner air for us to breathe and less asthma exacerbations. Remember, each internal combustion car is its own mini powerplant. We depend on each car owner to maintain their vehicle so it pollutes the least amount. Does this happen? How many gross polluters have you been behind?

HUMAN RIGHTS:

Many oil rich countries have regressive and deadly policies towards women, minorities an their own people in general. How much of our money goes to implementing these policies?

SOCIAL JUSTICE:

Many impoverished communities are located in urban areas and next to freeways. Think no idling vehicles and tailpipes. Also, with investment into this technology the prices for vehicles will decrease. Electric motors are hugely less complex than internal combustion motors. Maintenance (not including tires and wipers) can be VERY inexpensive. In 5.5 years, David and I have paid \$400 TOTAL for mechanical failures.

#### ECONOMIC:

We all know the US' auto companies are losing market share to other competitors. It was announced earlier this week that Honda just overtook Chrysler on the list of top 5 automakers for example. These requirements will push them to innovate and compete in a direction the market is going - especially given gas prices. Plug-in hybrids and battery electric technology are one piece of the sustainable and renewable energy equation this nation needs to move into an economic renaissance.

The affects of green house gasses on our environment are growing more deadly as every day that passes. We do not have much time to turn this around. The BEV is a vital piece to help in this fight for survival of the planet.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-19 20:25:20

No Duplicates.

## **Comment 158 for ZEV 2008 (zev2008) - 45 Day.**

First Name: John  
Last Name: Howland  
Email Address: jbhowl@aol.com  
Affiliation:

Subject: PHEV  
Comment:

I am a former motor vehicle professional. I was a Director of Fleet Operations initially for NJ Bell and later for other Bell Operating companies from 1978 to 1991. I served on the Mayor's Private Sector Task Force in the City of Philadelphia in 1992 and remodeled the city's motor vehicle operations from 1992-1995.

A bit of history which may be of interest to you: in 1910 electric taxicabs were operating every day in the city of New York. When I was a kid in the 40's bakery goods were delivered by electric trucks in NYC(Queens, actually). The technology could have advanced in the 100 years since electric vehicles were as common as hydrocarbon-driven vehicles. And it has, but not quite enough. Foreign oil is destroying our economy, polluting our air and funding our enemies. To be free of dependence on foreign oil we need a hybrid plug-in electric car that will do 45mph over a range of 150 miles on an overnight charge. That will sell to the American public, in my judgment. But conversion to electric has to start somewhere, even with vehicles that don't quite meet the criteria stated above. Corn-based ethanol is a fake, costing more energy to produce than it is worth. Ditto for hydrogen. Let's start with the battery technology as it exists today and work to improve it. Let's put PHEV's on the road now.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-20 07:43:33

No Duplicates.

**Comment 159 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Michael

Last Name: Stobbe

Email Address: Non-web submitted comment

Affiliation:

Subject: Revising California Zev Mandate

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/891-zev0002.pdf'

Original File Name: zev0002.pdf

Date and Time Comment Was Submitted: 2008-03-20 10:08:44

No Duplicates.

## **Comment 160 for ZEV 2008 (zev2008) - 45 Day.**

First Name: william  
Last Name: craven  
Email Address: william.craven@daimler.com  
Affiliation: Daimler AG

Subject: ZEV mandate  
Comment:

Testimony  
Of  
Mercedes-Benz  
Before the California Air Resources Board  
On Possible Amendments to the Zero-Emission Vehicle Program  
March 27th, 2008

Walter Puetz  
Director, Regulatory Affairs

Thank you, Madam Chairman, members of the board and ARB staff for the opportunity to testify before you decide on the issue of possible amendments to the Zero-Emission Vehicle Program.

My name is Walter Puetz, and I am Director of Regulatory Affairs for Mercedes-Benz. Over the years, Mercedes-Benz introduced many of the technological and safety features that have become common in modern vehicles. Mercedes-Benz is owned by Daimler AG. In the US Daimler brands also include Freightliner trucks, Orion and Thomas built bus and smart car. World wide Daimler employs over 300,000 people dedicated to the transportation industry.

Mercedes-Benz is researching, developing and commercializing a portfolio of technologies that will increase fuel efficiency and reduce tailpipe emissions ultimately to zero. One of these technologies that I would like to highlight today is hydrogen fuel cell vehicles.

We believe fuel cell vehicles have the best chance of giving customers what they want, 300 miles or greater range and fast refuelling. So far we have spent over one billion dollars on fuel cell vehicle development. Recently top management made another historic decision and that is to launch a small series of fuel cell vehicles in 2010. We are on a path that by 2015 a fuel cell vehicle produced in an annual volume of 100,000 or more can be equivalent in cost to a diesel hybrid vehicle. However, there is one critical component of the commercialization plan that we have little to no control over - The deployment of a hydrogen fuelling infrastructure in California.

Through the California Fuel Cell Vehicle Partnership we worked with ARB staff the auto industry and energy industry to identify the location of 40 - 50 fuelling stations that are needed for the next phase of commercialization of fuel cell vehicles in

California. Recent events including the closure of several existing fuelling stations and statements by energy companies that there is no interest in deploying new fuelling stations have us very, very concerned.

Mercedes understands and appreciates the attempt in the proposal of the revised ZEV mandate to be technology neutral and have the auto industry deciding with which technologies to use ZEV requirements be fulfilled.

Unfortunately, the proposal might be understood as a signal from CARB, fuel cell technology is not of interest any more.

Why?

The new proposal allows OEMs to achieving all Gold credits with Plug in Hybrids and BEVs. As a result of this, energy companies see higher risk in investing in a hydrogen infrastructure.

Therefore we kindly ask the Board:

- 1 As a clear signal of a CARB commitment, keep a certain number of FC vehicles mandatory in the revised ZEV regulation;
- 2 Increase the number of gold credits for fuel cell vehicles to reflect their current high and long-term consumer benefits.
- 3 Develop a plan that we can count on to ensure there is a hydrogen infrastructure in California.

We thank you for your time and we are open for further discussing this issue with you.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-20 10:22:03

No Duplicates.



**Comment 161 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Lyle

Last Name: Lindholm

Email Address: Non-web submitted comment

Affiliation:

Subject: Lyle Lindhold ZEV Comment

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/893-zev0003.pdf'

Original File Name: zev0003.pdf

Date and Time Comment Was Submitted: 2008-03-20 10:32:30

No Duplicates.

## Comment 162 for ZEV 2008 (zev2008) - 45 Day.

First Name: Dr. D. Mark

Last Name: Haines

Email Address: mark@serieshybrid.com

Affiliation: Freedom Formula Foundation

Subject: CARB decision discussed at GM-Volt townhall meeting at NYC Auto Show

Comment:

Dear Ms. Nichols,

I'm a member of the GM-Volt Nation interest group, and last night I attended the "GM Volt Nation Townhall Meeting" at the New York Auto Show where GM Vice Chairman for Product Development, Bob Lutz, stated that "the Chevy Volt will change the way America drives; like the Model T, it will revolutionize transportation in America". More details on our website at [www.freedomformula.org](http://www.freedomformula.org).

Ms Nichols, I'm afraid the CARB may enact regulations that do not encourage the type of vehicle (a gas-electric Plug-In Series Hybrid) represented by the Chevy Volt; WHICH DELIVERS A NET EFFECT OF 150 MILES PER GALLON when analyzed against the average American's driving patterns. Please make sure the CARB doesn't lose sight of their end goal, which is to reduce fuel consumption and therefore EVERY FORM OF POLLUTANT AND CONTAMINANT THAT COMES OUT OF AN EXHAUST PIPE.

So, let's cut to the core issue and encourage the CARB to get out of the technology game and instead address the BOTTOM LINE, which is the total fossil fuel impact of vehicles sold statewide by each manufacturer. Simply stated, something like:

"The total emissions of all cars you sell in CA (in terms of gallons of fuel consumed) must drop by 10% (compared to 2007) in 2012 and drop 5% per year after that, until we have a net reduction of 75%. You can use any technologies, combination of hybrids, smaller-lighter cars, all-electric, fuel-cell, hydrogen etc, only THE BOTTOM LINE counts.

It's not the TECHNOLOGY, it's the EFFICIENCY. I'd LOVE for Gov Schwarzeneger to adopt a twist on Bill Clinton's famous mantra, namely..."IT'S THE EFFICIENCY STUPID!" Can't you hear it; with the same accent and tempo as "I'll Be Back".

Physics dictates how much energy is required to accelerate a car from 0 to V miles/hour ( using the formula  $E = (1/2)mv^2$  ); so the real question that CARB should regulate is "HOW MUCH FUEL DID IT TAKE TO GET YOU TO V"? That figure (Energy / Amount of Fuel) is called EFFICIENCY; thus "It's The Efficiency Stupid"; and a series hybrid is 50% more efficient than a conventional car. So let's ask a simple question of the Board:

"Is it better for the state of California if by 2015 :

1. 20% of the cars reduce fuel consumption by 50% or
2. 1% of the cars reduce fuel consumption by 100%?

Answer: Option 1 is TEN TIMES BETTER !

So just focus on the BOTTOM LINE, keep the formulas simple and keep the end goal in sight by reducing fuel consumption and therefore EVERY pollutant associated with it. And most of all, keep the potential solutions affordable for a large percentage of California's citizens.

Yours Truly,

Dr. D. Mark Haines, Director  
Freedom Formula Foundation  
7777 N. Wickham Rd, Ste 12-118  
Suntree, FL 32940  
[www.freedomformula.org](http://www.freedomformula.org)  
(321)917-5323

Attachment: '[https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/895-lyledennis\\_withboblutz.jpg](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/895-lyledennis_withboblutz.jpg)'

Original File Name: LyleDennis\_withBobLutz.JPG

Date and Time Comment Was Submitted: 2008-03-20 11:07:23

No Duplicates.

## **Comment 163 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Sibylle

Last Name: Scholz

Email Address: sibyllescholz@gmail.com

Affiliation: Private Citizen

Subject: Transparency in your ZEV program

Comment:

Madam/Sir

I am writing to express my concern over the State of California's (SOC) policy regarding its ZEV program. To date, the SOC has denied the public access to automaker credit trading information. As an economist I find this behavior alarming, as it leads to less than optimal markets.

A trading market, such as that set up in the ZEV program, is designed to facilitate compliance in the most efficient manner possible. For some automakers, producing zero emission vehicles is easier, cheaper, or within their product plans. They can sell ZEV credits to those automakers whose ZEV production will take longer or for which it is more expensive to produce such vehicles.

However, the benefits of a trading market are gained only when both buyers and sellers have full information. Allowing trades to be kept confidential facilitates price fixing and collusion, hampering the efficient functioning of the market and distorting the pollution reduction goals of the ZEV program. Allowing confidential trading also prevents the public from overseeing and ensuring a non-fraudulent market. In order for the SOC to fully implement the ZEV program, it needs to make public all information on credits it currently holds confidential.

The importance of fully open trading markets in every credit trading system cannot be sufficiently stressed. This same Board is considering the creation of a pollution credit trading system for greenhouse gas emissions. Trading pollution credits is only possible in an open market such as we see at the Chicago Climate Exchange (CCX). Maintaining secrecy of trades not only limits market opportunities but can hurt business.

These principles are extremely important as the State moves toward adopting a pollution trading system for greenhouse gas emissions. Setting a state precedent for withholding credit trading information will hamper the effectiveness of a greenhouse trading market. The importance of open trading markets was recently signaled by the Chairman and CEO of the Chicago Climate Exchange, Dr. Richard L. Sandor: "We congratulate the pioneering initiative of the great State of California, the legislature and the people of California and know that implementing any emissions trading that may ensue will require price transparency and efficient, exchange-based systems for maximum success." I fully agree with Chairman Sandor's basic assumption regarding the need for transparency in such a system.

In summary, I urge you to disclose fully all information you have as it relates to emission credits you hold for automakers.

Respectfully,  
Sibylle Scholz, PhD  
Agricultural Economist

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-20 14:00:49

No Duplicates.

**Comment 164 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Charlton

Last Name: Jones

Email Address: Non-web submitted comment

Affiliation:

Subject: Dr. Charlton H. Jones

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/910-zev0001.pdf'

Original File Name: zev0001.pdf

Date and Time Comment Was Submitted: 2008-03-20 16:00:06

No Duplicates.

## **Comment 165 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Fred

Last Name: Neff

Email Address: OrdDepot@hotmail.com

Affiliation: Consumer's Union

Subject: Considerations for adoption of ZEV.

Comment:

I feel the following should be adopted as a minimum:

1. Strengthen the newly proposed "enhanced AT PZEV" category to require a minimum capability to drive in pure electric mode for 25 miles, not the proposed 10 miles, to accommodate the commuting range of a majority of drivers and make the vehicles more useful, profitable, and marketable.
2. Require automakers produce at least 10,000 electric or fuel cell vehicles total from 2012 to 2014, not the proposed 2,500 vehicles.
3. Do not allow the electric and fuel cell vehicles sold in other states to count towards the credits for the California requirement (known as the "travel provision"); placing vehicles in other states will not result in the necessary net improvements in California air quality. Each state's requirements should count only towards their own state -- a larger total number of vehicles across the country will result in improved economies of scale and lower prices for the vehicles, and will result in a larger air quality improvement countrywide.
4. Maintain the credit sunset for less efficient, lower power hybrids (known as Silver Type C); the current proposal asks to extend these credits indefinitely.
5. Do not increase the credits for Neighborhood Electric Vehicles (low speed vehicles similar to electric golf carts); they are not driven like full-function vehicles that are the focus of the ZEV Program.

And quite frankly I think our nations energy policy should be taken so seriously as to put on equal importance as war footing. This problem is already affecting our national security and is the root problem with the instability of the business markets at this time!

I can't emphasize enough how critical I feel subject is this and efforts should commence immediately!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-20 16:10:36

No Duplicates.



**Comment 166 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Adam

Last Name: Borelli

Email Address: aborelli@google.com

Affiliation: Google.org

Subject: Google.org's Proposed Changes to Staff ISOR, Zero Emissions Vehicle Program  
Comment:

Please see Google.org's position on the ZEV Program in the attached PDF.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/932-zev\_program\_--\_google.org\_response\_to\_isor.pdf'

Original File Name: ZEV Program -- Google.org Response to ISOR.pdf

Date and Time Comment Was Submitted: 2008-03-20 19:42:50

No Duplicates.

## **Comment 167 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Richard

Last Name: Dunn

Email Address: greenwheels@newmexico.com

Affiliation: GreenWheels Sustainable Transportation

Subject: Please Restore ZEVs

Comment:

In the mid-90s the CARB established modest yet pioneering ZEV standards for California, which resulted in establishment of Federal LSV standards and the appearance of several NEVs (Bombardier, Think, GEM) and roadworthy EVs (RAV4 E, EV1, Honda EV+, etc.).

The CARB's repeal of the ZEV standards arrested the development of the EV.

With global warming and peak oil, we now know we have no choice but to transform our vehicles to electricity, which is:

- 4x more efficient than an ICE vehicle
- 3x more efficient than a diesel or a hybrid
- half the GHGs (assuming coal-based generation)
- 5x less noise
- no tailpipe emissions

I am excited to hear you will be reconsidering ZEV standards. I hope you will strengthen them, but in no case should they be diluted.

Thank You,

Richard Dunn, President

GreenWheels Center for Sustainable Transportation

Los Alamos, New Mexico 87544

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-20 21:03:31

No Duplicates.

## **Comment 168 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Rodney

Last Name: Mills

Email Address: rodney\_mills@sbcglobal.net

Affiliation: Calcars

Subject: Notice of Public Hearing to Consider Adoption of Amendments to the 2008 Amendments to the

Comment:

This comment is in regards to agenda item 08-3-5.

I received an email from Felix Kramer of Calcars regarding the upcoming vote on the 27th of March, 2008, and it doesn't sound good. He seems to think that the California Air Resources Board is going to WEAKEN the California ZEV regulation (it is not clear to me at this time why he thinks this, but he apparently does). I am outraged. Even though I have never even a plug-in hybrid or electric vehicle, I am still outraged because I think electric vehicles hold a lot of promise for a variety of reasons. What I would like to know is why you would weaken this mandate regarding electric vehicles, especially in light of the movie, 'Who Killed The Electric Car'? I certainly hope that this vote does not turn out to be a disastrous one. I think that alternative energy (and I include electric vehicles in this category) have been at somewhat of a disadvantage historically, over the years, so I think they need as much support as we can give them. Thank you.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-21 02:00:40

No Duplicates.

## **Comment 169 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mark D

Last Name: Larsen

Email Address: yanquetino@casteyanqui.com

Affiliation: private citizen

Subject: Do NOT backpedal on the ZEV mandate!

Comment:

Mary Nichols, et. al.:

It is unconscionable that CARB now proposes to reduce the 25,000 ZEVs mandated by 2012 to a mere... 2,500, i.e., 1/10th the number originally required!

What are you thinking? You should INCREASE that number --NOT decrease it-- if you seriously want to meet the governor's goal of reducing greenhouse gas emissions 25% by 2020.

Do NOT let this happen on March 27. Please do the RIGHT THING for future generations and the planet in general!

Mark D Larsen

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-21 08:09:00

No Duplicates.

## **Comment 170 for ZEV 2008 (zev2008) - 45 Day.**

First Name: eddie

Last Name: eggers

Email Address: nodoors@comcast.net

Affiliation:

Subject: electric car

Comment:

we need these cars I started looking for one and I could not believe there are still none on the market you live in the most progressive state in the nation if you will not make these cars available what chance do I have in Indiana I did find one of the S10's GM made in 1997 on ebay and in the first two day's of bidding there was 22 bids and the price was over \$6,000 for a truck that had not been touched in two years but it most likely could be made to work again so that should show you there is a demand for these cars

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-21 08:25:19

No Duplicates.

## **Comment 171 for ZEV 2008 (zev2008) - 45 Day.**

First Name: David

Last Name: Baragona

Email Address: dave.baragona@gmail.com

Affiliation:

Subject: ZEV program

Comment:

I am an Arizona resident who is closely watching the ZEV program issues in California.

I am aware that California sets the standards for vehicle emissions that are later adopted by other states. In Arizona, our current emissions standards are based upon those set by California.

It is important for California to set the standard for Zero Emission Vehicles as well.

Because of this I strongly encourage you to continue with the ZEV program.

History has shown us that without government regulation, the automotive industry will continue to produce the same "high emission", "poor fuel economy" vehicles they are producing today.

The fuel economy of today's motor vehicles has shown no improvement over the last 30 years, since the last national regulation for fuel economy was put in place. In absence of government regulation, there simply was not enough incentive.

The electric cars of the 1990's were destroyed in the absence of government regulations for ZEV's. Once again, there simply was not enough incentive.

Now we are once again facing the issue of ZEV regulation.

I ask to you please continue to push for ZEV's in an effort to reduce green house gas enmissions, and reduce fuel consumption.

Without government regulation, ZEV's may once again become only a pipe dream.

The entire country is counting on California. Please do not fail us in our hour of need.

Thank You.

Sincerely,

David Baragona

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-21 09:40:48

No Duplicates.

## **Comment 172 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Elizabeth  
Last Name: Bayha  
Email Address: b\_bayha@yahoo.com  
Affiliation: California Taxpayer and Driver

Subject: Electric Cars  
Comment:

Dear CARB--  
With gas prices soaring, icebergs melting, oceans rising and changes in weather threatening our agricultural and economic might you have the power and the responsibility to do everything possible to reduce carbon emissions generated by drivers in California.

The simple, technologically feasible and right thing to do is to INCREASE the number of electric vehicles on the road in California and give California drivers more choices about the kind of cars they drive.

Consumers deserve the option to drive electric if they want to. The state should not get in the way of keeping tested and available technology out of the hands of drivers. The era of big oil is coming to an end. Wouldn't we be better off if we made the transition away from fossil fuel dependency sooner rather than later?

I urge you to expand the ZEV program -- give California drivers the option to choose what kind of vehicles they drive. Bring California to the forefront of environmental leadership on this issue. Working together, we can address one of the greatest threats to our global health, security and economic stability through technology that is here today, available, tested and ready to roll, if only you will allow it to happen.

Respectfully submitted,  
Elizabeth Bayha  
San Francisco

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-21 10:29:43

No Duplicates.



**Comment 173 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Karl-Heinz

Last Name: Ziwica

Email Address: karl-heinz.ziwica@bmwna.com

Affiliation:

Subject: BMW Group

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1024-bmw0001.pdf'

Original File Name: bmw0001.pdf

Date and Time Comment Was Submitted: 2008-03-21 13:22:40

No Duplicates.

## **Comment 174 for ZEV 2008 (zev2008) - 45 Day.**

First Name: John

Last Name: Hoverson

Email Address: jhknight56072@yahoo.com

Affiliation:

Subject: Zero emission is here now, but...

Comment:

I'm sure you already know this technology is here and available NOW... but it would be nice if Arnold would put some tax incentives forth.....

HYBRID TECHNOLOGIES, INC. (OTCBB: HYBR) PREPARES AS OIL PRICES HIT USD\$110 PER BARREL BY LAUNCHING NEW ALL ELECTRIC CITY CAR FOR UNDER US\$40,000

Hybrid Technologies Inc., A World Leader in All Electric Lithium Powered Products, Strives to Make Emission-Free Vehicles Affordable to Consumers.

Mooresville, NC - March 16, 2008 - Hybrid Technologies, Inc. (NASD OTCBB: HYBR - News) [www.hybridtechnologies.com](http://www.hybridtechnologies.com), emerging leaders in the development and marketing of lithium-powered products worldwide, is pleased to unveil the LiVTM WISE, their newest emission-free all electric city car at the New York International Auto Show March 19-31, 2008. Hybrid positions their new LiVTM WISE as the obvious alternative choice as gas prices reach \$4.00 a gallon in California.

[Click here to order your LiV™ WISE](#)

At a \$39,700 price point, Hybrid's LiV™ WISE City Car performs as well as a gasoline fueled vehicle with a driving range of 90-120 miles and speeds in excess of 75 mph. Not only will consumers save money in the long run, they can also make a substantial contribution in improving the environment

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-21 16:26:15

No Duplicates.

## **Comment 175 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Dr. Peter  
Last Name: Greer  
Email Address: prg@icm.com  
Affiliation:

Subject: Zero Emission Vehicle Regulation  
Comment:

March 21, 2008

Governor Arnold Schwarzenegger  
State Capitol Building  
Sacramento, CA 95814

Dear Governor Schwarzenegger,

As a former educator of forty years, and as a father of two children and grandfather of five - three girls and two boys - I worry about the environment we are leaving our children, with polluted air, vanishing resources, and the worrisome issue of climate change. Children are extremely observant and shrewd. They look to our example. I fear we have failed them.

As a conservative Republican who served in the Reagan Administration, I am outraged by the effects of our consumption of foreign oil on our national security and foreign policy. Further, I am frustrated that for all of its ambition and talent, my country has not had the foresight, courage, or political leadership to genuinely commit to the most viable alternatives to the petroleum we consume. The best way to get people to use less oil is to give them the opportunity to use less or none. Therefore, I am mystified as to why California Air Resources Board (CARB) would sacrifice 90 percent of the Zero-Emission Vehicles (ZEVs) committed by automakers in 2003 and settle for barely more than a handful a year in their new proposal.

Others have dramatically called for an "Apollo" project to create alternatives. After having the opportunity to drive an electric vehicle, I now realize an "Apollo" project is not necessary. What is desperately needed is commitment to what your state began in the 1990s. I all but beg you to direct CARB to put electric vehicles back on the road again by adopting the changes to the ZEV Program proposed by Plug-In America. California once passionately led the country in this "space." I implore you to renew that commitment by requiring automakers to build all of the ZEVs they have promised - and more. Ten other states now adopt CARB's decisions. Only if California leads will those of us in other areas of the country, and my children and grandchildren, have the opportunity to enjoy a foreign policy less driven by our oil consumption, enjoy a stronger national security, and enjoy a more pristine and healthy environment.

Aristotle had it right - he maintained that courage means having the right amount of fear for the situation faced and know what to

fear and what not to fear. How wonderful it would be if CARB showed by its decision that it has the right amount of fear about what is happening and will continue to happen to our country because of our dependence on oil, and more importantly, that CARB has the courage to intervene.

Respectfully,

Dr. Peter R. Greer  
1320 21st St. NW #101  
Washington, D.C. 20036

Cc: Mary Nichols, Ph.D.  
California Air Resources Board

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-21 19:51:21

No Duplicates.

## **Comment 176 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Michael

Last Name: Margulis

Email Address: mmargu@mcn.org

Affiliation: CA Smog Tech & Cruise Car Rep

Subject: Clean air cars. Save the ZEV

Comment:

Please don't modify/reduce the ZEV requirements of auto makers. With the rising price of gas, these cars will be in demand. Our country has the brains and technology to produce ZEVs people will love and want. California has been at the forefront of air pollution control for decades, the model for the entire world! Don't back down.

If you have representatives attending the Green California Summit, April 7-9 at the Sacramento Convention Center, I'm in booth 740 (Sun Motors, LLC). I'm a California Certified Small Business and I represent Cruise Car, the only company in the world today that has solar-assisted electric vehicles in mass production. These are LSV's; golf carts and transporters. Great for facility lots, civic centers, private and golf neighborhoods. I'm also an auto repair shop owner with a Gold Shield Smog Check Station. I have asthma and need clean air.

Thank you for your time.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-21 21:37:10

No Duplicates.

## **Comment 177 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Timothy

Last Name: Wells

Email Address: theseeker@gmail.com

Affiliation:

Subject: Please don't back down on ZEV mandates.

Comment:

Gas at the pump may still be fairly cheap here in the USA in comparison to the rest of the world, but the hidden costs of occupying foreign countries, and protecting that supply of gasoline makes the price much higher, both in money and human lives. The CARB is in a unique position to help instigate positive change, and should not water down any bill that would push forward the shift from an oil based economy.

The demand clearly exists for electric vehicles, and the technology is here right now to make them. Breakthroughs in creation and storage are not required, such as the case with hydrogen fuel cells. yes, battery technology and costs mean that for a given price EVs might only be good for 80-90% of the population, but battery technology will only advance more rapidly once the market is there with the higher demand.

It will also take time for the changeover to happen, so advancements in technology will only increase the usefulness of the vehicles produced, and appeal to ever larger segments. The use of exceedingly clean and reliable vehicles will have a negative impact on the automotive parts, labor, and emissions testing jobs market. However, as owners of EVs realize that if they produce their own electricity they can do better than driver cheaper, they can drive for free, new local jobs will be created in the clean energy markets like wind and solar power generation manufacture and installation.

Upsides of an electric automotive society:

- No automotive air pollution in city centers.
- Better quality of life due to higher air quality.
- Cleaner streams, water tables, rivers, and oceans due to less vehicle fluid runoff and fewer oil tankers to spill.
- Nighttime charging of EVs creates more even load for electricity producers, allowing more efficient operation.
- Increased co-generation of power to shore up the grid and offset increased electrical usage.
- No need to occupy foreign countries to secure resources.
- Catalyst for creation of better and cheaper clean alternative energy production technologies.

Downsides? of an electric automotive society:

- People are generally afraid of change. especially when vested interests spread a lot of FUD about it.
- New tax laws will need to be written eventually to supplant the gasoline taxes. (Probably assessed at registration time based on odometer readings.)

- Many well established companies will have to start from scratch creating new types of products, or be left in the dust as new startups eat their lunch.

Overall I'd say that the tremendous benefits to the environment, public health, foreign policy, and society in general far outweigh the potential annoyance of disrupting the status quo, and shifting profits from established industries to ones that are less harmful to their customers. If anything I'd say the regulations are too lax, not too stringent. People will buy any car you convince them that they need, and auto makers would have NO problem selling all of the electric vehicles they make if they actually advertised them and touted the benefits to the consumer, despite all of the drawbacks to their current associated parts supplier and oil industry partners.

Tim wells,  
About to start converting a car to an EV because none are made by the auto industry.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-23 02:05:51

No Duplicates.

## **Comment 178 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Joshua

Last Name: Pritt

Email Address: ramgarden@gmail.com

Affiliation: Concerned Citizen

Subject: We should already have electric cars on the road

Comment:

There is no reason why most if not all cars should be 100% electric. If you say people don't want them take a look at [www.teslamotors.com](http://www.teslamotors.com). There is an obvious want there. If you say it will take away thousands of jobs you will still need mechanics to work on them especially since it will be advanced technology. You can also put the people to work at the new solar power plants that should be installed all over the southwest. Please make sure 100% electric cars get put back on the road. Especially with gas prices nearing \$4 a gallon the car companies will not be able to keep up with demand and make plenty of profit - which is all they really seem to care about.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-23 07:58:11

No Duplicates.



## **Comment 179 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ron  
Last Name: Freund  
Email Address: chairman@eaaev.org  
Affiliation: Electric Auto Association

Subject: Proposed Modifications to the Zero Emissions Vehicle Mandate  
Comment:

To: California Air Resources Board  
Re: March 27 Hearing on Modifications to Zero Emissions Vehicle Regulation.

I currently own a dream machine, driving a Zero Emission Electric Vehicle that was made available by one automaker to meet the bold California Zero Emission Vehicle Regulation. Like many other electric vehicle drivers, my car is powered by electricity from my roof top solar array with no emissions at all. Unfortunately due to weakening of this regulation in 2003, this automotive option has not been available to California consumer's for several years.

The Air Resources Board should understand that the Zero Emissions Vehicle program can not be considered a research program. It was clearly defined as a production quota for automakers who wanted to continue to do business in the state. Technology has advanced significantly since 1990. The number of vehicles, as well as their size and power have undermined reductions in tailpipe emissions. With greater understanding of climate changing emissions we are moving now to reduce carbon dioxide emissions.

California is being watched by consumers worldwide. Our regulations are being emulated by numerous other states representing over half of the American population. The overwhelmingly positive experience of thousands of electric vehicle drivers over the last decade proves that the technology is mature and available. Given a chance, many more consumers could enjoy never having to go to the corner gas station to take a serious bite out of their earnings. The state would have an easier time attaining its AB32 goals as well.

Your staff proposal (the ISOR) unfortunately will only further delay progress in this vital area. I request that the board to direct its staff to modify the proposed regulatory changes to require the full 25,000 ZEVs which automakers had promised for 2012-2014. Further, create a separate requirement for plug-in hybrids that lets them replace the dirtiest vehicles in CARB's regulations, rather than the cleanest ZEVs.

All of Californian should have the choice that I had, to drive emission free.

Ron Freund  
Chairman  
Electric Auto Association

PO Box 639  
Los Altos, CA 94023-0639  
--

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-23 15:50:12

No Duplicates.

## **Comment 180 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Coby

Last Name: Skye

Email Address: coby@greens.org

Affiliation: Long Beach Greens

Subject: Bring Back the Zero Emissions Mandate

Comment:

In just a few days, the attached open letter to Governor Arnold Schwarzenegger and the California Air Resources Board was signed by over 80 registered, taxpaying voters. These attached signatures represent a tiny scratch of the surface of support by Californians for reinvigorating the Zero Emissions Vehicle mandate. Just two volunteers who spent a couple of hours at two local events in Long Beach, CA were able to gather all of these signatures, at one point running out of room on our clipboard. People want the auto manufacturers to give us the choice to plug in our vehicles, and unplug from the vicious cycle of oil and all the problems that come with it.

As the body charged with mitigating most of the air quality problems facing California, and also charged with implementing the most far reaching greenhouse gas emissions reduction regimen on earth, your Board has a significant responsibility. Please don't allow the same unbelievably wealthy and powerful corporations who scuttled the ZEV mandate of 1990 get away with continuing to poison our air. If we're going to make the type of cuts necessary to avoid global warming meltdown, we're going to need to drastically cut CO2 emissions from automobiles, and the only way that is going to happen is if regulators like your Board have the courage to implement meaningful and far-reaching regulations. Please don't shy away from reinstating a bold policy that was proven effective over a decade ago. We simply don't have another 10 years to delay. Your current constituents as well as future generations are counting on you.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1133-carb\_zev\_petition.pdf'

Original File Name: CARB\_ZEV\_Petition.pdf

Date and Time Comment Was Submitted: 2008-03-23 21:40:53

No Duplicates.

## **Comment 181 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Joseph  
Last Name: Henderson  
Email Address: dr.joe@rocketmail.com  
Affiliation:

Subject: Please save the BEV.  
Comment:

The Battery Electric Vehicle is the superior way of dealing with the energy/climate crises we are now entering.

Hydrogen is not the future.

Please consider renewing your previous support for the BEV, especially with the new battery technology coming out of Stanford University which gives us the promise of a BEV with a 500+ mile range at half the current battery weight.

BEVs combined with new solar panels offer the best combination of price and environmental protection for the daily commuter in the future.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 00:35:37

No Duplicates.

## **Comment 182 for ZEV 2008 (zev2008) - 45 Day.**

First Name: sigmund

Last Name: gronich

Email Address: sigmundgronich@aol.com

Affiliation:

Subject: ZEV Mandate Regulation for HFCVs in 2015 to 2017

Comment:

The current ZEV Mandate regulation does not recognize the importance of the 2015 to 2017 timeframe in being the critical period to go from technology development to pre-commercialization.

The current regulation retreats from prior commitments that should be increased to be considered as part of a commercialization step. It is proposed that the ZEV Mandate regulation with a higher number of vehicles needs to be conceived in conjunction with a federal demonstration program in order not to put the entire cash flow burden on industry. Also, the cost to achieve AB 32 goals for 2050 needs all low or zero carbon options. HFCVs when compared to these alternatives can have relaxed targets than were considered by the expert panel. The Type IV HFCV needs to be defined with a range of 300+ mile range and given a credit of 10.

Attachment: '[https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1150-arb\\_presentation\\_on\\_zev\\_mandate\\_regulations.ppt](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1150-arb_presentation_on_zev_mandate_regulations.ppt)'

Original File Name: ARB Presentation on ZEV Mandate Regulations.ppt

Date and Time Comment Was Submitted: 2008-03-24 09:38:26

No Duplicates.

**Comment 183 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Earl

Last Name: Killian

Email Address: carb@lists.killian.com

Affiliation: Electric Auto Association

Subject: ZEV program change comments

Comment:

Please see attached letter.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1155-carb20080327.doc'

Original File Name: CARB20080327.doc

Date and Time Comment Was Submitted: 2008-03-24 10:30:56

No Duplicates.

## **Comment 184 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Raymond

Last Name: Quan

Email Address: nakaquan@yahoo.com

Affiliation:

Subject: Promote ZEV's and PHEV's

Comment:

I urge you to promote the development, funding, and commercialization of ZEV's and PHEV's. With the recent announcements by GM and Toyota regarding the low probability of producing commercially viable hydrogen fuel cell vehicles, I believe that PHEV's will be THE way to go for oil independence and clean air.

I furthermore urge you to promote tax breaks for purchasers of PHEV conversions for existing hybrid vehicles as these pioneering citizens will lead the country and auto industry in adoption of the only real practical means of incorporating automotive electric drive technology. Just recall how the early purchasers of the first Toyota Prius's led the way toward hybrid technology becoming mainstream in the U.S. marketplace. The Prius has been the top selling car for 33 of the 52 months that it has been for sale! When automakers see how many PHEV conversions are being sold (with the help of tax breaks) they will similarly develop and produce these sorely needed vehicles.

Please to the right thing for our state and country.

Raymond Quan, MD  
San Marino, CA

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 11:15:56

No Duplicates.

## **Comment 185 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Shannon

Last Name: Monroe

Email Address: saladman007@gmail.com

Affiliation:

Subject: MSV

Comment:

Please allow the MSV to raise to 35 MPH.

I am ready to transition to an electric urban vehicle, however 25MPH is dangerously slow.

I am asking that MSV "definition" is included in the proposed ZEV regulations, so that further steps to include it in California

Vehicle Code and also get new class (MSV) established on a Federal level by NHTSA can be undertaken.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 14:30:25

41 Duplicates.



**Comment 186 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Stuart

Last Name: Johnson

Email Address: Non-web submitted comment

Affiliation:

Subject: Volkswagen Group of America

Comment:

Please see attached.

Attachment: '<https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1177-march08zevcomments-1.pdf>'

Original File Name: March08ZEVComments-1.pdf

Date and Time Comment Was Submitted: 2008-03-24 14:37:13

No Duplicates.

**Comment 187 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Bonnie

Last Name: Holmes-Gen

Email Address: Non-web submitted comment

Affiliation:

Subject: Energy Independence Now, American Lung Assoc., and Coalition for Clean Air  
Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1178-lung\_assoc.pdf'

Original File Name: lung assoc.pdf

Date and Time Comment Was Submitted: 2008-03-24 14:38:35

No Duplicates.

**Comment 188 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Harold

Last Name: Garabedian

Email Address: Non-web submitted comment

Affiliation:

Subject: State of Vermont- Dept. of Enviornmental Conservation

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1189-arb\_zev\_comments\_032408.pdf'

Original File Name: ARB ZEV Comments 032408.pdf

Date and Time Comment Was Submitted: 2008-03-24 15:20:55

No Duplicates.

## **Comment 189 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Harold  
Last Name: Jahn  
Email Address: haroldjahn@yahoo.com  
Affiliation: Clean Electric, Inc.

Subject: electric vehicle speed increase to 35 mph!  
Comment:

Dear members of the public hearing,

Our firm would likely introduce several thousand new 100% electric vehicles in 2008 and 2009 onto the street of California if this rule change from 25 to 35 mph is enacted.

Consider the economic and public disadvantage for California by remaining at a mere 25 mph.

Our firm and other firms will likely increase the presence and manufacturing capacity for 100% electric vehicles in other states.

This not only translates to less satisfied consumers in California looking for a real choice in their vehicle selection, but image how sad it would be if in a mere 5 years, 100,000 new electric vehicles are driving the streets of Washington and Montana, and only a few hundred are in California.

I remember five years ago, how american auto firms were making fun of the toyoto prius hybrid. The hundreds of thousands of workers in America being let go at american auto plants are no longer laughing.

We have an opportunity to provide true leadership in California. This mileage increase is one step in the right direction to making electric vehicles a real option for the citizens of California. And remain competitive!

Thank you,

Harold Jahn  
Director  
Clean Electric, Inc.  
cleanelectric.net

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 17:19:20

No Duplicates.



## **Comment 190 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mark

Last Name: Tavill

Email Address: mtavill@sbcglobal.net

Affiliation: resident consumer

Subject: Do NOT Weaken ZEV Mandate!

Comment:

I am writing to you as a very concerned CA resident. I have grave concern about the recently proposed changes to the California Zero Emissions Mandate as reflected in the staff's Initial Statement of Reasons (ISOR) dated February 8, 2008. If adopted as proposed, key provisions of the ISOR would needlessly weaken the intended purpose of the Zero Emissions Mandate, if not make a mockery of CARB itself.

On the very first page of the Initial Statement of Reasoning (ISOR), the staff wrote, "The Board adopted Resolution 07-18 directing CARB staff to return to the Board with proposed changes that address the state of technologies needed to meet the regulation. In directing that changes were needed, the Board affirmed its support for the program and emphasized that any changes should strengthen the overall objective of the program". The staff echoed this directive by asserting that "the proposed amendments are expected to maintain pressure on the commercialization of PURE ZEV technologies" (p. ii, top paragraph).

In order to fulfill the Board directive the staff's experts have evaluated various zero emission technologies and have concluded, "Given the current state of Battery technology staff doesn't anticipate that manufacturers will produce any battery EV prior to 2012" (p. 29, last paragraph).

I assure you that one CA-based company, Tesla Motors, is already in production of road-worthy fully certified battery powered ZEVs. I would like to emphasize that these cars are neither a "pipe dream" nor are they exotic one-of-a-kind creations. They've designed, developed and produced, without benefit of any state or federal aid, a remarkable and commercially viable battery powered zero emissions automobile. What's more, they're currently ramping up production that should reach an annual rate in excess of 1800 cars.

It seems clear that you have been misinformed about the availability of pure ZEVs and that the staff has completely erred in recommending that the Board substantially loosen for years to come, requirements that can in fact be met today.

What erroneous recommendations did the staff make?

Rather than recommend an increase in the minimum number of pure ZEV required in the years 2012-2014, the ISOR asks for 90% reduction from 25,000 to a mere 2,500 (p.26 section 4.1). Is this

in line with "maintaining the pressure on the commercialization of pure ZEV technologies"?

What's more, the ISOR proposes substitution of pure ZEVs with up to 90% Enhanced AT PZEVs in Phase III and substitution of up to 50% pure ZEVs with Enhanced AT PZEVs in Phase IV.

In their own words the staff proposal, if adopted, will decrease the number of pure ZEVs by 2/3 from 75,000 to 25,000 (page iii, last paragraph) between the years 2012 to 2017. How does one reconcile this with the Board's stated mission and directive to "strengthen the overall objective of the program"?

The ISOR is extremely concerned about the cost of compliance to automotive giants and foreign car makers, in their own words, "The proposed amendments to the ZEV program are projected by CARB staff to reduce the cost of compliance for automobile manufacturers." It's entirely illogical to grant a relief to the most prosperous auto makers such as BMW, Mercedes, and Volkswagen by proposing that these foreign car makers will be exempted from delivering pure ZEVs for a period of twelve years as they transition from intermediate volume manufacturer (IVM) to a large volume manufacturer (LVM). The ISOR reasons that it was warranted in order "to provide additional time to develop full ZEV technologies" (p. 22, the paragraph below table 3.9).

Unequivocally no automobile manufacturer should be granted a waiver, an exemption or a delay in fully complying with the pure ZEV requirements. The CARB requirements were not sprung on the automakers suddenly. All manufacturers knew of these requirements for years and should they really wanted to comply they certainly have much more financial and engineering resources than Tesla, yet Tesla has done it. Tesla dispels the notion that it can't be done. It's transparent that rather than take seriously CARB's requirements and work on a timely compliance the car makers have opted to rely on their considerable lobbying power.

Staff mistakenly has concluded, "Because the proposed amendments are anticipated to reduce costs faced by California businesses, they would have no adverse impact on the ability of California businesses to compete with businesses in other states" (p.35, section 6.8), where in fact the opposite is true. The staff proposals if enacted will have a severe negative impact on Tesla, the only car maker based in California, since having the ability to sell the accumulated ZEV rights mitigates in part some of the large costs incurred by the company in the development of a pure ZEV car. The staff recommendation is disturbing since in essence, not only it would substantially weaken the ZEV program, but it will also bestow a financial windfall on rich foreign auto makers and domestic giants while at once penalizing a California based ZEV manufacturer. This untenable proposition is not only illogical but in fact contravenes both the letter and the spirit of the State's own code (sections 11346.3 and 11346.5 of the government code).

With all the compelling evidence and facts provided, it is apparent that CARB must reject staff recommendation for granting any reduction, delays or reliefs in fully implementing the present requirements for pure ZEVs. In fact CARB is now in a position to accelerate the schedule and increase the number of pure ZEVs mandated.

Thank you.

MAT

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 17:20:15

No Duplicates.



## **Comment 191 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Tom

Last Name: Saxton

Email Address: tomsax@mac.com

Affiliation:

Subject: ZEV Vehicles are here now and need to be mandated into the market

Comment:

The big auto companies have no excuse for not developing vehicles which are more friendly to the environment.

Energy efficient vehicles are popular with consumers. Next time you go for a drive, just count how many times you see a Toyota Prius.

ZEV vehicles are technologically viable today. In response to previous CARB mandates, the big auto makers proved that ZEV vehicles can be developed and sold in quantity to consumers who want them. Witness the GM EV-1, the RAV-4 EV and the Chevy S-10 EV. The big auto companies produced these cars, sold them to a fraction of the consumers who wanted them and did everything in their power to hide and un-popularize them. This is well documented in the film "Who Killed the Electric Car." I personally know people who are still using the RAV4-EV and S-10 EV without any manufacturer support. These are awesome vehicles, loved by their owners and in high demand, with used vehicles selling for more than their original selling prices in many cases.

Recently Tesla Motors has started regular production of a fully safety-approved, highway-capable EV that has pre-booked orders approaching the numbers mandated by the watered-down CARB ISOR for the time period 2012-2014.

<http://www.teslamotors.com/>

That a tiny startup company can be ready to produce 1800+ ZEVs in 2009 proves that the big auto companies can easily produce far more in the 2012-2014 timeframe, even 25,000 seems like too low a number to really push the auto industry to do their part to improve air quality and reduce CO2 emissions.

My wife and I will be Tesla owner number 241. We have driven one of their late evaluation prototype vehicles, and I assure you this vehicle is quite real. We will gladly replace our Acura NSX-T with the Tesla Roadster, a high-end sports car that is cost competitive with gasoline-powered vehicles in the same performance category.

Tesla Motors will use the experience gained from producing this expensive, low-volume vehicle to design and produce their next vehicle in the much larger \$50,000 to \$70,000 sports sedan market in 2010. I expect they will have a ZEV in the \$30,000 price range shipping upwards of 300,000 vehicles by 2012.

Tesla Motors alone is likely to far exceed CARBs embarrassingly

small demands on the big auto makers. Now is the time to increase the pressure on the big auto makers rather than reduce the CARB mandate to less than what the market is clearly already demanding.

Tesla Motors is just the first of several promising companies to start regular production of ZEVs. Aptera, Miles Electric, and Phoenix Electric all have credible plans to produce safe, highway capable ZEVs in the 2009 to 2010 time frame.

<http://www.aptera.com/details.php>  
<http://www.milesev.com/>  
<http://www.phoenixmotorcars.com/>

Many other companies are working in ZEV market segment, as are many dedicated enthusiasts who are converting ICE vehicles to ZEV electric vehicles.

The California Air Resources Board has an opportunity to push the auto industry toward reasonable environmental progress. Please do so.

Tom Saxton

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 18:04:38

No Duplicates.

## Comment 192 for ZEV 2008 (zev2008) - 45 Day.

First Name: Allen  
Last Name: Chen  
Email Address: allen@greenemotor.com  
Affiliation:

Subject: Electric scooter, DOT approved, street legal  
Comment:

Date: 03-24-2008

Mr. Arnold Schwarzenegger  
Office of Governor  
States Capital Building  
Sacramento, CA 95814

Dear Governor Schwarzenegger:

I am a small business owner here in Santa Clara and have been involved with the computer peripheral business for the past 15 years. The recent development of high-oil prices and its negative impact on our economy is hurting my business and all the other small business in this region. The trend is bleak; three dollars a gallon just to get down the road and a brooding outlook that says that we'll feel the pain of four dollars before we Americans are willing to change our driving habits. Is there a way to soften the pinch? Yes! I think the solution is electric vehicles, because the electric power plants in US use coal (51%), nuclear (20%), renewable i.e. hydroelectric, wind, solar or tidal (9%), natural gas (17%) and oil (3%) to produce electricity. A majority of these fuel (80%) are non-oil based and under our control. Experts say we have enough coal to last another 250 years.

The lion's share of oil is used for transportation. To reduce our nation's addiction to oil," as mentioned in President Bush's State of the Union address is by using electric powered vehicles. While electric hybrid cars are a hot topic these days, none of the hybrid vehicles are plug-in vehicles (i.e. the electricity used by these vehicles are still generated by its gasoline engine not from a cheap non-petroleum source). I believe there is another easy and readily available solution; scooters that take advantage of cheap electricity and reduce the oil consumption. The solution is using plug-in electric scooters for the short distance/city speed applications.

The electric scooter has been a primary source of transportation in China and Taiwan for over 10 years. However the electric scooter in China is underpowered (600W) and suffers from short traveling range (30 miles). I have spent a year with my partner Dr. Chiang to improve this transportation tool to meet the needs of the US market. We would like to use this new transportation tool to relieve the demand for gasoline. The additional gasoline refining capacity can then be used to produce more diesel and jet fuel. The diesel fuel is used for trucks to deliver our freight and consumables and reduced jet fuel prices will help the economic

situation of the airlines, both of which must use oil based fuel whereas cars can more readily be shifted to alternate power systems.

This electric scooter is very environmentally friendly. Since it is powered 100% by electricity, it will bring immediate relief from noxious emissions that are so harmful. It also has many additional benefits including, a silent motor, rides as easily as a bicycle, can travel up to 30+ miles per hour and run 20 to 40 miles between charges. To fully charge this 1600W electric scooter at current electricity costs (\$0.08-0.10 per KW-Hour) is a whopping 14 cents. Not to mention the fact that the motor of this electric scooter is maintenance free. Just think of all the discarded motor oil from engines every few thousand miles. There is only a \$15 license plate fee for the whole life of the vehicle in the State of California. Plus there will be no tune up, smog test in the future. We also have the capability to convert vehicle, sedan and bus, from gasoline and electric. Why discard those school bus over 5 years just convert to electric bus, not only save the budget from government but also save the pollution and our environmental.

The electric scooter we have created is especially good for the short commutes, moving throughout a university campus or between buildings of large hospitals, companies. It is also good for fixed route traveling like postal delivery, newspaper delivery, and utility meter recoding. Of course you can take it camping, to the beach, supermarket runs, and have fun with your family;K. the list goes on and on.

I need your help to work with the local government to create a friendlier environment for electric scooter riders. Things like additional traffic lanes for electric scooters, free parking spaces in downtown and heavy shopping areas would encourage more riders.

In summary, even though this little electric scooter seems insignificant now, it is the first small step toward an oil-free ground transportation system independent of foreign influence, political ineptness, and special interest oil lobbying. With GM and Ford unable to see the future of transportation; it is now up to a few forward thinking American entrepreneurs who have started a cottage industry to promote these clean, green, gasoline free machines. We ask your political help to not stifle this progress. Electric vehicles are the future, and it must happen in our lifetimes!

Thank you

Allen Chen  
Owner  
Green Elec-Motor Inc.  
Tel : 408-739-9466  
www.jofforts.com  
www.greenemotor.com  
email : allen@greenemotor.com  
msn : jciusa@hotmail.com  
skype : jofforts

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1245-solarstation.bmp'

Original File Name: solarstation.bmp

Date and Time Comment Was Submitted: 2008-03-24 19:53:37

No Duplicates.

## **Comment 193 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Symmon

Last Name: Reese

Email Address: symmreese@hotmail.com

Affiliation:

Subject: The light in a friends smile

Comment:

Do you know the feeling of seeing the light shine from a friends smile?

I am a 44 year old husband and father of 2 children living in Orange County. I am a CPA, the assistant controller of an international corporation. I am not a tree hugging environmentalist or Hollywood celebrity looking for a cause.

It is my understanding CARB is voting on regulations impacting electric vehicles.

I am asking you to maintain, or increase, existing quotas on electric vehicles. Please also ease any unfair restraints on the manufacture of electric vehicles such as the 10 year battery life requirement.

A friend of my family passed away from cancer in December. On Saturday January 5th, the day of my friends funeral, the LA Times ran an article titled "Air Improves, But not Enough - study finds risk of cancer for regions residents still high". My friend was survived by a wife and three children. They relocated here from England on his work visa. They are now being deported.

At the end of this month you will be voting on regulations and discussing a hydrogen economy which does not exist. My 14 year old son will be saying goodbye to a real friend, traveling in a real plane, mourning the loss of his real father.

Regardless of your vote I have faith that truth will prevail. There are already more hybrids than Hummers on the road.

As I write this email I can picture my friend. I can see the light shine from his smile.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 21:03:52

No Duplicates.

## **Comment 194 for ZEV 2008 (zev2008) - 45 Day.**

First Name: abbey  
Last Name: chamberlain  
Email Address: abbey@abbeyphoto.com  
Affiliation:

Subject: vote for pollution-free cars  
Comment:

It is imperative that you vote to direct the auto makers to make more electric cars by 2017, not less! 2010 should be your goal.

Only with electric cars (not hybrids) will be reduce greenhouse gasses to a low enough level - fast enough - to make a difference in our planet's ability to support life.

Be bold. Do not cave-in to the auto makers' whining about profits. The 2 billion cost that is quoted for compliance, is only 200 million a year for 10 years. Divide that by the number of auto manufacturers, and it is a figure that is not unreasonable.

Our family will NOT but another car - any car- until we can buy an all electric car. We drive a 1992, 1991, and 2003. We are counting on being able to buy an ZEV in the next 3 years.

CARB must demand ZEV of the auto makers. They will not do it without our pressure. Be leaders, not whimps. Stop thinking with your purses. Electric IS viable. Many people are waiting for ZEVs. Most households have 2 or more cars. One car can certainly be the around-town errand and commuter car. The other can be for road-trips.

Don't expect hybris to be the solution. Carrying around all that extra weight (in addition to litium-ion battaries) is just plain senseless.

Please be leaders, be bold, and think about the impact your decision will have on future generations. No harm will come of mandating ZEV (sooner and in higher quantity).

Sincerely,  
Abbey Chamberlain  
James Pierce  
David Pierce  
Nigel Pierce  
Gladys Bird  
Aubyn Stahmer  
Carl Stahmer

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 21:08:51

No Duplicates.



## **Comment 195 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mark

Last Name: Hessing

Email Address: mark\_hessing@yahoo.com

Affiliation:

Subject: Yearning to use sun's energy

Comment:

Here in Barstow, we are bombarded, inundated, and for 5 months of the year, held hostage to energy. The sun's energy. We can harvest the energy easily - by sticking solar panels on our roofs. But there is little that we can power with the energy. PGE makes it difficult and expensive to use this free energy in the household.

If I could find an inexpensive electric car, I could fuel it with Barstow's overflowing solar energy. Please, CARB, do all you can to stimulate production of electric cars.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 21:10:13

No Duplicates.

## **Comment 196 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Lisa  
Last Name: Rosen  
Email Address: lrosen@eesolar.com  
Affiliation: Office Manager

Subject: Don't Eviscerate ZEV Mandate  
Comment:

1020 Marvista Ave  
Seal Beach, CA 90740  
March 24, 2008

RE: Retain Strong ZEV Mandate

To Mary Nichols and CARB Board members:

Please follow the resolution of the board of May 2007.  
Do not reduce the requirements for clean vehicles.

Requirements can be reduced if there is a necessity to do so, but once they are gone, restoration is a tedious process. Under both AB 32 and the ZEV mandate it would be better to allow your agency the possibility of effective regulation, rather than diminishing implementation. Research with fuel cells has not yet yielded any significant breakthroughs. Manufacturers should be allowed the option of producing the vehicles that will comply. If vehicle research is successful, but infrastructure questions arise, leaving the requirements in place with an alternative path to compliance strengthens the likelihood that both CARB and auto manufacturers will continue their efforts with the urgency of a serious deadline in place.

If Fuel Cell and Hydrogen Vehicles can not be brought to market, with the postponements previously allowed, the manufacturers should be allowed to instead produce (and sell) BEVs of the quality that past compliance produced.

Walter Puetz of Mercedes Benz wrote that his company anticipated that they could bring 100,000 fuel cell cars to market by 2015, at a cost equal to that of a diesel hybrid. If this is the case, it is one more argument for leaving the present regulations in place.

Postponing difficult decisions makes them even more difficult as time passes and options diminish.

The proposed silver-plus credit for plug in hybrids should not be implemented as recommended. It would not be effective in promoting CARB goals. A vehicle that can only run ten miles (at 18 mph) would not provide much in the way of clean air benefits. The vehicles for which this technology is proposed sound very unattractive to the drivers who care about vehicle efficiency and clean air. BEV technology ten years ago was better than this. Any vehicle in this category should be able to operate in Electric mode at full speed. There should also be a requirement that the

vehicle not be equipped with software that prevents any addition to the battery pack.

Manufacturers should not be given credit for any vehicle unless it is sold to the public.

The citizens of California should be given an accounting of the effectiveness of this program: the actual number and type of vehicles on still on the road.

The travel provision--giving credit for vehicles sold or placed in other states--is not a good idea.

Yours truly

Lisa Rosen

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 21:32:59

No Duplicates.

## **Comment 197 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Steven

Last Name: Pucci

Email Address: slpcarb@blackberry-hill.com

Affiliation:

Subject: No EVs prior to 2012

Comment:

As someone who has already paid the full price for a Tesla Roadster, I am quite angry that you have stated (p 29 of the ISOR) that you believe that manufacturers will not "produce any battery EVs prior to 2012." Tesla already has over 600 Roadster customers, is in active production, and will almost certainly deliver hundreds of cars by the end of 2009. These cars are full EVs by the definitions of the report.

Please do not give in to the "big business" interests who have so obviously formed the basis of the prior changes to the ZEV program. Just because Tesla Motors is a "small" car company does not mean it is less deserving of your consideration, particularly since it alone is a California company.

You have an opportunity now to make a difference in the next few years. Your charter is not to wait until the big car companies would make electric cars anyway; if that is your position then I fail to see how you are doing any good whatsoever and you might as well disband. Your aim should be to push them to do what Tesla is already doing, and far earlier than the dates proposed in the 2008 amendments.

Thanks for your consideration.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-24 21:33:41

No Duplicates.

## **Comment 198 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Andrew

Last Name: Simpson

Email Address: asimpson@teslamotors.com

Affiliation: Tesla Motors Inc.

Subject: Rebuttal to ZEV Expert Panel Report

Comment:

See attached. This document provides a rebuttal to the CARB ZEV Expert Panel's position on the market potential for lithium-ion full-performance battery electric vehicles (Li-Ion FPBEVs). Tesla Motors feels that the Expert Panel failed to acknowledge the near-term market potential for Li-Ion FPBEVs and the tremendous progress of emerging OEMs in bringing these vehicles to market. Tesla Motors believes that Li-Ion FPBEVs deserve more recognition as a legitimate ZEV technology with rapidly-growing mass-market potential.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1276-tesla\_rebuttal\_zev\_expert\_panel\_final.pdf'

Original File Name: Tesla\_rebuttal\_ZEV\_expert\_panel\_final.pdf

Date and Time Comment Was Submitted: 2008-03-25 00:09:24

No Duplicates.

## **Comment 199 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Steven

Last Name: Gysler

Email Address: s\_gysler@yahoo.com

Affiliation: California citizen

Subject: ZEV Mandate Weakening

Comment:

Please don't weaken the ZEV mandate. Several EV car companies are working on pure electric vehicles and will be able to comply. GM will be able to produce the VOLT by 2010. Several other well-known manufacturers have EVs in the pipeline.

According to your paper battery tech for autos is not yet available. This is not so. The new Lithion (Li-Ion) batteries are powerful and safe and battery companies are ramping up production.

If small private companies can meet the mandate, then so too, can the large corporations.

Here are a few URLs proving that EVs are viable now:

<http://www.venture.name/category/cocommuter-cars/>

<http://www.youtube.com/watch?v=I0FLk-p9scE&feature=related>

<http://www.greencarcongress.com/2008/03/subaru-will-eva.html>

<http://www.youtube.com/watch?v=euKMi3APHP8>

CNBC VIDEO:

<http://video.msn.com/video.aspx?mkt=en-us&vid=1edd1f29-d20e-46a0-b5e0-bbf7172ed5b0>

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-25 03:51:16

No Duplicates.

## **Comment 200 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Clinton

Last Name: Kennedy

Email Address: cdkenney@aol.com

Affiliation: myself

Subject: Amendments to the California Zero Emission Vehicle Regulation

Comment:

About five years ago CARB changed the zero emission vehicle rules based primarily based on auto industry complaints that it was too costly to achieve and that fuel cell vehicles would soon be available.

What has happened since?

- Fuel cell vehicles are still not on the market and there is no hope they will be any time soon or that they will be affordable even when they arrive.
- In particular, the US auto industry is being overtaken by foreign competitors at the cost of thousands of US jobs. GM had a technological edge in 2003 with their EV-1 but the change in CARB rules that year simply gave them permission to shoot themselves in the foot by abandoning their significant lead.
- The absence of ZEV's not only means more pollution but it also means more dependence on oil. Clearly gasoline has almost doubled in price since 2003 with no end in sight.

CARB should revise it's current rules to mandate high production levels of ZEV's and Plug-in Hybrids over the very short range for the California market. The costs may be high at first but would they really be higher than gasoline costs doubling?

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-25 04:56:40

No Duplicates.

## **Comment 201 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Douglas

Last Name: Korthof

Email Address: doug@seal-beach.org

Affiliation:

Subject: Stand fast. Support ZEV and clean air.

Comment:

These comments have been submitted on-line as part of the record for this meeting and for the current review of the ZEV mandate that has apparently been requested by the Auto Manufacturers' Alliance (AAM).

If you accede to AAM requests to let them out of their prior fuel cell production commitments, it can never be undone; there will be only further requests later on.

Mercedes Benz testimony for this meeting is that they will produce 100,000 fuel cell ZEV by 2015; if so, there is no need to lower standards.

Stand fast. No change is required; AAM can always return to proven, reliable battery EVs. If the Board allows them to give up on fuel cells now, their commitment in the future will only get weaker.

AAM has always asked to be released from their obligations, and so far always won. This consistent record of regulatory failure must be halted if our greenhouse gas reduction targets are to be met.

The tailpipe of each Internal Combustion vehicle extends to the oil refinery needed to make their fuel, and beyond, to the electric wellhead pumps, oil tankers, oil drilling platforms, foreign oil diplomacy and wars.

Each ZEV has the dual benefit of reducing stationary and mobile source pollution.

Moreover, if battery plug-in ZEV are for sale on the free market, the avoided cost of gasoline can finance each driver's solar rooftop system, enabling them to drive clean while helping stabilize the electric usage curve.

### **1. 2003 RELIANCE ON FUEL CELLS WAS A MISTAKE p. 3**

The 2000 Battery Assessment Workshop estimated the cost of the battery for an EV at no more than \$10,500. Compared to fuel cell vehicle cost of up to \$1 million, and the attendant cost of producing technical-grade hydrogen and specially-treated high-pressure tanks, that now seems a bargain.

AAM consistently ignored customer demand for battery EVs, and are



continuing to do so, particularly considering the recent oil price increases. Loss of a proven technology was a mistake then and now.

AAM must either produce the fuel cells it promised, according to the schedule they agreed to in 2003, or return to battery EV production.

No questionable breakthrough research is needed for battery EVs. Highly reliable Toyota RAV4-EV, HondaEV and GM EV1 were, and are, proven and successful only because ARB once enforced the ZEV mandate.

Giving up now would be a slippery slope of future surrender.

## 2. STAFF PROPOSAL WEAKENS ZEV MANDATE p. i

Staff was charged with not weakening the "overall objectives" of the (ZEV) program, which they are interpreting as retaining 2018 as the date that there will be a sudden return to ZEV production.

As this date approaches, the idea of a miraculous surge, a sudden conversion, becomes more and more unlikely. ARB has always acceded to AAM requests to rework ZEV; this proposal continues that tradition by lowering the number of ZEV produced. This idea must be rejected. Hold AAM to the agreement made in 2003: produce either fuel cells or battery EVs.

## 3. GRANT ZEV CREDIT ONLY FOR SALE, NOT LEASE p. 6

There were 43,726 ZEV gold credits granted for only 4,560 ZEV vehicles, of which 4,400 were battery EV "placements". The vast majority of ZEV were Battery EVs. However, almost all of them were taken off the road and crushed. This gives the appearance of bad faith on the part of AAM (other than Toyota, which did leave its RAV4-EV in the hands of the public and in fleets).

There must be no ZEV credit granted for leases that allow this sort of intransigence in the future. There has been no explanation for why AAM insisted on removing these clean air ZEV from the hands of the public, then destroying them, and no explanation for why GM and Honda could not follow the example of Toyota, selling them to willing buyers.

The crushing of almost all of the ZEV fleet reflects poorly AAM as well as ARB.

The staff report needs to be corrected to the actual number of Battery EV on the road, not the sleight-of-hand number produced and then crushed. Like the vehicles themselves, the credits should vanish and be crushed.

Henceforward, ZEV credit must only be granted for vehicle sales, complete change of ownership to willing buyers, so that this sort of misleading accounting does not recur.

## 4. STICK TO ORIGINAL (OR ALTERNATE) PATH

AAM promised, in 2003, to produce requisite numbers of ZEV according to the relaxed schedule of requirements agreed to by CARB at that time. The Auto Alliance had, and has still, the option of continuing to produce proven BEV, or, as they claimed was the easier path, produce smaller numbers of fuel cell

vehicles. There is no reason, particularly in view of the Mercedes Benz testimony about their planned production of fuel cells, to relax standards. Let them stick to their original commitments.

#### 5. FUEL CELLS ARE THE DEAD END

AAM and ARB staff argued in 2003 that Battery EVs were a dead-end, and that every dollar spent on BEV production took away from fuel cell research, which, they claimed, was the ultimate goal. Why pour money into short-term Battery EV production that they claimed was a dead end?

AAM and ARB gave up on what was then a proven technology, with a fan club and thousands of BEV on the streets in the hands of loving drivers, for what now seems, according to the Expert Panel, to be an unrealistic assumption.

After 5 years of the "Hydrogen Fuel Cell Research", AAM is requesting more time to pursue fuel cells. It may be that Fuel Cell research is the dead end, and the ultimate standard be Battery EVs. Sticking to the original agreement gives AAM more chances to demonstrate fuel cells, but if they fail, they can go back to selling proven Battery EVs.

#### 6. ZEV REGULATIONS NEED SIMPLIFICATION p. 15 et seq.

The Board ordered staff to simplify the ZEV regulations; instead, the proposed changes make them much more complicated.

The original ZEV mandate was simple: each zero-emission car is counted as one ZEV, and only one. By complicating the idea, the Board risks obscurantism and loss of credibility.

The Board must return with the people to the plain idea of "one vehicle, one ZEV", and reject the concepts of EAER, UFrCd, 4th order polynomial fits, and arcane grants of ZEV credit which have nothing to do with zero-pollution vehicles.

The public can understand that the Board is under pressure from very powerful vested interests; if you have to surrender to them, at least admit it, and stop using problematic terms such as "partial zero emission."

Make ZEV regulations simpler, you don't have to agree with staff proposals to complicate and mystify them further.

#### 7. Type F PHEV must do highway-speed in ZEV mode (p. 17)

Staff is requesting what amounts to replacement gold ZEV credit for "advanced componentry allowance" on a new "type F" PHEV that goes through the UDDS FTP-72 test cycle for light vehicles partially on "ZEV fuel," even if the vehicle's engine starts at times. The maximum speed attained momentarily on this cycle is less than 60 mph, and most driving is stop-and-start at about 18 mph.

<http://www.dieseln.net/standards/cycles/ftp72.html>

So the plug-in Prius and the GM dual-mode hybrid pickup truck would both get "ZEV credits" that displace real ZEV, even if the driver never plugs in the car at all, under the theory that it will "...encourage the deployment of higher battery capacity HEV

drive systems...[so that] costs can be shared...".

Staff report, p. 17 states these use "10 kW" of power, instead of talking about how much all-electric range they have (kWh). The proposal creates a loophole ZEV credit for HEV that cannot run in normal driving without an Internal Combustion (IC) engine. The electric motor is envisaged only an IC assist.

This already assumes defeat of the ZEV mandate; such vehicles can never be zero emission ZEV, they will always require gasoline for the daily grind.

NO gold ZEV credits, or replacement credits, should be granted for any vehicle that can't go at highway speed in all-electric mode. Such a vehicle, whether blended mode or serial hybrid, is primarily an oil-fired vehicle, and should be restricted to Silver or Bronze credits only.

A plug-in hybrid awarded ZEV credits must have a demonstrated range on ZEV fuel only of at least 40 miles at highway speed, capable of being augmented with add-on battery packs for those wishing to convert them to longer-range BEV. Features such as the built-in routine to stop add-on battery packs on the Toyota Prius should be prohibited and penalized.

ARB must make explicit the difference between plug-in serial hybrids such as the proposed GM VOLT, which are just an EV with a genset, and the so-called plug-in blended hybrids, like the plug-in Prius and the GM "dual mode" hybrid pickup. The latter cannot go at highway speed in EV-only mode, so they are dependent on gasoline. The full-function serial hybrid can drive oil-free if you go less than 40-, or 80-, or 160- miles, depending on the size of the battery.

This is, after all, the ZEV mandate, not the Internal Combustion mandate.

Instead of weakening the ZEV mandate, the Board can, and must, strengthen it in the recommended ways in order to meet our AB32 and AB1493 goals.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-25 08:10:44

No Duplicates.

## **Comment 202 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Michael  
Last Name: Thwaite  
Email Address: Michael@BurnSparks.com  
Affiliation:

Subject: Request for consideration  
Comment:

Dear sir, madam,

I am writing to you in regard to the adoption of amendments to the 2008 amendments to the California Zero Emissions Vehicle Regulation.

As a resident of New Jersey I look over to the west with some admiration; an admiration of the direct influence and governance that has been applied with respect to the environment of California.

It is therefore, with some disappointment that I read that the pressure being exerted on the auto-industry to work towards a better environment has once again been diminished.

What I find more troubling is that the statements being made by the staff of the C.A.R.B. don't appear to be accurate; if such inaccurate statements as "Given the current state of Battery technology staff doesn't anticipate that manufacturers will produce any battery EV prior to 2012" (p. 29, last paragraph) are released to the broader public when, companies such as Tesla Motors (in your own back-yard), SMART and others in Europe are producing exactly that today, the damage to the reputation of C.A.R.B. will leave the organisation in tatters with little left in the way of credibility.

I urge you to carefully consider and reject the staff recommendation for granting any reduction, delays or reliefs in fully implementing the present requirements for pure ZEVs.

Michael Thwaite  
141 Old Stirling Road  
Warren, NJ 07059

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-25 08:26:40

No Duplicates.

## **Comment 203 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Russell

Last Name: Sydney

Email Address: main@sustainableclub.org

Affiliation: Sustainable Transport Club

Subject: Ten Year Warranty on Batteries

Comment:

Dear Air Resources Board Members:

This is to spell out the concerns behind the ten-year battery warranty included in your ZEV regulations.

In working with the manufacturers of electric vehicles it is clear to me that producing batteries and providing warranties is done by battery companies not by the manufacturers of the vehicles. These battery companies are either new companies working on new technology or they are old companies working on updating and optimizing old technologies.

The old companies are working with technology that they normally can provide twelve-month full warranty replacement on those batteries. I have actually found one that gives a three-year replacement warranty and had trouble getting that honored because the battery supply was being limited to military uses in Iraq.

The new companies are just now getting the technology in place to provide batteries for initial testing. The only new technologies that have been fully field-tested are the nickel metal hydride batteries in the Toyota RAV 4. These are fading after six of seven years. The Lithium Ion batteries show great promise in the lab and in early testing but none has been field tested on a long-term basis. In point of fact very few short-term field tests have been completed successfully.

There is a lot of new technology involved with lithium ion batteries that are in very early stages of development. This includes both the chemistry and construction of the batteries as well as the technology for the battery management systems and for the chargers. Buying batteries alone does not work. They have to have all three parts to be an effective source of power for an electric vehicle.

Requiring that new vehicle manufacturers put their companies future on the line behind this new and experimental technology is unreasonable. The requirement means that the manufacturers are at the mercy of the companies that produce the batteries, the battery management systems and the chargers. Any of these companies could have technical flaws or management problems that means they go out of business. The battery management systems or the chargers may have problems that destroy the batteries and these may or may not be provided by the battery or the vehicle manufacturer. The vehicle manufacturers competition may buy out the battery producer. The battery producer could refuse to warranty the

batteries that are not managed by their own technology. All of this puts the burden on the vehicle manufacturer in an unreasonable way as they could be left holding the bag for the warranty on a product produced by another company.

Keeping the ten-year specification would require the manufacturer to increase prices substantially to cover this burdensome requirement. That in turn will reduce the demand for the vehicle and delay getting the ZEV solutions on the road.

The consumers can and will take on some of the burden for replacing batteries. Experienced electric vehicle owners recognize that batteries are a consumable supply and plan on replacing them. This is the maintenance that is required on an EV. It is required much less frequently than an oil change or a tune up. The expense for changing the pack is higher than that of an oil change - a recent estimate of \$1800 was given for a full speed EV including labor. That is still reasonable when you consider the energy savings and the savings on oil and brakes etc. that a good EV provides.

It may be appropriate to require a disclosure notice of the estimated maintenance cost to new consumers over the ten-year period so that they know what to expect.

If you want to push the technology then start by exceeding the industry standard of one year and require the current industry extreme high end of a four-year warranty. As the technology becomes proven and is developed in that time period then increase the requirement. Asking a new and developing industry to start out by giving a warranty that is more than five times the current average is just asking too much.

This information is based on four years of using electric vehicles, forty years of being a business manager as well as having experience as a professional mechanic and in managing small commercial vehicle fleets. It is also based on being part of network of people and manufacturers interested in alternative vehicles.

The ten-year requirement is going to delay the start of this market more than encourage it. If you want ZEVs on the road then let us know by adjusting this part of the regulations.

Appreciatively Yours

Russell Sydney  
Principle Organizer for The Sustainable Transport Club.  
[www.sustainableclub.org](http://www.sustainableclub.org)

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-25 10:13:30

No Duplicates.



**Comment 204 for ZEV 2008 (zev2008) - 45 Day.**

First Name: CYNTHIA

Last Name: VERDUGO-PERALTA

Email Address: VPCENERGY@AOL.COM

Affiliation: ASTHMAS & ALLERGY FOUNDATION OF AMERICA

Subject: ZEV CREDIT LEVEL REVISION

Comment:

PLEASE DISSEMINATE THE ATTACHED LETTER TO CHAIRMAN NICHOLS AND ALL  
THE OTHER CARB BOARD MEMBERS.

THANK YOU FOR YOUR ASSISTANCE IN THIS MATTER.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1338-  
zev\_revision\_brd\_ltr.doc'

Original File Name: ZEV REVISION BRD LTR.doc

Date and Time Comment Was Submitted: 2008-03-25 11:00:10

No Duplicates.



**Comment 205 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Sara

Last Name: Rudy

Email Address: srudy@ford.com

Affiliation: Ford Motor Company

Subject: 2008 Amendments to the California Zero Emission Vehicle Regulation

Comment:

Please find attached Ford Motor Company comments in response to the Notice of Public Hearing to consider adoption of the 2008 Amendments to the California Zero Emission Vehicle Regulation.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1349-ford\_comments\_2008\_03\_25.pdf'

Original File Name: Ford comments 2008\_03\_25.pdf

Date and Time Comment Was Submitted: 2008-03-25 11:43:49

No Duplicates.

## **Comment 206 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Lou  
Last Name: MacMillan  
Email Address: c1937@znet.com  
Affiliation:

Subject: ZEV mandate  
Comment:

I understand CARB is again considering a Zero Emissions Vehicle (ZEV) mandate.

After the mid 1970s "Oil Crunch", I built an electric car. The electric part of the car worked fine but I'm not a "Sedan" person. In 1982, I built an electric wagon. It had a top speed of 70 MPH and Max range of 75 Miles. I immediately started driving it full time. I was paying approximately \$100 a month on my gas credit card on my 20 MPG Suburban style truck. (presently called SUVs.) Gas was around 76 cents per gallon.

The month after I started driving the EV my electric bill went from \$25 - \$30. My gas card dropped to \$10. This continued for the next several months. Another thing I noticed about the EV was that there was no oil to change, no mufflers to buy no tune ups. About every 6 months I'd check the battery water. At 90,000 miles the series motor lost about half power. With a screwdriver, 20 minutes and \$60 worth of brushes, the motor was "rebuilt".

It wasn't trouble free. The door and lift gate hinges wore out, the seat belt latch wore out, the door and steering wheel locks wore out after many years of delivery service. The electric motor still works.

In the 1990s, California Air Resources Board (CARB) established the Zero Emissions Vehicle (ZEV) mandate. The ZEV goals were once 2% in 1998, 3% in 2001, and 10% in 2003. I thought to myself, "That's not very stringent, but when people notice how inexpensive the EVs are to operate, the Internal Combustion Vehicles (ICVs) will quickly become history."

When the first batch of new EVs came out in the 1990s, I tried to buy a "Pregnant" Honda Civic. Then a GM Impact (later called an EV1). The dealers refused to sell them. When I got to Toyota, the Rav4-EVs were all gone.

Rather than complying with the (ZEV) mandate, The Auto manufacturers sued. I won't rehash the documentary, Who killed the Electric Car.

Alternatives to foreign petroleum have been proposed. Some quite ludicrous. Briefly, burning vegetable and animal oil will relieve the dependency on foreign oil but produce CO2. The worst being corn oil that takes 1.3 gallons of petroleum to produce one gallon of ethanol. A gallon of Ethanol produces less power than a gallon of petroleum so it takes around 1.4 gallons more. It also would require 6 Midwest states to devote their entire acreage to growing only ethanol corn, no food crops. Photo Voltaic Panels (PVs) covering Alameda County would provide the same energy. It would be much more efficient to burn switch grass and waste

vegetation (leaves, stalks) in a stationary power plant than to refine it to be used as motor fuel.

Hybrids are a great idea for municipal buses and delivery vehicles but EVs would cost and pollute less.

Hydrogen has to be extracted from other elements before it can be burned. It takes 4 times the energy for this extraction than if batteries were charged and used to propel a vehicle. Hydrogen fuel cell vehicle will go a maximum of 100 miles per charge. A bit less than battery EVs. Hydrogen and Natural gas vehicles require hours for refueling as compressing gas causes heat that would ignite if fueled too quickly. One accident would make the Hindenburg look like a marshmallow roast.

There has been an argument against EVs that they don't go very far per charge and take too long to refuel. Curtis Publishers (Saturday Evening Post) of Philadelphia, used CT drayage trucks till they closed their doors. They were driven 24/6 as their drivers got Sunday off. When they pulled into the dock for a load of magazines, a new battery pack was slide under the bed. (See photos.) The first GM Impact had a T shaped replaceable battery pack. It was deleted from the lease fleet and replaced with an overly expensive "paddle". On the Phoenix race track, the Snow White vehicle had it's battery pack swapped in under 10 seconds when it made pit stops. With different battery technologies available, this would quickly determine which one was least expensive, longest lasting, and preferred. There is no excuse to wait for advanced battery technology.

CT 3 in a row Q.jpg

Battery swapping has been around for a while. Look at your Makita Drill. The batteries were located in wooden boxes between the wheels. With doors open, the used pack would roll out one side as the fresh pack would roll in the other. Would you stand at a gas station waiting for fuel to be distilled? Why wait for the battery to charge?

The energy for all these EVs could come from PVs. Nuclear has a waste disposal problem. Hydro electric has extra capacity at night when EVs usually charge. With Battery exchange stations, there would be no more power surges as the batteries waiting for vehicles could store energy and be used to power the grid when emergency called for it. This is a great deal for California.

Some say that EVs won't reach the necessary speed to travel on public roads. The Iowa Light rail electric trolleys routinely traveled about 90 MPH. When they were replaced with gas-electric and diesel buses in the late 1940s, the buses had a top speed of 50 MPH. Historically, the fastest steam locomotive traveled 126 MPH. The fastest Diesel electric at 198 MPH. The TGV electric train at 320 MPH. The Mag-Levs are designed for speeds that compete with the airlines.

The Zero Emissions Vehicle (ZEV) mandate should be installed retroactively. Thus requiring 20% ZEVs immediately. The SAE should require all EVs to use the same size interchangeable battery pack. One pack for small cars and large trucks. Two packs for large cars and SUVs. More for semi trucks.

These packs should contain all the battery management systems necessary.

If the oil executives whine about the bottom line, Just remember that they just made record profits for the last 7 years at our expense. If the Automotive Manufacturers association say they cost more than Petroleum vehicles. They're wrong. They could afford to scrap all the EVs they made before. If they try

to bribe you again, prosecute.

The DMV needs to change their law that prohibit EVs because they don't have air pollution control devices on them.

Electric vehicles are less expensive to build and operate. Ask San Francisco Muni that operates Diesel and Trolley buses in their fleet.

Thank you, Lou

Attachment: '[https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1352-ct\\_3\\_in\\_a\\_row\\_q.jpg](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1352-ct_3_in_a_row_q.jpg)'

Original File Name: CT 3 in a row Q.jpg

Date and Time Comment Was Submitted: 2008-03-25 11:56:52

No Duplicates.

## **Comment 207 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Clifford  
Last Name: Rassweiler  
Email Address: montreal73@hotmail.com  
Affiliation: ProEV Inc.

Subject: Required more ZEV's, not less  
Comment:

I drive and race a car powered by Kokam Lithium Polymer batteries.  
It has a street range of 180 miles. It regularly beats gas cars in  
Sports Car Club of America races.

It is not rocket science. Any race shop can build a reasonable EV.  
Let's get started!

Clifford Rassweiler  
Driver  
ProEV's Kokam battery powered Electric Imp  
www.ProEV.com

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1355-car500jpg.jpg'

Original File Name: car500jpg.jpg

Date and Time Comment Was Submitted: 2008-03-25 12:43:00

No Duplicates.

**Comment 208 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Skip

Last Name: Smalenberger

Email Address: skipcity@tampabay.rr.com

Affiliation:

Subject: Proposed reduction in ZEV production thresholds

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1356-zev\_skip.pdf'

Original File Name: ZEV SKIP.pdf

Date and Time Comment Was Submitted: 2008-03-25 12:51:38

No Duplicates.

**Comment 209 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mark

Last Name: Tavill

Email Address: mtavill@sbcglobal.net

Affiliation:

Subject: Don't Weaken ZEV Mandate!

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1361-mark\_t.pdf'

Original File Name: Mark t.pdf

Date and Time Comment Was Submitted: 2008-03-25 13:02:17

No Duplicates.

**Comment 210 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Deborah  
Last Name: Bakker  
Email Address: dbakker@hatci.com  
Affiliation:

Subject: Hyundai ZEV Comments  
Comment:

Dear Mr. Goldstene, Ms. Nichols, Board Members, and ARB staff:

Please see the attached document for comments regarding the 2008 proposed amendments to the ZEV program.

Regards.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1391-2008\_march\_25\_hyundai\_zev\_comments.pdf'

Original File Name: 2008 March 25 Hyundai ZEV comments.pdf

Date and Time Comment Was Submitted: 2008-03-25 14:33:22

No Duplicates.



## **Comment 211 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Gil

Last Name: Soref

Email Address: gsoref@accesstechgroup.com

Affiliation:

Subject: ZEV Mandate

Comment:

I am writing to you in regards to the proposed changes to the ZEV mandate. Rather than weaken the mandate, CARB should strengthen it. The battery technology is sufficiently advanced at this present time so that it is not onerous for car manufacturers to make ZEV cars as proven by Tesla Motors. If a relatively new car company like Tesla Motors is able to accomplish this, then established car manufacturers like GM and Daimler should have no problem. They just need the right incentive.

Ten years ago GM made the EV1 and it was able to travel over 70 miles on a battery charge. Since then battery technology have advanced substantially. An EV1 with new lithium or Nickel Metal Hydride batteries which are currently used by Tesla and Toyota would certainly increase the range of such a car if the car manufacturers deemed it necessary to produce.

I and many others can appreciate the lobbying power of the large car companies. Times like this determine 'what we are made of'. Do we have the moral strength to resist their lobbyists? We must ask ourselves how much we really care about the environment? Do we really care that our reliance on foreign oil is financing the people who carried out the 911 attacks? Do we really care that our reliance on foreign oil is financing the people that killed over 4000 of our soldiers in Iraq?

This is a chance to do something about the above mentioned issues that can have a great impact.

Wishing you moral strength and courage.

Gil Soref  
Concerned Citizen

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-25 15:10:06

No Duplicates.

## **Comment 212 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Randolph  
Last Name: Sun  
Email Address: drsun@mchsi.com  
Affiliation:

Subject: Please Consider Revising the ZEV Mandate  
Comment:

Hello Members of the California Air Resources Board,

This Thursday marks a time in the history of California that may change the future of our lives. The ZEV mandate to require auto manufacturers to provide the public with vehicles that are powered by renewable and non-polluting fuels is critically important for our generation and generations to come. Currently, throughout the United States we have an electric infrastructure that is powered by solar, hydroelectric, coal and nuclear sources of electricity. This does not even touch salt water conversion to HHO or what we call Browns Gas. With this gas a generator could be run in a very bio-friendly fuel that is non-polluting as the byproduct is just water.

With electric powered vehicles present in major cities evidenced by municipal transportation such as BART, electric buses and trains, the use of electricity in transportation has proven successful. Taken to a personal level, a personal vehicle such as the Tesla Roadster, the Phoenix pickup truck and others, one can see how efficient and environmentally friendly these vehicles can be.

Global warming is real and nations worldwide are seeing the disastrous results of man's carbon dioxide emissions are playing on our home called Earth. How are my children and your children going to survive? Auto manufacturers are thinking of their own pocketbooks and protecting their own bank accounts and telling you it will cost them billions. If you consider the multi-billions of dollars profits oil companies are making in one quarter, it puts the burden that auto manufacturers have to come up with a small, tiny piece of the pie. Would you not say that auto manufacturers are supporting the oil companies via their production of vehicles that use petroleum based fuels?

It is time we look beyond the dollars and look toward the betterment for our world. As man, we have caused considerable damage to our environment. Animals and species of life other than man have worked closely with nature but unfortunately as humans we have pretty much destroyed much of what we set foot on. Because we are biological beings and depend on the same resources as the rest of the life that exists in this world, let us work together and let California be an example in mandating vehicles that will not set global warming into a doomsday machine where there will be no turning back.

PLEASE require the ZEV mandate where California will be an example

for the rest of our nation. Not only will we produce our OWN fuels,  
but it will release us from the strangle hold from countries that  
support terrorism and produce oil.

Respectfully,

Dr. Randolph Sun  
President, Sun Dental  
Lakeport, CA 95453

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-25 15:21:01

No Duplicates.

## **Comment 213 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Claudia

Last Name: Vieira

Email Address: cvgardendesign@gmail.com

Affiliation:

Subject: ZEV mandate considerations

Comment:

Hello,

I am writing to encourage the California Air Resources Board to adopt the recommendations of Google.org and CalCars regarding making changes to the ZEV Program. I, as a California resident, am very excited to learn about the potential leadership role our state can play in introducing the next generation of fuel efficient and low impact vehicles. We need to accelerate this process as much as possible and your role now is critical.

Thank you,  
Claudia Vieira

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-25 15:44:59

No Duplicates.

**Comment 214 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jo Ellen

Last Name: Young

Email Address: Non-web submitted comment

Affiliation:

Subject: A stronger ZEV Program: more clean vehicles, no more loopholes

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1456-zevformletter7.pdf'

Original File Name: zevformletter7.pdf

Date and Time Comment Was Submitted: 2008-03-25 17:11:49

2002 Duplicates.

**Comment 215 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Barry

Last Name: Wallerstein

Email Address: bwallerstein@aqmd.gov

Affiliation:

Subject: SCAQMD Staff Comments on Proposed ZEV Amendments

Comment:

Please find attached the South Coast AQMD staff comments on the proposed ZEV Amendments to be considered on March 27th.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1470-scaqmd\_staff\_comments\_on\_zev\_amendments\_-\_032508f.pdf'

Original File Name: SCAQMD Staff Comments on ZEV Amendments - 032508f.pdf

Date and Time Comment Was Submitted: 2008-03-25 17:22:37

No Duplicates.

**Comment 216 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Luke

Last Name: Tonachel

Email Address: ltonachel@nrdc.org

Affiliation:

Subject: Proposal to Strengthen Enhanced AT-PZEV

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1483-strengthening\_proposal\_enhanced\_at-pzev\_2008-03-25.pdf'

Original File Name: Strengthening Proposal Enhanced AT-PZEV 2008-03-25.pdf

Date and Time Comment Was Submitted: 2008-03-25 17:36:14

No Duplicates.

## **Comment 217 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jennifer

Last Name: Krill

Email Address: jenniferkrill@ran.org

Affiliation: Rainforest Action Network

Subject: RAN Response to CARB's Staff Proposal for the ZEV Program

Comment:

RAN Response to the California Air Resource Board's "Staff Proposal: Initial Statement of Reasons" for the Zero Emission Vehicle Program

Rainforest Action Network (RAN) has reviewed the "Staff Proposal-Initial Statement of Reasons" and while it contains some improvements to the Zero Emission Vehicle (ZEV) Program, we find that the Proposal undermines the opportunity for ZEV regulation in the state of California to bring the highest standard of pollution and petroleum-free vehicles into the marketplace.

First and foremost, RAN would like to see ZEVs prioritized above Enhanced AT-PZEVs, and our recommendations are made in the spirit of getting ZEVs into consumers' hands as soon as possible. Based on our extensive conversations with automakers, we believe that they are indeed capable of meeting strong regulations and the highest bar for ZEVs in California. Given the escalating threats of global warming, air pollution, and our dependence on oil, we simply don't have time to wait.

1) INCREASE "GOLD" ZEV NUMBERS - Staff's proposal notes that the 18-year history of the ZEV Program has yet to make ZEVs commercially available, and thus the current proposal calls for a reduction in numbers of ZEVs required. Reducing the number will reverse the likelihood that ZEVs will become commercially available. The current proposal would require fewer an average of 140 ZEVs per year from any individual automaker until 2015- few enough that several automakers can use banked credits for the next decade to meet this requirement. Those with fewer banked credits can easily accomplish these numbers through credit trading with small automakers, such as Tesla. Worse, the lower numbers reduce the likelihood that ZEVs will reach mass production and a viable economy of scale. Or, if they do, it will occur outside of California and may have no benefit for Californians, costing us a priceless opportunity to lead the way into the new generation of transportation technology.

We therefore recommend that California does not decrease, but in fact increases the numbers of ZEVs required from the industry under the Alternative Path for Compliance from 2,500 to 10,000 in Phase II (2009-2011) and from 25,000 to 100,000 in Phase III (2012-2014).

2) RAISE THE FLOOR, NOT THE CEILING- To the extent that allocation is taken from another category to make room for Enhanced AT-PZEVs, it should be taken from the dirtiest category in the ZEV Program,



not the cleanest. While PZEVs have served as an air-quality victory for the Program, they no longer need commercialization support, and lend no ZEV-enabling value. Therefore, we propose that the percentage of the Program requirements allowed to be met by PZEVs be reduced to 4% in Phase III, 2% in Phase IV, and phase out completely after 2018. In each Phase, the reduced PZEV requirement would be transferred up to the Enhanced AT-PZEV category, creating a stand-alone requirement for these vehicles without distracting from commercialization efforts of true ZEVs.

RAN agrees that PZEVs play an important role in achieving California's air quality goals. However, they don't support the specific goals of the ZEV Program; our proposal provides adequate time for a PZEV requirement to be shifted to a more appropriate program such as LEV III.

3) DEFINING PHEV CREDITS- We strongly encourage the Board to reconsider defining and crediting Plug-in Hybrid Vehicles (PHEV) by kWh (either onboard or net usable) rather than miles.

Using kWh provides more flexibility to the automakers to build PHEVs according to what they think will sell in the marketplace and will result in more overall cars on the road. Defining by miles biases toward small PHEVs, while defining by kWh will still encourage smaller, more efficient vehicles because they are more cost-effective to build, but also reward manufacturers who choose to electrify larger vehicles.

3) BACKFILLING- RAN opposes the use of Enhanced AT-PZEVs to backfill for any portion of the ZEV requirement and prefers to see separate, appropriate requirements created for ZEVs and Enhanced AT-PZEVs.

4) PUBLIC FLEET OPPORTUNITIES- While there is certainly retail demand for ZEV and near-ZEV cars, fleets can play a significant role in assuring a market for automakers compelled to build them, as well as in producing air-quality results for the areas in which they're deployed. We therefore encourage CARB to consider requiring public fleets to purchase ZEVs and Enhanced AT-PZEVs when available and where practical for their intended use. However, because these vehicles are purchased with public funds, we propose that fleets must choose the most economical vehicle technology (lifetime cost) for a given air-quality benefit.

5) CREATIVE ZEV ECONOMICS- It makes sense for staff to consider the economic impact of the regulation on the automaker, however, citing 2003 battery cost estimates and projected 2012-2014 fuel cell costs to determine the incremental cost of each technology (ISOR, pg. 33) paints an inaccurate economic scenario that biases against plug-in vehicles. The two technologies need to be evaluated on an even economic playing field.

6) TRAVEL PROVISION - RAN opposes any travel provision in combination with decreasing the number of ZEVs required in any phase. We are very aware of how this issue has been "gamed" in the past, with vehicles being removed from service after a few years and placed in another state for credit. However, sanctioning the idea of building fewer ZEVs not only for one state, but eleven, will not lead to the market-building volume that we need.

7) EFFICIENCY MATTERS - California should incentivize ZEVs based on their overall energy efficiencies on a well-to-wheels or

lifecycle basis, and not consider vehicles alone, divorced from energy production. Incorporating overall efficiency into considerations today will prepare us for the time when both vehicles and some energy sources will be zero-emission, and ZEV choices will be based on efficiency, economics, and other considerations.

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Founded in 1985, Rainforest Action Network campaigns for the forests, their inhabitants and the natural systems that sustain life by transforming the global marketplace through education, grassroots organizing, and non-violent direct action. For more information visit [www.ran.org](http://www.ran.org).

Attachment: '[https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1485-ran\\_zev\\_carb\\_response\\_032008.doc](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1485-ran_zev_carb_response_032008.doc)'

Original File Name: RAN ZEV CARB Response 032008.doc

Date and Time Comment Was Submitted: 2008-03-25 17:37:24

No Duplicates.

## **Comment 218 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Roberto

Last Name: DePaschoal

Email Address: dpaschoal@ev-motion.com

Affiliation:

Subject: Concept of lead-acid EV with highway speeds capability

Comment:

I am an inventor involved in a project of a unique platform of a concept five-seater vehicle with the length of a Smart-for-Two propelled by lead-acid batteries which could travel at 75 mph. for a 100 miles on a single charge. The concept has many other novel features such as replaceable power pack containers, zero turning radius, adjustable suspension, etc. etc.  
Please contact Roberto DePaschoal for more information at info@ev-motion.com

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1566-open\_letter.rtf'

Original File Name: Open Letter.rtf

Date and Time Comment Was Submitted: 2008-03-25 20:34:15

No Duplicates.

## **Comment 219 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Mark  
Last Name: Seidler  
Email Address: m.seidler@att.net  
Affiliation:

Subject: ZEV regulation  
Comment:

CARB,

I am an electrical engineer and I would like to add my voice to the chorus of voices from the engineering community and state unequivocally that EVs and PHEVs are economically and environmentally far superior to standard ICE vehicles. The key to understanding the advantage is the simple fact that ICE vehicles are only about 15% efficient at converting gasoline into motion while electric motor vehicles are about 90% efficient at converting electricity into motion.

The major auto manufacturers oppose and delay EV and PHEV introduction because they are so reliable and long-lived (easily over a MILLION mile life-span) that long-term profits are reduced.

The public interest must take priority over corporate interests. Manufacturers must be forced to offer EVs or they will simply continue their delaying tactics.

The major auto manufacturers have been lying about NiMH battery technology. Chevron/Cobasys is sequestering large-format NiMH technology and should be exposed as the corporate criminals they really are. For more info read:

<http://www.evworld.com/blogs/index.cfm?page=blogentry&authorid=51&blogid=104>

Thank you for your attention,  
Mark Seidler

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-25 21:45:11

No Duplicates.

**Comment 220 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Christopher  
Last Name: Bostwick  
Email Address: cb41@chrysler.com  
Affiliation: Chrysler LLC

Subject: 2008 Amendments to the Zero Emission Vehicle Regulation  
Comment:

Ms. Andreoni:

Please see the attachment for Chrysler LLC's Comments with regards to the 2008 Amendments to the Zero Emission Vehicle Regulation.

Best Regards,

Chris Bostwick  
Chrysler LLC

Attachment: '[https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1599-chrysler\\_llc\\_written\\_comments\\_zev\\_hearing.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1599-chrysler_llc_written_comments_zev_hearing.pdf)'

Original File Name: Chrysler LLC Written Comments ZEV Hearing.pdf

Date and Time Comment Was Submitted: 2008-03-25 21:56:28

No Duplicates.

**Comment 221 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Sherry

Last Name: Boschert

Email Address: sherry.boschert@gmail.com

Affiliation: Sierra Club California

Subject: Sierra Club California's comments on ZEV Program revisions

Comment:

Please see attached pdf file.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1624-sc\_zev\_comments\_3-08.pdf'

Original File Name: SC ZEV Comments 3-08.pdf

Date and Time Comment Was Submitted: 2008-03-25 22:56:04

No Duplicates.

**Comment 222 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Spencer

Last Name: Quong

Email Address: squong@ucsusa.org

Affiliation: Union of Concerned Scientists

Subject: ZEV Program and Global Warming

Comment:

The Union of Concerned Scientists, Natural Resources Defense Council, Friends of the Earth, Center for Energy Efficiency and Renewable Technologies, American Lung Association of California, Coalition for Clean Air, and Energy Independence Now, are pleased to submit the following report analyzing the effect the ZEV program has on California's long term global warming goals.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1639-ucs\_zev\_and\_global\_warming\_final\_w\_cover.pdf'

Original File Name: UCS ZEV and Global Warming Final w\_Cover.pdf

Date and Time Comment Was Submitted: 2008-03-26 00:04:49

No Duplicates.

**Comment 223 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jay  
Last Name: Friedland  
Email Address: jay@pluginamerica.org  
Affiliation: Plug In America

Subject: Plug In America Response-Staff Proposal: Initial Statement of Reasons-ZEV Program  
Comment:

Please see the attached pdf file and related support documents at  
<http://www.pluginamerica.org>

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1641-pia\_isor\_response.pdf'

Original File Name: PIA\_ISOR\_Response.pdf

Date and Time Comment Was Submitted: 2008-03-26 00:13:15

No Duplicates.



## **Comment 224 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ian

Last Name: Cree

Email Address: ianccree@hotmail.com

Affiliation:

Subject: Global warming/air pollution

Comment:

The MOST important actions on prevention of global warming are NOT being done:

1. Research into TIDAL POWER stations: America's Eastern and Western seabords offer almost unlimited tidal power. The only such station in the Western Hemisphere is in Nova Scotia and that province already produces 12% of its electric power from renewable sources.
2. Research into low cost electric cars and high speed rechargeable batteries. Tesla has already an excellent vehicle, but at too high a cost.
3. Prepare for recharge stations at service stations and consider an electric pickup through a groove in the main streets of cities. (Like the old trams).
4. Put an immediate ban on all new coal powered power stations, and phase out all of the old ones. Put an immediate ban on all mountain top blast mining for coal and on all industrial river pollution.
5. Put an immediate ban on any new nuclear power stations, and nuclear weapons. Start to research better ways of disposing of nuclear waste.
6. Start the construction of large wind farms and solar farms. (The latter are best located in the southern desert states). Denmark has shown the feasibility of building wind farms over the sea with turbines supported by pylons driven into the seabed.
7. Careful construction of dams for hydro power without having a harmful impact on wildlife and drinkable water supply.
8. Speeding up the increased mileage rules for gas powered vehicles.
9. Planting new forests and cutting back on lumber industry deforestation.
10. Aid to foreign nations in need to achieve the above goals.

We then become no longer dependent on the Middle East and cut the cost of power, transportation and health care out of all recognition.

How think you?

Sincerely,

Ian Campbell Cree, MB(Hons.), MS, FRCS(Eng. & C.), FACS, LRCP.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-26 05:52:19

No Duplicates.

**Comment 225 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Muriel

Last Name: Strand

Email Address: auntym@earthlink.net

Affiliation:

Subject: Bicycles are Sub-Zero Emission Vehicles

Comment:

see attached

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1679-zev\_amendments\_comments\_3\_08.doc'

Original File Name: zev amendments comments 3:08.doc

Date and Time Comment Was Submitted: 2008-03-26 07:48:24

No Duplicates.

**Comment 226 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Barbara  
Last Name: Young  
Email Address: byoung2@csulb.edu  
Affiliation:

Subject: ZEV2008  
Comment:

Please listen to those of us who are concerned with our air quality  
for our grandchildren and other future generations.  
I would love to drive a vehicle that is more efficient and less  
polluting.  
Thankyou  
Barbara Young

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1781-zev2008.doc'

Original File Name: ZEV2008.doc

Date and Time Comment Was Submitted: 2008-03-26 08:55:28

No Duplicates.

**Comment 227 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Dave  
Last Name: Flanagan  
Email Address: dave.flanagan@utcpower.com  
Affiliation: UTC Power

Subject: UTC Power Comments to ZEV Regulation Amendments  
Comment:

Dear ARB,  
UTC Power would like to offer the attached letter for consideration by the ARB staff and Board Members on the proposed 2008 amendments to California's ZEV Program. I will also attend the hearing and offer an oral comments summarizing UTC's letter regarding this subject. Thank you for offering an opportunity for UTC Power to provide comments.

Warmest regards,  
Dave Flanagan  
General Manager, Automotive Programs  
UTC Power

Attachment: '[https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1854-utc\\_power\\_statement\\_on\\_proposed\\_2008\\_zev\\_requirement\\_changes\\_\\_032608\\_final\\_.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1854-utc_power_statement_on_proposed_2008_zev_requirement_changes__032608_final_.pdf)'

Original File Name: UTC Power Statement on Proposed 2008 ZEV Requirement Changes \_032608 final\_.pdf

Date and Time Comment Was Submitted: 2008-03-26 09:25:40

No Duplicates.

**Comment 228 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Jamie

Last Name: Knapp

Email Address: jamie@jknappcommunications.com

Affiliation: ZEV Alliance

Subject: Public Disclosure of credits

Comment:

Please see the attached letter from environmental organizations.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1916-zev-pra-3-25-08.pdf'

Original File Name: ZEV-PRA-3-25-08.pdf

Date and Time Comment Was Submitted: 2008-03-26 09:54:35

No Duplicates.

**Comment 229 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Luke

Last Name: Tonachel

Email Address: ltonachel@nrdc.org

Affiliation: Natural Resources Defense Council

Subject: Potential ZEV Loopholes

Comment:

Please see attached submitted on behalf of Union of Concerned Scientists, NRDC, American Lung Association of CA, Center for Energy Efficiency and Renewable Technologies, Coalition for Clean Air, Energy Independence Now and Friends of the Earth

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1978-potential\_zev\_loopholes\_2008-03-26.pdf'

Original File Name: Potential ZEV Loopholes 2008-03-26.pdf

Date and Time Comment Was Submitted: 2008-03-26 10:32:34

No Duplicates.

**Comment 230 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Kazuo

Last Name: Abe

Email Address: TRegulatory@tma.toyota.com

Affiliation: Toyota Motor North America, Inc.

Subject: Comments to 2008 Initial Statement of Reasons

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/1988-toyota\_isor\_comment.pdf'

Original File Name: Toyota ISOR Comment.pdf

Date and Time Comment Was Submitted: 2008-03-26 10:39:28

No Duplicates.



## **Comment 231 for ZEV 2008 (zev2008) - 45 Day.**

First Name: David

Last Name: Harralson

Email Address: david\_harralson@hotmail.com

Affiliation:

Subject: Zero Emissions Vehicles

Comment:

I am writing to exhort you to terminate any programs that purport to enable or mandate the so-called zero emission vehicle.

There is no such thing as a zero emission vehicle.

The proposed program to subsidize the electric vehicle is fatally flawed.

Conventional gasoline vehicles are tightly regulated for emissions, in some cases emitting fewer pollutants than already existing in the surrounding air.

The electric generating infrastructure is in a state of accelerated transition as it seeks to expand capacity for new requirements, bring on-stream a new generation of low polluting generating capability and retire the old generation of highly polluting coal and nuclear generators.

Battery powered vehicles have a far lower energy density than conventional carbon based vehicles. Their range is less, their manufacturing costs far higher and their total environmental costs are higher. (The current 100mpg incentive program documents this).

Electric vehicles export pollution from the point of consumption (public roads) to the point of generation (coal generators and nuclear power plants) A recent IEEE Spectrum article attempted to quantify the costs for nuclear waste sequestration and suggested it may be as great as our national debt. Coal generation has environmental pollution problems from the mining stage, through excess CO2 emissions, excess particulate emissions and heavy metal pollution both at the plant and downstream for thousands of miles.

In addition, vehicles burning fuel are required to pay federal and state taxes to support our transportation infrastructure. Electric vehicles do not pay any of those taxes, which means they wear out our roads without paying their fair share of construction and maintenance costs.

For all these reasons, and many more, I request that you do not support electric vehicle programs in any form.

Thank you.

David W. Harralson

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-26 11:03:08

No Duplicates.

## **Comment 232 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Fred

Last Name: Fuddpucker

Email Address: cozycamper@starstream.net

Affiliation:

Subject: ZERO Electric cars !!!

Comment:

Now is NOT the time to manufacture electric cars! Why design and build a vehicle that cannot go at least 500 miles distance in a 12 hour day, requires MANY MANY hours to recharge its batteries if a facility is available to do this, Costs as much, or much more than a gasoline powered car, would have to be much smaller and lighter than a gas powered car in order to operate, and much more?

There is NO SHORTAGE of oil in the U.S. and around the world! The gasoline engine is plentiful, very reliable, and a simple mechanism that any mechanically minded individual can fix if need be.

When an electric car can be made cheaper, more spacious and comfortable, cheaper to operate AND give the builder and dealer a profit for building and selling it, only THEN will they become practical. This isn't likely to happen in our lifetime !!!

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2008-03-26 11:03:24

No Duplicates.

**Comment 233 for ZEV 2008 (zev2008) - 45 Day.**

First Name: David

Last Name: Patterson

Email Address: david.patterson@na.mitsubishi-motors.com

Affiliation: Mitsubishi Motors R&D of America

Subject: Mitsubishi Motors Comments Regarding ZEV 2008 ISOR  
Comment:

Please see attached letter.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2084-mitsubishi\_motors\_zev2008\_comments.pdf'

Original File Name: Mitsubishi Motors ZEV2008 Comments.pdf

Date and Time Comment Was Submitted: 2008-03-26 11:38:35

No Duplicates.

**Comment 234 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Sara

Last Name: Huang

Email Address: Non-web submitted comment

Affiliation:

Subject: Dont weaken ZEV regualtion

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2234-sarahuang.pdf'

Original File Name: sarahuang.pdf

Date and Time Comment Was Submitted: 2008-03-26 17:23:45

600 Duplicates.

**Comment 235 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Steven

Last Name: Pucci

Email Address: Non-web submitted comment

Affiliation:

Subject: Steven Pucci

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2237-pucci0001.pdf'

Original File Name: pucci0001.pdf

Date and Time Comment Was Submitted: 2008-03-26 17:33:43

No Duplicates.

**Comment 236 for ZEV 2008 (zev2008) - 45 Day.**

First Name: James

Last Name: Ehlmann

Email Address: Non-web submitted comment

Affiliation:

Subject: General Motors

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2238-gm0001.pdf'

Original File Name: gm0001.pdf

Date and Time Comment Was Submitted: 2008-03-26 17:37:55

No Duplicates.

**Comment 237 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Ira

Last Name: Ruskin

Email Address: Non-web submitted comment

Affiliation:

Subject: Assembly California Legislature- Ira Ruskin

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2241-acl0001.pdf'

Original File Name: acl0001.pdf

Date and Time Comment Was Submitted: 2008-03-26 17:45:15

No Duplicates.



**Comment 238 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Gavin

Last Name: Newsom

Email Address: Non-web submitted comment

Affiliation:

Subject: Office of Mayor- Gavin Newson

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2243-gavin0001.pdf'

Original File Name: gavin0001.pdf

Date and Time Comment Was Submitted: 2008-03-26 17:48:39

No Duplicates.

**Comment 239 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Arthur

Last Name: Marin

Email Address: Non-web submitted comment

Affiliation:

Subject: Northeast States for Coordinated Air Use Management (NESCAUM)

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2244-nescaum\_zev\_comments\_3-26-08.pdf'

Original File Name: NESCAUM ZEV comments 3-26-08.pdf

Date and Time Comment Was Submitted: 2008-03-26 17:51:33

No Duplicates.

**Comment 240 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Daniel

Last Name: Emmett

Email Address: demmett@einow.org

Affiliation:

Subject: Energy Independence Now

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2246-ein.pdf'

Original File Name: ein.pdf

Date and Time Comment Was Submitted: 2008-03-26 17:55:36

No Duplicates.

**Comment 241 for ZEV 2008 (zev2008) - 45 Day.**

First Name: Laurie

Last Name: Burt

Email Address: Non-web submitted comment

Affiliation:

Subject: Commonwealth of Massachusetts

Comment:

Please see attached.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2248-mass0001.pdf'

Original File Name: mass0001.pdf

Date and Time Comment Was Submitted: 2008-03-26 17:58:17

No Duplicates.

## **Comment 1 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Sigmund

Last Name: Gronich

Email Address: Non-web submitted comment

Affiliation:

Subject: ARB Presentation on Proposed ZEV Mandate Regulations

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2415-sigmund\\_gronich.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2415-sigmund_gronich.pdf)

Original File Name: Sigmund Gronich.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:09:18

No Duplicates.

## **Comment 2 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Reg

Last Name: Modlin

Email Address: Non-web submitted comment

Affiliation:

Subject: Chrysler

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2416-reg\\_modlin.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2416-reg_modlin.pdf)

Original File Name: Reg Modlin.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:10:22

No Duplicates.

### **Comment 3 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Ben

Last Name: Knight

Email Address: Non-web submitted comment

Affiliation:

Subject: Honda

Comment:

Pamphlets included & please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2417-ben\\_knight.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2417-ben_knight.pdf)

Original File Name: Ben Knight.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:11:59

No Duplicates.

## **Comment 4 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Steve

Last Name: Ellis

Email Address: Non-web submitted comment

Affiliation:

Subject: Honda

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2418-steve\\_ellis.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2418-steve_ellis.pdf)

Original File Name: Steve Ellis.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:13:00

No Duplicates.



## **Comment 5 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Andrew

Last Name: Simpson

Email Address: Non-web submitted comment

Affiliation:

Subject: Tesla Motors

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2419-andrew\\_simpson..pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2419-andrew_simpson..pdf)

Original File Name: Andrew Simpson..pdf

Date and Time Comment Was Submitted: 2008-04-03 13:17:28

No Duplicates.

## **Comment 6 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Dave

Last Name: Flanagan

Email Address: Non-web submitted comment

Affiliation:

Subject: UTC Power

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2420-dave\\_flanagan.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2420-dave_flanagan.pdf)

Original File Name: Dave Flanagan.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:19:16

No Duplicates.

## **Comment 7 for ZEV 2008 (zev2008). (At Hearing)**

First Name: David

Last Name: Green

Email Address: Non-web submitted comment

Affiliation:

Subject: ORNL slides

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2421-david\\_green.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2421-david_green.pdf)

Original File Name: David Green.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:20:16

No Duplicates.

## **Comment 8 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Dave

Last Name: Underwood

Email Address: Non-web submitted comment

Affiliation:

Subject: Plug Power

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2422-dave\\_underwood.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2422-dave_underwood.pdf)

Original File Name: Dave Underwood.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:21:03

No Duplicates.

## **Comment 9 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Sara

Last Name: Rudy

Email Address: Non-web submitted comment

Affiliation:

Subject: Ford

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2423-sara\\_rudy.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2423-sara_rudy.pdf)

Original File Name: Sara Rudy.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:21:36

No Duplicates.

## **Comment 10 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Ted

Last Name: Flittner

Email Address: Non-web submitted comment

Affiliation:

Subject: BEV and PHEV Development

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2424-ted\\_flittner.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2424-ted_flittner.pdf)

Original File Name: Ted Flittner.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:25:27

No Duplicates.

## **Comment 11 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Dr. Robert

Last Name: Sawyer

Email Address: Non-web submitted comment

Affiliation:

Subject: Department of Mechanical Engineering Berkeley University

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2425-robert\\_sawyer.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2425-robert_sawyer.pdf)

Original File Name: Robert Sawyer.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:27:55

No Duplicates.

## **Comment 12 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Phil

Last Name: Baxley

Email Address: Non-web submitted comment

Affiliation:

Subject: Shell Hydrogen LLC

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2426-phil\\_baxley.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2426-phil_baxley.pdf)

Original File Name: Phil Baxley.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:28:32

No Duplicates.



### **Comment 13 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Gavin

Last Name: Newsom

Email Address: Non-web submitted comment

Affiliation:

Subject: Office of the Mayor

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2427-gavin\\_newsom.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2427-gavin_newsom.pdf)

Original File Name: Gavin Newsom.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:29:20

No Duplicates.

## **Comment 14 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Luke

Last Name: Tonachel

Email Address: Non-web submitted comment

Affiliation:

Subject: Slides

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2428-luke\\_tonachel.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2428-luke_tonachel.pdf)

Original File Name: Luke Tonachel.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:30:26

No Duplicates.

## **Comment 15 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Adam

Last Name: Borelli

Email Address: Non-web submitted comment

Affiliation:

Subject: Rechargeit & Google

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2429-adam\\_borelli.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2429-adam_borelli.pdf)

Original File Name: Adam Borelli.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:39:42

No Duplicates.

## **Comment 16 for ZEV 2008 (zev2008). (At Hearing)**

First Name: David

Last Name: Modisette

Email Address: Non-web submitted comment

Affiliation:

Subject: ARB staff proposal

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2430-david\\_modisette.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2430-david_modisette.pdf)

Original File Name: David Modisette.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:45:20

No Duplicates.

## **Comment 17 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Besir

Last Name: Dunlap

Email Address: Non-web submitted comment

Affiliation:

Subject: ZEV technology

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2431-besir-\\_dunlap.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2431-besir-_dunlap.pdf)

Original File Name: Besir- Dunlap.pdf

Date and Time Comment Was Submitted: 2008-04-03 13:47:34

No Duplicates.

**Comment 18 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Steve

Last Name: Heckerorth

Email Address: Non-web submitted comment

Affiliation:

Subject: South Coast AQMD

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2432-steve\\_heckerorth.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2432-steve_heckerorth.pdf)

Original File Name: Steve Heckerorth.pdf

Date and Time Comment Was Submitted: 2008-04-03 14:15:19

No Duplicates.

**Comment 19 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Matt

Last Name: Miyasato

Email Address: Non-web submitted comment

Affiliation:

Subject: South Coast AQMD

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2433-matt\\_miyasato.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2433-matt_miyasato.pdf)

Original File Name: Matt Miyasato.pdf

Date and Time Comment Was Submitted: 2008-04-03 14:21:56

No Duplicates.

**Comment 20 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Doug

Last Name: Korthof

Email Address: Non-web submitted comment

Affiliation:

Subject: ZEV

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2434-doug\\_kothof.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2434-doug_kothof.pdf)

Original File Name: Doug Kothof.pdf

Date and Time Comment Was Submitted: 2008-04-03 14:25:33

No Duplicates.



**Comment 21 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Marc

Last Name: Geller

Email Address: Non-web submitted comment

Affiliation:

Subject: San Francisco Electric Vehicle Association

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2435-marc\\_geller.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2435-marc_geller.pdf)

Original File Name: Marc Geller.pdf

Date and Time Comment Was Submitted: 2008-04-03 14:28:13

No Duplicates.

## **Comment 22 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Andrew

Last Name: Frank

Email Address: Non-web submitted comment

Affiliation:

Subject: UC Davis

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2436-andrew\\_frank.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2436-andrew_frank.pdf)

Original File Name: Andrew Frank.pdf

Date and Time Comment Was Submitted: 2008-04-03 14:31:14

No Duplicates.

## **Comment 23 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Norman

Last Name: Plotkin

Email Address: Non-web submitted comment

Affiliation:

Subject: Automotive Aftermarket Industry Association

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2437-norman\\_plotkin.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2437-norman_plotkin.pdf)

Original File Name: Norman Plotkin.pdf

Date and Time Comment Was Submitted: 2008-04-03 14:41:29

No Duplicates.

## **Comment 24 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Karl- Heinz

Last Name: Ziwica

Email Address: Non-web submitted comment

Affiliation:

Subject: BMW

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2439-karl-\\_heinz\\_ziwica.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2439-karl-_heinz_ziwica.pdf)

Original File Name: Karl- Heinz Ziwica.pdf

Date and Time Comment Was Submitted: 2008-04-03 14:45:40

No Duplicates.

**Comment 25 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Cynthia Verdugo

Last Name: Peralta

Email Address: Non-web submitted comment

Affiliation:

Subject: Asthma & Allergy Founddation of America & CA Hydrogen Business Council

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2440-cynthia\\_verdugo\\_peralta.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2440-cynthia_verdugo_peralta.pdf)

Original File Name: Cynthia Verdugo Peralta.pdf

Date and Time Comment Was Submitted: 2008-04-03 14:50:44

No Duplicates.

## **Comment 26 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Bill

Last Name: Reinert

Email Address: Non-web submitted comment

Affiliation:

Subject: Toyota Motor Sales

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2441-bill\\_reinert.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2441-bill_reinert.pdf)

Original File Name: Bill Reinert.pdf

Date and Time Comment Was Submitted: 2008-04-03 14:55:54

No Duplicates.

**Comment 27 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Michael

Last Name: Lord

Email Address: Non-web submitted comment

Affiliation:

Subject: Toyota

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2442-michael\\_lord.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2442-michael_lord.pdf)

Original File Name: Michael Lord.pdf

Date and Time Comment Was Submitted: 2008-04-03 15:01:42

No Duplicates.

**Comment 28 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Mark

Last Name: Duvall

Email Address: Non-web submitted comment

Affiliation:

Subject: Electric Power Research Institute

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2443-mark\\_duvall.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2443-mark_duvall.pdf)

Original File Name: Mark Duvall.pdf

Date and Time Comment Was Submitted: 2008-04-03 15:05:27

No Duplicates.



**Comment 29 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Gina

Last Name: McCarthy

Email Address: Non-web submitted comment

Affiliation:

Subject: State of Connecticut Department of Environmental Protection

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2444-gina\\_mccarthy.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2444-gina_mccarthy.pdf)

Original File Name: Gina McCarthy.pdf

Date and Time Comment Was Submitted: 2008-04-03 15:12:19

No Duplicates.

**Comment 30 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Bill

Last Name: Hernandez

Email Address: Non-web submitted comment

Affiliation:

Subject: ZEV

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2445-bill\\_hernandez.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2445-bill_hernandez.pdf)

Original File Name: Bill Hernandez.pdf

Date and Time Comment Was Submitted: 2008-04-03 15:18:03

No Duplicates.

**Comment 31 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Colby

Last Name: Trudeau

Email Address: Non-web submitted comment

Affiliation:

Subject: ZEV

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2446-colby\\_trudeau.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2446-colby_trudeau.pdf)

Original File Name: Colby Trudeau.pdf

Date and Time Comment Was Submitted: 2008-04-03 15:25:17

No Duplicates.

**Comment 32 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Jay

Last Name: Foster

Email Address: Non-web submitted comment

Affiliation:

Subject: Law Offices of Jay Foster

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2447-jay\\_foster.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2447-jay_foster.pdf)

Original File Name: Jay Foster.pdf

Date and Time Comment Was Submitted: 2008-04-03 15:45:27

No Duplicates.

### **Comment 33 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Danielle

Last Name: Fugere

Email Address: Non-web submitted comment

Affiliation:

Subject: Friends of the Earth

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2448-daniell\\_fugere.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2448-daniell_fugere.pdf)

Original File Name: Daniell Fugere.pdf

Date and Time Comment Was Submitted: 2008-04-03 15:49:30

No Duplicates.

**Comment 34 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Deborah

Last Name: Bakker

Email Address: Non-web submitted comment

Affiliation:

Subject: Hyundai - Kia Motors

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2449-deborah\\_bakker.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2449-deborah_bakker.pdf)

Original File Name: Deborah Bakker.pdf

Date and Time Comment Was Submitted: 2008-04-03 16:03:18

No Duplicates.

**Comment 35 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Serry A.

Last Name: Weinman

Email Address: Non-web submitted comment

Affiliation:

Subject: American Jewish Committee

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2450-sherry\\_a.\\_weinman.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2450-sherry_a._weinman.pdf)

Original File Name: Sherry A. Weinman.pdf

Date and Time Comment Was Submitted: 2008-04-03 16:05:17

No Duplicates.

**Comment 36 for ZEV 2008 (zev2008). (At Hearing)**

First Name: David

Last Name: Patterson

Email Address: Non-web submitted comment

Affiliation:

Subject: Mitsubishi

Comment:

please see attached

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2451-david\\_patterson.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2451-david_patterson.pdf)

Original File Name: David Patterson.pdf

Date and Time Comment Was Submitted: 2008-04-03 16:19:54

No Duplicates.



**Comment 37 for ZEV 2008 (zev2008). (At Hearing)**

First Name: Ron

Last Name: Freund

Email Address: Non-web submitted comment

Affiliation:

Subject: Ron Freund

Comment:

Please see attached

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2460-ronfreud.pdf>

Original File Name: ronfreud.pdf

Date and Time Comment Was Submitted: 2008-05-30 09:52:28

No Duplicates.

## **Comment 1 for ZEV 2008 (zev2008) - 15-1.**

First Name: Anthony  
Last Name: Cimino  
Email Address: Anthony@cimino.us  
Affiliation: no oil addiction

Subject: ZEV...Where are the fully electrics being revisited?  
Comment:

Here is my 2000 Ford Ranger EV NiMH....Why are you allowing the patent suppression of NiMH batteries? Why aren't you forcing hard like in the 90's?

This truck could save many poeple from getting lung cancer by hurting the air with CO2....Isn't your job to clean the air?

Please note the zero emissions HOV lane stickers from the state of California!

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2464-ev.jpg>

Original File Name: EV.jpg

Date and Time Comment Was Submitted: 2008-07-25 13:21:20

No Duplicates.

## **Comment 2 for ZEV 2008 (zev2008) - 15-1.**

First Name: Randall

Last Name: Bohanon

Email Address: randall.bohanon@gmail.com

Affiliation: California Registered Nurse

Subject: ZEV

Comment:

I attempted to read the ZEV regulations and proposed amendments, but the amount of unnecessary content wore me down. I'm sure that is what the creators were aiming for when they wrote it. What I gathered is that this regulation will not accomplish the goal of the CARB. Do you know what your goal is?

Goal: Clean up the air in California.

May I suggest a simpler solution.

Action item: All major automobile manufacturers must produce for sale in California X (large number) amount of electric vehicles.

Just start with this one item. Don't worry about Hybrids or Hydrogen, nor credits, etc. These are attempts to resist change. All the major automobile manufacturers have already built electric vehicles since the 1990s.

If you and the automobile manufacturers are worried about the higher price of electric vehicles, start working on legislation for tax breaks and/or gov. subsidies. You guys have wasted enough money already to cover the subsidies.

Shame on you.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-25 14:38:35

No Duplicates.

### **Comment 3 for ZEV 2008 (zev2008) - 15-1.**

First Name: Mark D

Last Name: Larsen

Email Address: yanquetino@casteyanqui.com

Affiliation: private citizen

Subject: Go back to the drawing board!

Comment:

July 25, 2008

Mary Nichols, Chair  
California Air Resources Board  
Headquarters Building  
1001 "I" Street  
P.O. Box 2815  
Sacramento, CA 95812

Ms. Nichols, et. al.:

That CARB would dilute the ZEV mandate even further is beyond comprehension. One would think if you might want to clean a bit of the egg off its face from the past debacle, shockingly made public in the documentary "Who Killed the Electric Car?" --and only exacerbated at its March meeting.

I can only conclude that CARB must feel like it is between a rock and a hard spot: the state has given it the charge of trying to clean the air, yet its most outspoken "automotive expert," Dr. Sperling, suffers from a blatant conflict-of-interest by his professional and financial ties to the oil and auto companies that fund his "Hydrogen Pathways Program" and "Institute of Transportation Studies" at UC Davis.

What is sorely needed is for CARB to change tack completely. It needs to simply assure that citizens are given every option available, and then let the free market work its magic. More specifically, it needs to forget about percentages (like before) or numbers and different colors of "credits" (like now). The ZEV mandate should simply require that, by 2012, the franchised dealers of all the major auto manufacturers licensed in California (and I would lower that "threshold" to include companies like Mitsubishi, Subaru, Volvo, etc.) must comply with these stipulations:

- \* They must have a ZEV vehicle in their showrooms, and at least two more on the lot for customers to test drive at any given time.

- \* Those ZEVs must be capable of a top speed of no less than 80 mph.

- \* They must have an emissions-free, EPA certified range of no less than 100 miles.

\* They must meet federal safety standards.

\* They must cost no more than 125% of the average base price of all the models in the same "class" sold by the parent company in the previous year.

\* They must be deliverable to customers who purchase them within at least a 60-day period.

\* For its part, CARB, with the help of the governor and the legislature, will establish the very best government incentives available to those who purchase the ZEVs to help offset their 25% higher price tag (say, for example, tax deductions, waived registration fees, no sales tax, carpool lane access, etc., etc.).

\* What if the car manufacturers do not comply (again)? Suppose they once again claim that they can't develop and produce the ZEVs fast enough for their dealers to meet the 2012 deadline? Then provide legal protection to the dealers so that they secure their ZEVs from other sources without losing their franchises.

\* And if the dealers do not comply? Then the state levies a hefty fine on them, which increases every month, and after 6 months revokes their business licenses until the requirement is met. Period. THAT will get the auto companies moving, believe me. They might not listen to CARB, or even to us consumers, but they most certainly will listen to their own local dealers!

I do not think that such a mandate is unreasonable. After all, the EV1 and the RAV4-EV were capable of that same speed and even greater range back in 2002, so surely car manufacturers can do even better nowadays. In point of fact, as you know, Tesla is already producing in California its Roadster, with a 221-mile, emissions-free range, and Governor Schwarzenegger has spearheaded incentives so that the company can build its next all-electric sedan, the Model S, in California as well. Aptera will start selling its Typ-1e in November out of Carlsbad. Mitsubishi will start testing its iMiEV in California in the next few months, and has announced that it will go on sale one year earlier than originally projected. Think has set up offices for North America in Menlo Park and will anticipate selling its City by 2009. Phoenix will start selling its SUT and SUV models to fleets by the end of this year. Subaru is even now testing out its R1e with power companies in this country. ZENN has announced that it intends to start selling its cityZENN by the end of 2009. Nissan has committed to also produce an EV by 2010.

In short, with all these manufacturers jumping on the "green" bandwagon, there is no longer ANY excuse for CARB not to implement the mandate I have outlined above. Its members will probably want to debate the numbers suggested (range, speed, cost, etc.) to settle on a definitive requirement, but the principle is much more sound than anything CARB has attempted to mandate in the past. After all, California has no authority to dictate to auto manufacturers with factories in other areas, but it most certainly has power over what the local dealers must provide inside the state's boundaries. CARB needs to focus its energies where it has real influence.

What kind of ZEV those dealers wish to provide should be left entirely up to them --be it a battery electric car, a hydrogen

fuel-cell vehicle, a plug-in hybrid, or even one powered by a flywheel or compressed air or a solar panel-- as long as it produces \_ZERO\_ emissions for at least 100 miles. No more of CARB favoring one technology over another: let the technology itself decide.

And no more of this lame "no customer demand" excuse from the auto manufacturers. If customers do not even KNOW about the option, if they can't SEE it and TEST DRIVE it, how can they demand it? The above ZEV mandate would assure that customers DO know --and can decide accordingly. Get the ZEVs in the showrooms! Take advantage of the free market system instead of trying to thwart it.

Do the RIGHT thing!

Mark D Larsen

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-25 14:42:47

No Duplicates.

## **Comment 4 for ZEV 2008 (zev2008) - 15-1.**

First Name: Jason

Last Name: Jungreis

Email Address: jasonzjungreis@gmail.com

Affiliation:

Subject: proposed rule fairness requires across the board application

Comment:

I have no objection to this proposed rule as long as CARB applies it fairly: that is, every manufacturer for every non-OEM vehicle component that may in any way effect automobile performance must adhere to this same stringent standard. Without such a proviso, I believe this proposed rule is unfairly singling out PZEVs.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-25 14:43:12

No Duplicates.

## **Comment 5 for ZEV 2008 (zev2008) - 15-1.**

First Name: Robert

Last Name: Lange

Email Address: rlange@hughes.net

Affiliation: Konoctieaa.org

Subject: Electric, not hydrogen, Now

Comment:

We need leaders who will act in the best interests of our planet.

Not baised on greed, Not destroying the very air we need to breathe, or fouling it with CO2.

Not supporting the very terrorists we fight, by buying their oil!

Hydrogen will be just out of reach, for years if not decades to come...and you will still need oil changes, hoses, radiators, and all the upkeep you have now.

We the people have a right to live in an unpolluted world!

Electric is the only choice , as you can charge off (your own)solar array, and run your house, in the same process!

Lets work together for a better world (for our kids and grandkids) and a future we can all live with.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-25 16:05:15

No Duplicates.



## **Comment 6 for ZEV 2008 (zev2008) - 15-1.**

First Name: Richard

Last Name: Gillock

Email Address: r.r.gillock@ieee.org

Affiliation:

Subject: Zero Emission Vehicle Standards

Comment:

I was shocked to read the 2008 amendments to the California Zero Emission Vehicle Regulation. To end this program in 2008 is to forfeit the future of our children.

I cannot understand how rational human beings can end a regulatory plan that would have a significant positive impact on the fight against pollution and global warming. The human race is on the brink of ending our existence on this planet. We have no time left for politics. We must take giant steps to reverse the damage we are doing to our environment and climate. The ZEV standards were a small step in the right direction, and now even that small step is being turned into a stumble.

I urge you to rescind these amendments and proceed with strong ZEV standards to lead this nation away from the pending environmental collapse that these regulations were initially designed to address.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-25 22:57:33

No Duplicates.

**Comment 7 for ZEV 2008 (zev2008) - 15-1.**

First Name: Themis  
Last Name: Glatman  
Email Address: TLadyManor1@aol.com  
Affiliation:

Subject: Green Vehicles  
Comment:

Dear Sir/ Madam

I am writing to express my dismay at your lack of expediency in this subject.

Perhaps this is the most important piece of legislation you will ever work on.

This can truly benefit all of our lives.

Please do the right thing and get the laws passed that will force the car manufacturers to start building electric cars and also a better version of the plug-in-hybrids.

We need them and we need them now...

Thank you

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-27 23:49:02

No Duplicates.

## **Comment 8 for ZEV 2008 (zev2008) - 15-1.**

First Name: Yoshaany

Last Name: Rahm

Email Address: yyrahm@sbcglobal.net

Affiliation:

Subject: ZERO EMISSION REGULATION

Comment:

I strongly support zero emissions for vehicles in the state of California. Such regulations ought to be put in place AS SOON AS POSSIBLE, AND WITHOUT DELAY. We must protect both our environmental and our collective health NOW.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-28 12:36:46

No Duplicates.

## **Comment 9 for ZEV 2008 (zev2008) - 15-1.**

First Name: Matt

Last Name: Foster

Email Address: marleywoods@yahoo.com

Affiliation:

Subject: PROPOSED 2008 AMENDMENTS TO THE CALIFORNIA ZERO EMISSION  
VEHICLE REGULATION

Comment:

California EPA/Air Resources Board,

I am writing to comment on the proposed 2008 amendments to the California Zero Emission Vehicle Regulation. I am not an expert on ZEV or regulations pertaining to them. I am merely a consumer who is very concerned about the environment in California and the negative effect that we, as humans, are having on the environment, especially with regard to vehicle-generated air pollution and its impact on Global Climate Disruption.

To my unlearned eye, it looks like the amendments you are proposing are completely gutting the portions of the regulation that were adopted to mandate ZEV beyond 2008. If I am interpreting this correctly, I want to lodge my deepest concerns and urge you in the strongest possible terms to do all you can to require automobile manufacturers and others to continue to convert their fleets of passenger cars and light duty trucks to ZEV, and at a MINIMUM, the ZEV requirements of 11% in 2009-11, 12% in 2012-14, 14% in 2015-17, and 16% in 2018 and beyond be sustained.

If a plug-in ZEV passenger car, hybrid or battery-powered, were available today, I would purchase one within the next 12 months and use the solar panels that I will soon have installed on my roof to charge it. It is my understanding that your organization is responsible for solutions to our current and looming air quality problems. Please do all you can to maintain and strengthen ZEV requirements.

Kind regards,

Matt Foster

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-28 15:32:10

No Duplicates.

## **Comment 10 for ZEV 2008 (zev2008) - 15-1.**

First Name: Justin

Last Name: Kulongoski

Email Address: kulongos@hotmail.com

Affiliation:

Subject: Comment on ZEV 2008 Modified Text for the 2008 Amendments to the California Zero Emission V

Comment:

I was a big supporter of the Zero Emission Vehicles that were available in the late '90s and early 2000's. They were safe, dependable, fun to drive, and produced zero emissions! Where are they today? What happened to them? The answer is changes to the CA Zero Emission Vehicle Regulation. The technology exists; actually it is old now, and there is no reason why electric vehicles should not be available for purchase or lease TODAY. Do not put off the only alternative fuel technology that has actually been proven. No more pork barrel "ethanol" scams. We need to take seriously the effect of burning fossil fuels on our health, communities, national security, and planet. Please do not extend or alter the requirements for Zero Emission Vehicles. We need these vehicles on the road, the time is NOW!

Specific comments Resolution 08-24:

(1) 7,500 ZEV per manufacturer is too few. Require 12,500.

(2) New TYPE V ZEV should be required beginning 2015.

(3-4) Close loop holes

(5) PEHVs should be required to travel at least 40 miles on electric charge to get any extra credit.

(6) NO special credit should be given to hydrogen powered vehicles. These are costly red herrings

(7) transparency is good.

Thank you.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-29 15:13:05

No Duplicates.

## **Comment 11 for ZEV 2008 (zev2008) - 15-1.**

First Name: Dr. Wayne

Last Name: Aller

Email Address: waynealler07@hotmail.com

Affiliation:

Subject: ZEV standards

Comment:

First, let me congratulate your staff for its efforts to reduce air pollution.

However, my sense is that you may have underestimated the automobile industry's mindset with regard to producing low emission, fuel efficient products. Given the price of fuel and the serious concern of the American population over these costs, and their increasing awareness of the role of greenhouse gases in global warming, I believe there will a greater demand and willingness by the industry to produce better vehicles. Therefore, I believe the time-table spelled out in 1962.1 which graduates to 16% by year 2018 is too lax. However the ARB wants to move the time-table forward, or increase the percentages is up to your staff (using PHEV, Enhanced AT PZEVs, BPHEVs, AER PHEVs, or whatever). I believe the U.S. auto manufactueres are approaching a panic mode and are ready to ramp up production of alternative vehicles on a scale not seen since what happened in WW II.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-31 09:40:08

No Duplicates.

## **Comment 12 for ZEV 2008 (zev2008) - 15-1.**

First Name: arjun

Last Name: verma

Email Address: junarkv@yahoo.com

Affiliation:

Subject: Increase the rate of ZEV implementation

Comment:

I believe that the manufacturer ZEV production percentage requirements are much too lenient, even in year 2018. Requirements of .81%, 3%, 6% and even %16 percent ZEV production are not enough -- I know our manufacturers can meet a more stringent timeline than that within the next decade. We need to establish much more ambitious goals for ZEV implementation if we are going to avoid a catastrophe of insufficient oil supply for our vehicles. It's in everyone's best interests  
Thank you

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-31 14:08:31

No Duplicates.

### **Comment 13 for ZEV 2008 (zev2008) - 15-1.**

First Name: Richard

Last Name: Valentinitetti

Email Address: Non-web submitted comment

Affiliation: NESCAUM

Subject: 15 Modifications to ZEV

Comment:

Please see attachment.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2476-zev\\_nescaum0001.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2476-zev_nescaum0001.pdf)

Original File Name: Zev Nescaum0001.pdf

Date and Time Comment Was Submitted: 2008-08-01 12:00:39

No Duplicates.



## **Comment 14 for ZEV 2008 (zev2008) - 15-1.**

First Name: Randy

Last Name: Bostic

Email Address: Non-web submitted comment

Affiliation:

Subject: Plug in Cars, Plug-in-hybrids, all electric battery cars

Comment:

Please see attached comment.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2478-zev\\_form\\_letter0001.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2478-zev_form_letter0001.pdf)

Original File Name: ZEV Form letter0001.pdf

Date and Time Comment Was Submitted: 2008-08-06 15:25:40

4 Duplicates.

**Comment 15 for ZEV 2008 (zev2008) - 15-1.**

First Name: Ira

Last Name: Ruskin

Email Address: Non-web submitted comment

Affiliation: Ca Assembly Member for the 21st District

Subject: Zero Emission Vehicle Regulation Program Changes

Comment:

Please see attached letter.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2480-zev\\_2008\\_ira0001.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2480-zev_2008_ira0001.pdf)

Original File Name: ZEV 2008 Ira0001.pdf

Date and Time Comment Was Submitted: 2008-08-08 16:26:27

No Duplicates.

## **Comment 16 for ZEV 2008 (zev2008) - 15-1.**

First Name: Doug

Last Name: Glener

Email Address: Doug.Glener@gmail.com

Affiliation:

Subject: Electric cars

Comment:

Dear Sir or Madam,

Please stop passing onerous and unnecessary regulations on electric cars. Make it easy for manufacturers to get them on the roads.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-11 11:31:45

No Duplicates.

## **Comment 17 for ZEV 2008 (zev2008) - 15-1.**

First Name: Joshua

Last Name: Pritt

Email Address: ramgarden@gmail.com

Affiliation:

Subject: We NEED Electric Vehicles

Comment:

It has gone beyond something a few people just want to something America needs to survive. It's time to face the facts. The earth will eventually run out of oil. Why base anything - much less your entire economy - on something that will run out? It would be very easy to pass laws similar to the ZEV2008 that would help Americans afford to install solar PV panels or even thin film PV shingles on their roofs to fuel their EV cars and trucks as well as their homes. If we don't start changing our transportation over to electric drive soon, we won't have time to change over once the oil has run out. It would be A LOT cheaper to do the change over slowly and a little at a time rather than in a panic once we find out there is no more oil to get. Instead of trying to make synthetic oil to use to make gasoline and diesel why not just convert over to all electric powered by the sun and wind? It would be cleaner, quieter, and better for consumers since they won't need oil changes, tune ups, and unnecessary trips to get other repairs internal combustion engines are known for. If you don't pass the ZEV2008 you will go into the history books as the reason why America's future failed. If you DO pass the ZEV2008 you will go into the history books as a hero - actually the savior - of America's future. Thank you for reading my comment and I hope you take what I've said to heart.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-11 11:54:53

No Duplicates.

**Comment 18 for ZEV 2008 (zev2008) - 15-1.**

First Name: Pete

Last Name: Nater

Email Address: fasnater@gmail.com

Affiliation:

Subject: plug in cars

Comment:

Why does this have to be so difficult. Make them easy to obtain,  
please!!!!!!!!!!

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-11 11:56:34

No Duplicates.

## **Comment 19 for ZEV 2008 (zev2008) - 15-1.**

First Name: ronald

Last Name: mcurdy

Email Address: freedex@rogers.com

Affiliation:

Subject: zev's reasons

Comment:

save the world-save our industries-if we don't do it others will-  
same old story.How did the auto industry get in trouble- help them  
save themselves. They work from hand to mouth- be a statesman not  
a politician

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-11 12:56:31

No Duplicates.

## **Comment 20 for ZEV 2008 (zev2008) - 15-1.**

First Name: charles

Last Name: cummings

Email Address: chardott-2@yahoo.com

Affiliation: none

Subject: GM Bailout?!

Comment:

If GM cries for a "Bailout", they already have it. The EV1. If they have the need for \$ this will bail anyone out. GUARENTEE

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-11 13:19:57

No Duplicates.

**Comment 21 for ZEV 2008 (zev2008) - 15-1.**

First Name: David

Last Name: Patterson

Email Address: david.patterson@na.mitsubishi-motors.com

Affiliation: Mitsubishi

Subject: ZEV Modifications

Comment:

Please see attachment.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2488-mits\\_zev0001.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2488-mits_zev0001.pdf)

Original File Name: Mits ZEV0001.pdf

Date and Time Comment Was Submitted: 2008-08-11 16:23:15

No Duplicates.



## **Comment 22 for ZEV 2008 (zev2008) - 15-1.**

First Name: Thomas

Last Name: Saidak

Email Address: tsaidak@pacbell.net

Affiliation:

Subject: 2008 Amendments to the California Zero Emission Vehicle Registration  
Comment:

I have been watching and reading the CARB hearings regarding mandates of ZEV for a number of years. As near as I can tell, CARB has been giving too much credence to auto maker's statements regarding the feasibility of manufacturing ZEV vehicles. Based on the proven claims of A123 Systems, Altair, the High Compression Internal Combustion Engine (HCICE) and the XH150, here is where we are at now:

We can make ANY vehicle with a curb weight of 3,000 lbs or less a PHEV that can attain 40 miles all electric, and 50 mpg thereafter PHEV. The use of HCICE technology will at a minimum, double the mpg of any standard internal combustion engine (ICE), and could as much as quadruple the mpg. This technology is scheduled for deployment in 2013 by US Automakers. It is not clear what percentage of vehicles this will apply too. CARB needs to know that this technology is made possible by direct injection of ethanol fuel in the 5% range, i.e., for every 20 gallons of gasoline consumed, 1 gallon of ethanol will be required to avoid knock ( premature cylinder detonation).

On the all electric vehicle side as of today:

Lightning Car Company in England can make a sports car that can go from 0 to 60mph in 3.9 seconds, with a range of 250 miles at a cost less than \$15.00/recharge. This recharge can be done in as little as 10 minutes. The short recharge time requires a 500/kwh plug in station. The 40 mile recharge, which works for nearly 75% of drivers in the U.S., would take less than 4.5 hours on a standard 120 volt socket. Tesla Motors makes a sports car with a 220 mile range with a cost to recharge from 0 to 100% of less than \$4.40. Hydrogen based fuel cells will never reach this economic efficiency. This alone should tell CARB that hydrogen or ethanol fueled vehicles are not worth considering as cost factors are a major indicator of comparative efficiency. Toyota has raised their warranty for the battery packs in the Prius to 150,000 miles, which should give CARB greater confidence of the state of current battery technology.

Implications:

An all electrical passenger car and truck fleet would require an additional 10% over current electrical generation capability. Switching to an all electrical vehicle fleet would reduce air pollution by 16% locally assuming no change in the generation mix, drop oil imports by as much as 4%, and the trade deficit in the energy sector by as much as \$28 Billion Dollars. A corporate intelligence service, Stratfor, has made the assertion that Saudi Arabia purposely overproduced oil to keep it at or about \$20.00/bbl to convince the US government to drop critical alternative energy research. To the degree that this did leave to suspension of most US energy research projects, it would seem

that it is imperative that a major market such as California dictate the need for transformation of automotive industries. This is best exemplified by Governor Schwarzeneger's ownership of a GMC Hummer.

Action:

Given the above, it would seem a rational approach would be to mandate that as of 2013, all passenger and light vehicle trucks sold in California should be PHEV's, with HCICE engines. This gives all automakers 5 years to comply. Given that it takes only 2 years to build a battery factory, the requirement is easily achievable. All such PHEV's should be programmed to shut down the HCICE within 3 seconds of coming to a complete stop (a strategy used by the Toyota Prius). During 2012 to 2014, the agreed to requirement for 25,000 ZEV should be adhered too, with the proviso that by 2018, ALL passenger vehicles and light trucks must be ZEV vehicles. I would remind CARB that the ability of researchers in the US in the last 10 years has made a mockery of any naysayer regarding BEV vehicle capabilities. I would further like to remind CARB that the manipulations of oil producing countries to influence US policy decisions makes it clear that bold, decisive action on the part of Federal and State policy makers is required to overcome consumer confusion regarding the synergies of their immediate strategies in decision making as to what vehicles make the most sense to buy. The large auto manufacturers should be given the clear message to lead, follow or get out of the way. Thank you for your attention to this missive.

Thomas Saidak

tsaidak@pacbell.net

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-11 20:10:42

No Duplicates.

**Comment 23 for ZEV 2008 (zev2008) - 15-1.**

First Name: Ze'ev

Last Name: Drori

Email Address: theceo@teslamotors.com

Affiliation: Tesla Motors, Inc.

Subject: Tesla Motors' Response to 15-day Comments to ZEV Program

Comment:

Please see the attachments for Tesla Motors' Response to 15-day  
Comments to ZEV Program.

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2490-carb15daycommentperiodresponsefinal.pdf>

Original File Name: CARB15DayCommentPeriodResponseFinal.pdf

Date and Time Comment Was Submitted: 2008-08-12 15:53:17

1 Duplicates.

## **Comment 24 for ZEV 2008 (zev2008) - 15-1.**

First Name: Robin

Last Name: Swennes

Email Address: rswennes@roadrunner.com

Affiliation:

Subject: Don't water it down!

Comment:

The time to mandate change towards electric cars is now. Please don't water down the current CARB Zero Emission Vehicles regulation. Electric vehicles could not only greatly reduce air pollution, but sound pollution as well. That's something no one talks about, but it is very important. The more overpopulated we get, the more noise we create.

One global change we should mandate is a maximum speed capability on civilian cars. The speed limit is 65; let's make cars that only go 70mph, and we'll automatically save on gas and pollution. That doesn't have to be only for electric cars; it should be for all cars on the road.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 07:39:42

No Duplicates.

## **Comment 25 for ZEV 2008 (zev2008) - 15-1.**

First Name: Stephen

Last Name: Davies

Email Address: turbomaker@sbcglobal.net

Affiliation:

Subject: California Zero Emission Vehicle Regulation

Comment:

Your (CARB) actions continue to disappoint a large majority of the population when you continue to decrease the incentives and mandates for ZEV's.

Government regulation drives change, as does the market. Providing the incentive for any company to invent and manufacture alternative conveyance systems is important right now, at this pivotal point in economy, public support, and technical expertise.

I doubt if this 'perfect storm' will appear again, and if you (CARB) continue to downplay ZEV significance, then future policy will be a farce and political rhetoric.

Stand up for technology. Stand up for change. Stand up for what is right, not only for the environment, but for improved efficiency and innovation.

If you are not happy with the technological improvements made in the last 20 years as compared to computers or other technologies, then do something about it - stop being indecisive and non-committal as your predecessors!

Put ZEV's on the road!

Push alternative forms of transportation!

Incentivize and stimulate the next 'big thing'.

Future taxpayers will be glad you did...something

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 10:40:39

No Duplicates.

## **Comment 26 for ZEV 2008 (zev2008) - 15-1.**

First Name: Steve

Last Name: Fermi

Email Address: steve194@comcast.net

Affiliation:

Subject: CARB Must Maintain Pressure to Deliver Pure ZEV's in California

Comment:

I fully support the four proposals made to you on August 11th by Tesla Motors CEO Ze'ev Drori, as follows:

CARB should:

1) Increase not decrease the minimum number of Pure ZEV required in Phase III (2012-2015);

2) Eliminate the substitution of Pure ZEVs with Enhanced AT-PZEVs;

3) Set the minimum ZEV requirements on a yearly basis rather than for three years, thus preventing manufacturers from getting an additional three year grace period and eliminating "blackout" years;

4) Change the carry forward provision of gold ZEV credits earned by any manufacturer that exclusively manufactures pure ZEVs to expire 3 years from the date of transfer to another manufacturer.

I simply do not see how CARB can have reached a faulty conclusion that no electric car will be commercially available until 2012, when in fact Tesla Motors is ALREADY delivering fully electric cars at this very moment. CARB should be LEADING the charge toward early and wide adaptation of true zero emission vehicles, rather than handicapping manufacturers like Tesla, a CALIFORNIA based company, that is already producing ZEV's.

I urge you to reconsider your policies regarding ZEV's, as stated above.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 10:57:13

No Duplicates.

## **Comment 27 for ZEV 2008 (zev2008) - 15-1.**

First Name: R.M. 'Auros'

Last Name: Harman

Email Address: rmharman@auros.org

Affiliation: Presidio School of Management

Subject: Please Increase Requirements for Zero Emission Vehicles

Comment:

I write in support of increasing the number of Zero Emission Vehicles required from major auto manufacturers. Vehicles currently in production, such as the Tesla Roadster, the Smart ForTwo, and others, demonstrate that electric ZEVs with usable ranges are well within the reach of current technology. They may start out somewhat expensive, but consumer desire is already present, and forcing production to scale up will lead to decreasing prices and improvements in supporting technologies.

Please consider fully restoring the ZEV requirement to its original level.

Regards,

R.M. 'Auros' Harman

Master of Sustainable Business Administration

Class of '09, Presidio School of Management

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 12:41:17

No Duplicates.

## **Comment 28 for ZEV 2008 (zev2008) - 15-1.**

First Name: Mark

Last Name: Warren

Email Address: mwarren\_us@yahoo.com

Affiliation:

Subject: Leave the ZEV Mandate alone...

Comment:

Unless the CARB shows moral authority, gasoline powered cars will continue to bankrupt our children's and grandchildren's future. Please leave the mandate for 25000 zero emissions vehicles between 2012 and 2015. What do you think got GM to work on the Volt in the first place? Market economics were an unlikely motivation; the CARB's ZEV mandate was their motivation.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 12:44:12

No Duplicates.



## **Comment 29 for ZEV 2008 (zev2008) - 15-1.**

First Name: Mark

Last Name: Warren

Email Address: mark.warren@me.com

Affiliation:

Subject: Strengthen California's ZEV instead of weakening it...

Comment:

Current market forces (specifically the jump in oil prices) have clearly shown that car manufacturers have plenty of technology available to meet California's ZEV Mandate; do not let automobile lobbyists and money buy the votes of the CARB again (as was documented in Who Killed the Electric Car)!

Please implement the following changes to the ZEV Mandate and exercise the moral authority necessary to grant our children and grandchildren a cleaner, cooler and healthier planet than what we have today. Give them a fighting chance to correct the wrongs that we have already wrought upon them.

Specifically:

1) Increase, not decrease, the minimum number of Pure ZEV required in Phase III (2012-2015). More than 25000 zev vehicles need to be put on the roads!

2) Eliminate the substitution of Pure ZEVs with Enhanced AT-PZEVs. AT-PZEV vehicles are still gasoline powered, oil addicted machines.

3) Set the minimum ZEV requirements on a yearly basis rather than for three years, thus preventing manufacturers from getting an additional three year grace period and eliminating "blackout" years. A consistent, steady regulatory environment is the single best thing the CARB can provide for the clean energy sector.

4) Change the carry forward provision of gold ZEV credits earned by any manufacturer that exclusively manufactures pure ZEVs to expire 3 years from the date of transfer to another manufacturer.

With these actions the Air Resources Board will once again be able to recapture its credibility and assume the mantle of leadership in advancing the goal of true zero emissions transportation in the state of California and beyond.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 12:53:32

11 Duplicates.

## **Comment 30 for ZEV 2008 (zev2008) - 15-1.**

First Name: Graham  
Last Name: Orndorff  
Email Address: graham@shway.com  
Affiliation:

Subject: Zero Emission Vehicle Program  
Comment:

Dear Chairwoman Nichols,

Please reconsider the decision to reduce the required number of Zero Emission Vehicles. The technology exists and has existed for quite a while to have such vehicles on the road today, yet no such choice is given to the consumer.

Our society is such that we cannot live without personal transportation. Yet we have based 100% of this transport on oil. Oil is run by a cartel of folks who do not like us very much. Because we consumers have no choice in the matter we continue to base our transportation upon something that causes a massive transfer of our economy who fund the very people at which we are at war. Our economy, our safety, our health and our environment are being put in the hands of people who would like to take that all away from us.

Please strengthen the ZEV mandate. Give consumers the choice to have non-oil based transport. Give support to small companies like Tesla, Aptera, Miles and others who would like to help convert our state and national fleet to something better. Give pressure to larger vehicle manufacturers to offer a reasonable transport choice to consumers.

Thank you for your time,  
Graham Orndorff

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 13:48:15

No Duplicates.

## **Comment 31 for ZEV 2008 (zev2008) - 15-1.**

First Name: Earl

Last Name: Cox

Email Address: earlcox@charter.net

Affiliation:

Subject: Let's get with the CARB program

Comment:

It has come to my attention that CARB is further watering down the ZEV mandate again. Is this all that CARB knows how to do any more. What happened to the old CARB that had the courage to stand up against the auto manufacturers on the behalf of we Californians?

Let's get back to ZEV's. Tesla, Phoenix Motors, Aptera, AC Propulsion, Enova, Energy CS, etc, all California companies trying their hardest to solve our energy and pollution problems yet CARB isn't.

You know what the right thing to do is. Please, do it. That is what we, the voters want you to do.

If this is too open, let me try to be a bit more specific:

Increase the number of pure ZEVs back to the original numbers the real CARB established in the early '90's

Don't allow Gasoline burners to count as ZEVs. And please knock off the outright lie in your PZEV nomenclature. You not only kill your own credibility but the credibility of government in general.

Facilitate the sale of ZEV credits by startup ZEV manufactures to the large vehicle manufacturers who refuse to build them.

Get rid of the large vehicle manufacturer shills on your board and quit listening to their lobbyists. Instead, take your advice from the likes of Tesla Motors and AC Propulsion who are actually producing ZEVs today.

Sincerely,

Earl Cox

La Crescenta, CA

cc:

Hon Arnold Schwarzenegger

Hon Bob Margett

Hon Jack Scott

Hon George Runner

Hon Anthony Adams

Hon Paul Krekorian

Hon Cameron Smyth

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 16:38:10

No Duplicates.

## **Comment 32 for ZEV 2008 (zev2008) - 15-1.**

First Name: Aaron

Last Name: ward

Email Address: aaroncward@gmail.com

Affiliation:

Subject: Please reconsider your target goals for ZEVs

Comment:

Reducing the minimum zero emission vehicles moves california in the complete opposite direction from where we should be moving. There are a lot of electric vehicles coming to the market in the next few years, and there are some already available to buy today.

Our Governor extended some very generous offers to Tesla Motors to relocate their new electric sedan manufacturing facility from New Mexico to Silicon Valley. That is the message that the fifth largest economy in the world needs to send out. That we are taking the necessary steps to encourage electric vehicle production and use.

Any decisions to reduce the required quota of electric vehicle production makes it seem like you really don't care about moving forward, the environment, the creation of jobs for californians, or reducing our dependence on foreign oil.

Whose interests are you supposed to represent? The will of the people?- or the big three and big oil?

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 18:40:21

No Duplicates.

### **Comment 33 for ZEV 2008 (zev2008) - 15-1.**

First Name: robert

Last Name: hoke

Email Address: rwhokey@msn.com

Affiliation:

Subject: concerns about your decisioning

Comment:

Please reconsider your decision to decrease the number of zev's in phase 3. The country needs to hold auto manufacturers to a higher number, not lower number. I understand that there must be an enormous amount of political pressure, but I beg you to consider the impact your decision has on our future. California has an opportunity to raise the bar and make a definitive stand for what is right. Raise the requirements of auto manufacturers to increase the number of ZEV's on the road.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 19:02:43

No Duplicates.

**Comment 34 for ZEV 2008 (zev2008) - 15-1.**

First Name: Kyrstin

Last Name: Munson

Email Address: songsailher@yahoo.com

Affiliation:

Subject: PLEASE DO SOMETHING!!

Comment:

We DO NOT WANT AIR QUALITY LIKE BEIJING!!

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 19:05:09

No Duplicates.



**Comment 35 for ZEV 2008 (zev2008) - 15-1.**

First Name: Mike

Last Name: bradley

Email Address: mbradley@personalumbrella.com

Affiliation:

Subject: ZEV Regs

Comment:

As in most things. Keep it simple.

Give unexpiring credits to Auto Mfg for CA DMV registered ZEV only sales to residents of CA.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 23:07:43

No Duplicates.

## **Comment 36 for ZEV 2008 (zev2008) - 15-1.**

First Name: Paul  
Last Name: Connor  
Email Address: pconnor@ucla.edu  
Affiliation:

Subject: Don't reduce zero emissions vehicles  
Comment:

Hi,

I'm writing today to urge you not to reduce the number of zero emissions vehicles mandated for 2012 to 2015.

I believe you we need to push for more zero emissions vehicles. I believe it is a very accomplishable goal to demand that manufactures produce 25,000 zero emissions vehicles.

I live in California and I want cleaner air, not to mention less dependancy on oil. Companies, and people can accomplish a lot when the need is there. By setting a high minimum number of vehicles, companies will be forced to innovate, and that will be a great thing for California, and the world. Don't be afraid to push the big manufactures, they'll come through... if you make them.

Thank you.

-Paul

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 23:14:47

No Duplicates.

## **Comment 37 for ZEV 2008 (zev2008) - 15-1.**

First Name: Domenick  
Last Name: Yoney  
Email Address: dyoney@hotmail.com  
Affiliation:

Subject: More true ZEVs for Phase III  
Comment:

For reasons of public health and environment I urge the board to drastically increase the number of true zero emission vehicles (ZEVs) required for phase III. Public support for these vehicles has burgeoned with the onset of higher fuel prices but needs to be re-inforced by a regulatory commitment from the board so as to give automakers the confidence to pursue strong ZEV programs. The current proposal of 7,500 units is woefully inadequate by a magnitude of 10. The state, the country and the planet need the board to take a position of strong environmental leadership.

Thank you.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-14 04:18:18

No Duplicates.

## **Comment 38 for ZEV 2008 (zev2008) - 15-1.**

First Name: Jeffrey

Last Name: Power

Email Address: power.jeffrey@gmail.com

Affiliation:

Subject: ZEV

Comment:

I am disappointed to see the changes made to the ZEV law CA had past. The changes weaken the scope and intent of the law and allows CA to be trampled on by the car making companies. The edits made were unnecessary and against the public will. I disagree with the boards decision entirely and and thoroughly disappointed.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-14 05:10:28

No Duplicates.

## **Comment 39 for ZEV 2008 (zev2008) - 15-1.**

First Name: Ian

Last Name: Cree

Email Address: ianccree@hotmail.com

Affiliation:

Subject: Greenhouse gases

Comment:

The MOST important actions on prevention of global warming are NOT being done:

1. Research into TIDAL POWER stations: America's Eastern and Western seaboard offer almost unlimited tidal power. The only such station in the Western Hemisphere is in Nova Scotia and that province already produces 12% of its electric power from renewable sources.
2. Research into low cost electric cars and high speed rechargeable batteries. Tesla has already an excellent vehicle, but at too high a cost.
3. Prepare for recharge stations at service stations and consider an electric pickup through a groove in the main streets of cities. (Like the old trams).
4. Put an immediate ban on all new coal powered power stations, and phase out all of the old ones. Put an immediate ban on all mountain top blast mining for coal and on all industrial river pollution.
5. Put an immediate ban on any new nuclear power stations, and nuclear weapons. Start to research better ways of disposing of nuclear waste.
6. Start the construction of large wind farms and solar farms. (The latter are best located in the southern desert states). Denmark has shown the feasibility of building wind farms over the sea with turbines supported by pylons driven into the seabed.
7. Careful construction of dams for hydro power using technology to prevent a harmful impact on wildlife and drinkable water supply.
8. Accelerating the date requiring increased mileage rules for gas powered vehicles.
9. Planting new forests and cutting back on lumber industry deforestation.
10. Aid to foreign nations in need to achieve the above goals.

Sincerely,

Ian Campbell Cree, MB(Hons.), MS, FRCS(Eng.& C.), FACS, LRCP

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-14 08:16:15

No Duplicates.

## **Comment 40 for ZEV 2008 (zev2008) - 15-1.**

First Name: Steve

Last Name: Elliott

Email Address: steve22se@peoplepc.com

Affiliation:

Subject: Don't Water Down the CARB/ZEV !

Comment:

We all want Electric Vehicles now ! Not in 5, 10 years. Stop working against the consumer and support all-electric cars 100%. Do you want to appear to be in the pocket of the Big Oil companies and Big Auto companies ? Refusing to discuss it in a public forum seems to affirm this impression. Enough's enough, let's clean up the air with the use of electric cars and change things for the better. Be part of the solution and not the problem.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-14 09:11:08

No Duplicates.

## **Comment 41 for ZEV 2008 (zev2008) - 15-1.**

First Name: Jason

Last Name: Webster

Email Address: websterjason@mac.com

Affiliation: Oakland business owner/resident/taxpayer

Subject: Please do not lower your ZEV standards!!

Comment:

I am appealing to you to reconsider the Board's decision to reduce the minimum number of pure zero emissions vehicles by 70%, from 25,000 to a mere 7,500 during Phase III (2012 to 2015).

Do not succumb to pressure you are receiving from the automotive industry and other levels of government, you must keep the pressure on to force innovation from the major automakers. A commercially-viable ZEV is already a reality, and is absolutely something every manufacturer can accomplish at the levels originally set by the board.

Do not allow another electric car to be killed! We are in a time that requires bold steps which will make us all a little uncomfortable, but these decisions will ensure the health of our society and the world around us.

Sincerely,  
Jason and Letitia Webster  
Oakland, CA

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-14 09:26:53

No Duplicates.



## **Comment 42 for ZEV 2008 (zev2008) - 15-1.**

First Name: Colby

Last Name: Trudeau

Email Address: giantquesadilla@gmail.com

Affiliation:

Subject: Please Reconsider

Comment:

Ms. Nichols:

While I thank you for not watering down the ZEV mandate as much as was proposed, CARB has made it too weak. Please reconsider the changes you have made. The mandate needs to push automakers and have them put a noticeable number of ZEVs on the road. I urge you to require the full 25,000 ZEVs.

I also thank you for including Plug In Hybrids, however these cars shouldn't be replacing ZEVs in the mandate. We need these cars in addition to ZEVs, such as battery electric vehicles. Rather than replacing clean ZEVs with plug in hybrids, why not replace conventional ICE cars?

Please take my thoughts into consideration. The health of the state of California is in your hands. These changes may seem small, but the automakers CAN do it and they WILL make a difference!

Thank you for your time,  
Colby Trudeau

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-14 09:31:14

No Duplicates.

## Comment 43 for ZEV 2008 (zev2008) - 15-1.

First Name: Jeff

Last Name: Gonder

Email Address: jeff\_gonder@nrel.gov

Affiliation: NREL

Subject: Zero-Emission VMT PZEV Allowance Recommendations

Comment:

These comments fall along the same line as my earlier e-mail (included in the attached zip file). They are updated and summarized below with reference to the equations in section C-3.3 (pp. C-11 and C-12) in the 15-day notice (7/25/08) version of the "California Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model ZEVs, and 2001 and Subsequent Model HEVs, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes." The second file in the zipped attachment is an updated version of the spreadsheet I included previously that now uses the updated equation as well as alternate versions exploring replacement of  $UF(R_{cda})$  with  $UF(EAER)$  or  $UF(R_{cdc})$  (read "utility factor as a function of xyz"). The two parameters that can again be varied on the spreadsheet are the miles offset between the whole-cycle charge-depleting range measurement and the "actual" charge-depleting end point ( $R_{cdc} - R_{cda}$ ), and the equivalent electric range fraction (EERF). The "\_Example1" tab (with Offset = 4 and EERF = 0.5) highlights the allowance discontinuity at 40 miles  $R_{cda}$  for the cases taking the UF of  $R_{cda}$  or  $R_{cdc}$ . The "\_Example2" tab (with Offset = 6 and EERF = 0.9) demonstrates the mathematical possibility to exceed the 1.35 peak allowance (intended for long  $R_{cda}$  distances) at actual  $R_{cda}$  values slightly less than 40 miles for the case taking the UF of  $R_{cda}$ . Here is a summary of my observations and recommendations based on this examination:

- 1) It is confusing to now use a mixture of EAER and  $R_{cda}$  to define whether the allowance is a constant or derives from the equation. For instance, it is possible to have an EAER of 10.1 miles and an  $R_{cda}$  of 9.9 miles which presents a circumstance undefined by the table in section C-3.3. \*\*\*In addition, because the peak allowance is now defined by  $R_{cda}$ , a manufacturer could simply include enough battery energy to displace the minimum 10 miles worth of CO<sub>2</sub> production and slowly deplete it over 40+ miles in order to earn the maximum credit (see "\_Example1" using progressively smaller EERF).\*\*\* This would be a cost-effective way for a manufacturer to maximize credit earnings, but would not provide the large CO<sub>2</sub> displacements desired. RECOMMENDATION: Return to range bins defined solely by EAER.
- 2) It is also confusing as written to understand what the maximum allowance should be. Is the "EAER<sub>40</sub>" supposed to be a variable or a constant? RECOMMENDATION: Re-write the maximum allowance as 40/29.63 or 1.35 if that was the intention.
- 3)  $R_{cda}$  is a somewhat abstract variable compared to EAER, which is calculated from the full  $R_{cdc}$  measurement multiplied by the measurable CO<sub>2</sub> offset fraction (EERF). It's application is further brought into question by the two examples shown in the

spreadsheet, and by the fact that a fractional distance into a cycle may not correspond to an equivalent fractional energy use or CO2 production. RECOMMENDATION: Simplify the regulation by eliminating the need for R\_cda measurement and instead of using UF(R\_cda) in the equation:

A) Use UF(EAER) if the intent is just to have an asymptotically increasing credit with no discontinuity, or  
B) Use UF(R\_cdc) if the intent was to give less credit to vehicles with lower EERF (but avoid potential "gaming" aimed at maximizing the 'Offset' that I have defined in the spreadsheet in order to exceed the intended peak credit of 1.35).

Please let me know if you would like me to clarify or discuss any of these comments further.

Regards,

Jeff Gonder  
Center for Transportation Technologies and Systems (CTTS)  
National Renewable Energy Laboratory (NREL)

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2517-carb15daycommentattachments.zip>

Original File Name: CARB15DayCommentAttachments.zip

Date and Time Comment Was Submitted: 2008-08-14 09:48:15

No Duplicates.

## **Comment 44 for ZEV 2008 (zev2008) - 15-1.**

First Name: yoshaany

Last Name: rahm

Email Address: yyrahm@sbcglobal.net

Affiliation:

Subject: california air resource board

Comment:

Please focus on more plug in cars now. Stop the complex talk and  
ACT NOW.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-14 17:21:37

No Duplicates.

**Comment 45 for ZEV 2008 (zev2008) - 15-1.**

First Name: Jamie

Last Name: Knapp

Email Address: jamie@jknappcommunications.com

Affiliation:

Subject: Environmental Group Comments on ZEV 15-day notice

Comment:

Comments attached.

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2520-env.comments-zev-15-day-8-14-08.pdf>

Original File Name: Env.comments-ZEV-15-day-8-14-08.pdf

Date and Time Comment Was Submitted: 2008-08-14 17:57:58

No Duplicates.

## **Comment 46 for ZEV 2008 (zev2008) - 15-1.**

First Name: Matthew

Last Name: Roche

Email Address: mattroche@mac.com

Affiliation: none

Subject: Please don't reduce ZEV goals

Comment:

I am extremely interested in buying an electric vehicle, and it appears that I may get the opportunity within the year, as some major companies, including BMW, are planning to introduce versions of their cars that are fully electric.

It is clear that they are motivated by your quotas, and the benefit accrues to concerned citizens, the environment, and our energy independence.

Please don't water down the requirements. If anything, raise them. I desperately want to buy an electric car, and you are making a difference in making them available.

Thanks,  
Matthew Roche  
Mill Valley, CA

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-15 00:06:00

No Duplicates.

**Comment 47 for ZEV 2008 (zev2008) - 15-1.**

First Name: Dennis

Last Name: Faulkner

Email Address: appleimacdude@mac.com

Affiliation:

Subject: what are you doing?

Comment:

You successfully killed the electric cars years ago, that could have helped us so much with homeland security, gas prices, and air quality - what are you going to do this time? Killing the Zero Emissions Mandate was something that was very much against the purpose of CARB - or what should have been the purpose of CARB.

This time around we expect you to do your job.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-15 02:51:14

No Duplicates.

**Comment 48 for ZEV 2008 (zev2008) - 15-1.**

First Name: David

Last Name: Shaw

Email Address: djshaw@gw.dec.state.ny.us

Affiliation: New York State DEC

Subject: ZEV Regulatory Proposal

Comment:

The attached comments are submitted on behalf of the New York State Department of Environmental Conservation. For questions, please contact David J. Shaw, NYSDEC, Division of Air Resources, 625 Broadway, Albany NY 12233.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2524-zev\\_letter.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2524-zev_letter.pdf)

Original File Name: ZEV letter.pdf

Date and Time Comment Was Submitted: 2008-08-15 06:47:28

No Duplicates.



**Comment 49 for ZEV 2008 (zev2008) - 15-1.**

First Name: Stephen

Last Name: Sinkez

Email Address: stephen.sinkez@bmwna.com

Affiliation: BMW of North America, LLC

Subject: BMW Group Comment

Comment:

Please see attached.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2525-bmw\\_comments\\_on\\_the\\_proposed\\_15-day\\_modifications\\_to\\_the\\_ca\\_zev\\_reg\\_order\\_8-14-08.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2525-bmw_comments_on_the_proposed_15-day_modifications_to_the_ca_zev_reg_order_8-14-08.pdf)

Original File Name: BMW Comments on the Proposed 15-Day Modifications to the CA ZEV Reg Order 8-14-08 .pdf

Date and Time Comment Was Submitted: 2008-08-15 10:30:47

No Duplicates.

## **Comment 50 for ZEV 2008 (zev2008) - 15-1.**

First Name: Christopher  
Last Name: Bostwick  
Email Address: cb41@chrysler.com  
Affiliation: ZEV Large Volume Manufacturers

Subject: ZEV Regulation: 15-Day Notice Comments  
Comment:

Dear Chairman Nichols:

On behalf of the Large Volume Manufacturers of the ZEV Mandate, please see the attached letter pertaining to 15-Day Notice comments on proposed amendments of the ZEV regulation.

Best Regards,

Chris Bostwick  
Chrysler LLC

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2526-large\\_volume\\_manufacturer\\_zev\\_15\\_day\\_notice.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2526-large_volume_manufacturer_zev_15_day_notice.pdf)

Original File Name: Large Volume Manufacturer ZEV 15 Day Notice.pdf

Date and Time Comment Was Submitted: 2008-08-15 12:24:37

No Duplicates.

**Comment 51 for ZEV 2008 (zev2008) - 15-1.**

First Name: David

Last Name: Modisette

Email Address: dave@ppallc.com

Affiliation: California Electric Transportation Coali

Subject: Comments of the California Electric Transportation Coalition - 15-Day Notice Changes  
Comment:

The California Electric Transportation Coalition is filing the attached comments on the Proposed 2008 Amendments to the California Zero Emission Vehicle Regulation, 15-Day Notice Changes.

Dave Modisette,  
Executive Director

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2527-caletc\\_letterhead\\_-\\_comments\\_zev\\_regs\\_\\_15-day\\_notice\\_\\_81508.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2527-caletc_letterhead_-_comments_zev_regs__15-day_notice__81508.pdf)

Original File Name: CalETC Letterhead - Comments ZEV Regs, 15-Day Notice, 81508.pdf

Date and Time Comment Was Submitted: 2008-08-15 12:38:58

No Duplicates.

## **Comment 52 for ZEV 2008 (zev2008) - 15-1.**

First Name: Michael

Last Name: Lord

Email Address: michael.lord@tema.toyota.com

Affiliation: Toyota

Subject: Toyota Comment on Modified Text

Comment:

Dear Chairman Nichols and Mr. Cackette,

Please find attached Toyota's comments on the proposed modified text for the 2008 amendments to the California zero emission vehicle regulation.

Best regards,

Michael Lord

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2528-08092.pdf>

Original File Name: 08092.pdf

Date and Time Comment Was Submitted: 2008-08-15 13:58:24

No Duplicates.

**Comment 53 for ZEV 2008 (zev2008) - 15-1.**

First Name: Arthur

Last Name: Marin

Email Address: amarin@nescaum.org

Affiliation: NESCAUM

Subject: 15-Day Proposed Modifications to ZEV Regulation

Comment:

File attached.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2529-nescaum\\_comments\\_zev\\_15-day\\_8-15-08.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2529-nescaum_comments_zev_15-day_8-15-08.pdf)

Original File Name: NESCAUM Comments ZEV 15-Day 8-15-08.pdf

Date and Time Comment Was Submitted: 2008-08-15 14:29:00

No Duplicates.

**Comment 54 for ZEV 2008 (zev2008) - 15-1.**

First Name: Christopher  
Last Name: Bostwick  
Email Address: cb41@chrysler.com  
Affiliation: Chrysler LLC

Subject: Chrysler LLC 15-Day Notice Comments  
Comment:

Dear Chairman Nichols:

Please see the attached letter for Chrysler LLC's 15-Day Notice comments on proposed amendments to the ZEV regulation.

Best Regards,

Chris Bostwick  
Chrysler LLC

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2530-chrysler\\_llc\\_comments\\_15\\_day\\_notice.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2530-chrysler_llc_comments_15_day_notice.pdf)

Original File Name: Chrysler LLC Comments 15 Day Notice.pdf

Date and Time Comment Was Submitted: 2008-08-15 14:37:28

No Duplicates.

## **Comment 55 for ZEV 2008 (zev2008) - 15-1.**

First Name: Doug

Last Name: Korthof

Email Address: Doug@Seal-Beach.org

Affiliation:

Subject: CARB has failed US: CARB is the problem, not the solution

Comment:

The proposed modifications to the ZEV mandate are based on an overly timid assessment of the technology, mistaken assumptions about the future, and false representations from the Auto Alliance.

CARB staff reliance on these three levels of falsehoods is a direct abandonment of the public interest.

CARB at this point stands with the Alliance of Automobile Manufacturers as the chief problem facing the general public, instead of being the strong advocate of the public interest in opposition to the oil and auto interests.

CARB has chosen to position itself against clean air and on the side of the chief polluters, Western States Petroleum Association and the Alliance of Automobile Manufacturers.

CARB and the Air Quality Control Districts (AQMD) have divided up the problem of pollution due to oil-fired cars, in order to hide the extent of the problem. These agencies spend their time trying to attack small-time air emitters whose contributions are puny compared to that of the refineries and oil-fired cars and trucks. This apparent collusion and deception should be stopped, and an inventory of all oil-fired pollution, including all aspects of oil refining such as subsidized water and the electric required to deliver it, should be created. But CARB has failed to do this, failed to work for the people.

The existence of practical Zero Emission Vehicles (ZEV) has been proven. The Toyota RAV4-EV is still on the road, even though it is no longer supported by Toyota so far as replacement batteries are concerned.

CARB's failure to recognize real ZEV, and to support the production and maintenance of ZEV, is alarming, if not pitiful.

CARB's duty is to require production of real ZEV for sale to the general public, without trick or artifice, at a reasonable price (for example, the median price of all cars sold in a model year).

If the public demand for ZEV is too high, then let them come back and explain why they had claimed that no one wanted them.

This is the reality: plug-in Toyota RAV4-EV, designed prior to 1997, are the best ZEV in existence. We need constant improvement, design effort, and, mostly, regular production of

real ZEV, year after year.

The proposed regulations are overly complex, full of loopholes, and don't require industry to do much of anything.

It's a disgrace: CARB has killed the Electric car all over again.

Shame is not enough; the budget that's burned by CARB should be rescinded, the staff discharged, and some real Agency formed to address the problem of air pollution. CARB, and the AQMD system, have failed.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-15 14:58:41

No Duplicates.



## **Comment 56 for ZEV 2008 (zev2008) - 15-1.**

First Name: Jay  
Last Name: Friedland  
Email Address: jay@pluginamerica.org  
Affiliation: Plug In America

Subject: Plug In America Response to 15-Day Notice - Increase ZEV numbers now!  
Comment:

Plug In America proposes the following document with comments to the "15 Day Notice of Public Availability of Modified Text" Specifically, the Board should consider the long term impact of its actions and take further action now, based on our proposal. If we do act now, we can really make a difference. Waiting until 2015 and requiring very few vehicles on the road will not accomplish what we need and that will only serve to reduce the long-term effectiveness of CARB and hurt the State of California. We encourage the Board to reconsider our suggested changes to make the regulation even simpler and more results-oriented. Only when ZEVs are available in showrooms will this Program truly be a success.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2533-pia-15dayresponse\\_final.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2533-pia-15dayresponse_final.pdf)

Original File Name: PIA-15DayResponse Final.pdf

Date and Time Comment Was Submitted: 2008-08-15 15:21:26

No Duplicates.

**Comment 57 for ZEV 2008 (zev2008) - 15-1.**

First Name: Matt

Last Name: Miyasato

Email Address: mmiyasato@aqmd.gov

Affiliation: South Coast AQMD

Subject: SCAQMD Comments on proposed ZEV changes

Comment:

Please find South Coast AQMD staff recommendations to ZEV regulation changes.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2534-aqmd\\_zev\\_comments\\_15aug08.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2534-aqmd_zev_comments_15aug08.pdf)

Original File Name: AQMD ZEV Comments 15Aug08.pdf

Date and Time Comment Was Submitted: 2008-08-15 16:35:59

No Duplicates.

**Comment 58 for ZEV 2008 (zev2008) - 15-1.**

First Name: James

Last Name: Ehlmann

Email Address: Non-web submitted comment

Affiliation:

Subject: General Motors

Comment:

please see attached

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2540-zev90001.pdf>

Original File Name: ZEV90001.pdf

Date and Time Comment Was Submitted: 2008-08-19 10:07:34

No Duplicates.

**Comment 59 for ZEV 2008 (zev2008) - 15-1.**

First Name: Steve

Last Name: Marion

Email Address: marion5768@aol.com

Affiliation:

Subject: A humble request to do the right thing and fight the good fight

Comment:

Please see attached comment.

Attachment: <https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2541-zev100001.pdf>

Original File Name: ZEV100001.pdf

Date and Time Comment Was Submitted: 2008-08-20 15:29:10

No Duplicates.

## **Comment 1 for ZEV 2008 (zev2008) - 15-2.**

First Name: Douglas

Last Name: Rosen

Email Address: drosen@milesev.com

Affiliation: MILES Electric Vehicles

Subject: ZEV manufacturer requirements

Comment:

It is in the interest of all Californians and all Americans to have the most zero emission vehicles on the road as possible. The old adage that requiring zero emission vehicles will hurt economic prosperity is being proven to be false. The obvious truth is that the longer we wait, the longer we keep promoting IC and carbon emitting vehicles the worse off our economy will be as a result.

CARB must at last abandon its perceived benefactors and return to supporting the people whom it represents with real support for advancement in clean healthy technologies.

We can not continue being a species that poisons its young and soils its nest or this will lead to extinction and we are the guilty party.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-03 17:03:27

No Duplicates.

## **Comment 2 for ZEV 2008 (zev2008) - 15-2.**

First Name: Ross

Last Name: Guldenbrein

Email Address: radiocycle@pacbell.net

Affiliation:

Subject: PHEV are a viable link to the future!

Comment:

Hello,

Although I do not fully understand the wording of the ZEV regulation, I ask that you would pass legislation to require both public and private fleets to buy efficient vehicles that save money in the long run. Like compact fluorescent lightbulbs (CFLs), the up-front cost is higher, but greater efficiency guarantees cost savings in the long run. Push fleets to follow the cost-efficient path, and offer financial assistance in the early years, if needed, as fleet owners adjust to the new regulation.

Provide state assistance (perhaps some of the AB118 funds) to partner with either consumers or automakers and remove some of the risk associated with state-of-the-art car batteries. State regulations require a 15-year or 150,000-mile warranty on hybrid batteries. Plug-in hybrid electric vehicles can get 100+ miles per gallon using newer lithium-ion batteries, but these batteries have not been on the market long enough to meet the current 15-year warranty, which is delaying introduction of plug-in hybrids. The state could offer an "insurance" program for batteries beyond the first 7 years of use at very little financial risk to the state, giving automakers and consumers the confidence to move forward. The program could sunset in a few years once the longevity of lithium batteries is established.

Shift funding from programs to establish hydrogen fueling stations to programs incentivizing battery electric vehicles and plug-in hybrids. Hydrogen fuel-cell cars will not be commercialized for decades, if ever, and so won't be ready in time to deal with global warming, while plug-in vehicles could be commercialized today. Funds currently being spent on hydrogen are a waste in this regard, especially in a period of state budget limitations, because they weaken the state's ability to move toward more-viable plug-in vehicles.

Thank you so much for the opportunity to express my views on the future of our state's energy independence and on our bid to become the number one clean air state in the nation.

Ross and Jean Guldenbrein

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-03 19:15:35

No Duplicates.

### **Comment 3 for ZEV 2008 (zev2008) - 15-2.**

First Name: John

Last Name: Cabrera

Email Address: jpcabrera2@aol.com

Affiliation:

Subject: Regarding Clean Fuel Vehicles

Comment:

Hello.

I, as many as many Californians want the freedom to be able to purchase hybrids, plug-in hybrids, hydrogen and electric vehicles. It is very disappointing that the technology which does exist is not made available to all Californians now. Please make these vehicles available as soon as possible.

Thank you.

John Paul Cabrera, BASW, PPS, MSW

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-03 22:50:44

No Duplicates.



## **Comment 4 for ZEV 2008 (zev2008) - 15-2.**

First Name: William

Last Name: Haskell

Email Address: haskell-bill@stanfordalumni.org

Affiliation:

Subject: Concern Over Proposed Changes

Comment:

Dear CARB Representative,

If I understand the proposed changes correctly, the 2008 Amendments essentially kill any regulation contained therein as 2008 is almost over. What is the purpose of this? Is it to be revised again in 2009 just to change the date? The regulations should move quickly towards support of clean and non-fossil fuels powered vehicles. It should support preservation of the environment and reduction of dependency on oil and any other foreign-controlled sources of fuel.

Please represent the people of California and the world; not big business. Thank you for your consideration.

Sincerely,  
William Haskell

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-04 08:53:17

No Duplicates.

## **Comment 5 for ZEV 2008 (zev2008) - 15-2.**

First Name: Tom

Last Name: Kunhardt

Email Address: tt101@mac.com

Affiliation:

Subject: California Zero Emission Vehicle Regulation

Comment:

It is more important than ever to increase the required number of zero emission vehicles that auto manufacturers must make available to California citizens.

We made headway the last time we had strong requirements, let's up the ante and set high targets to drive the market to mass produce electric vehicles.

Now is a perfect time to pass this mandate. The ITC has been extended for eight years and the \$2,000 cap has been lifted for those who purchase a solar electric system for their home. This creates a perfect opportunity for Californians to invest in a solar system that can power their home and their cars dramatically and instantaneously reducing pollution and carbon emissions.

It's a no brainer!

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-04 10:47:41

No Duplicates.

## **Comment 6 for ZEV 2008 (zev2008) - 15-2.**

First Name: Mark D

Last Name: Larsen

Email Address: yanquetino@casteyanqui.com

Affiliation: private citizen

Subject: Eliminate the refueling bias against EVs in the ZEV tiers!

Comment:

Hold on a minute here! Now that I have looked at CARB's tables more closely, do I understand its ZEV "tiers" correctly? In which the higher tiers have "refueling" mandates?! If so, CARB continues to impose an inherent bias against electric vehicles from the get-go.

For example, a Tesla Roadster uses ~265 watts/mile on the road, which requires ~308 watts/mile at the plug. This means that, for the Type III Tier, you would have to load over 29 kWh (100 miles) into the Roadster in under 10 minutes. Ridiculous! How many high-capacity charging stations has the state of California provided that are capable of such a recharge? Not one, that I am aware of. Unless and until it does, the state has no business mandating such a time limit.

Moreover, no EV on earth is going to qualify as a Type IV. Even the Roadster, for instance, would have to recharge in 10 minutes... over 58 kWh of electricity (190 miles)!!! Impossible! CARB has got to be kidding to limit the definition of a Type IV ZEV like this!

The only conclusion anyone can draw from these "refueling capabilities" is that they represent a blatant bias toward hydrogen --and those who want to \_sell\_ hydrogen to consumers rather than letting them get their "fuel" at a cheaper price from the electric grid or even --gasp!-- for free from solar panels on their roofs.

What in the world is CARB thinking? I thought you were supposed to be advocating ZERO-emissions. Period. NOT showing prejudicial favoritism of one source of energy over another.

CARB needs to eliminate the refueling requirements and focus exclusively on range to distinguish one Type of ZEV from another. ANY vehicle that can travel over 100 miles without refueling should qualify as a Type III, and ANY vehicle that can travel over 200 miles without refueling should qualify as a Type IV --no matter how long that refueling takes, 10 minutes or 4 hours!

Think about it: a Tesla Roadster, now has a newly verified range of 244 miles per charge. A driver could thus leave Los Angeles at 8:00 in the morning, stop for a leisurely lunch in San Luis Obispo at noon while charging the batteries at an RV Park, continue driving at 4:00 and arrive in San Francisco at around 8:00 in the evening. Surely CARB can see that this is more than sufficient in both range and recharge rate for a vehicle that produces zero

--ZERO!-- emissions.

Isn't that CARB's prime directive? To monitor and protect \_air\_ resources? When did it get into the business of mandating \_time\_ resources via refueling capabilities?

Please, PLEASE finally do the right thing. With more and more auto manufacturers developing electric vehicles, if CARB continues down this path it will only end up with more egg on its face.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-05 14:56:36

No Duplicates.

**Comment 7 for ZEV 2008 (zev2008) - 15-2.**

First Name: Steve

Last Name: Elliott

Email Address: na@na.com

Affiliation:

Subject: Do Not Kill The Electric Car Again !!

Comment:

Over regulating/mandating or limiting ZEV's / Electric Cars is  
WRONG and NOT the way to go. Stop all of this nonsense. We are  
watching you. WE ALL NEED ELECTRIC CARS NOW !

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-06 12:35:30

No Duplicates.

## **Comment 8 for ZEV 2008 (zev2008) - 15-2.**

First Name: Bonnie

Last Name: Yelverton

Email Address: bonniebauer@world.oberlin.edu

Affiliation: private hybrid owner

Subject: Require that the hybrids of the future are plug-ins.

Comment:

I am the proud owner of a 2000 Honda Insight and my husband drives a recent Prius.

Soon after I bought my Insight, I joined a meet-up of hybrid and EVs at Griffith Park in LA. I was impressed by the EVs, but their "owners" were all in mourning that their Leases soon would be up and not renewable. When I saw the movie "Who killed the electric car?" I was devastated over what had become of these beautiful, efficient and patriotic cars!

Now it is time to bring them back.

Please require that all future hybrids be plug-ins. That would have made our own hybrids perfect! Most of our trips are very short. The longest is driving 40 miles to a concert in LA.

I think only on longer road trips would we even need gasoline. (I realize that the Insight uses electricity differently and would need further adaptation to be able to be a plug-in. But I understand that Honda is re-introducing the Insight, so they should be required to make this possible.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-11 09:42:18

No Duplicates.

## **Comment 9 for ZEV 2008 (zev2008) - 15-2.**

First Name: Christopher  
Last Name: Bostwick  
Email Address: cb41@chrysler.com  
Affiliation: ZEV Large Volume Manufacturers

Subject: ZEV Regulation: 2nd 15-Day Notice Comments  
Comment:

Dear Chairman Nichols:

On behalf of the Large Volume Manufacturers of the ZEV Mandate, please see the attached letter pertaining to the 2nd 15-Day Notice on proposed amendments to the ZEV regulation.

Best Regards,

Chris Bostwick  
Chrysler LLC

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2560-large\\_volume\\_manufacturer\\_2nd\\_15\\_day\\_notice.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2560-large_volume_manufacturer_2nd_15_day_notice.pdf)

Original File Name: Large Volume Manufacturer 2nd 15 Day Notice.pdf

Date and Time Comment Was Submitted: 2008-10-17 12:50:41

No Duplicates.

**Comment 10 for ZEV 2008 (zev2008) - 15-2.**

First Name: barry

Last Name: wallerstein

Email Address: bwallerstein@aqmd.gov

Affiliation: scaqmd

Subject: SCAQMD Comments re CARB 2008 Amendments to ZEV Regulation  
Comment:

Please see the attached comment letter. Thank you.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2561-carb\\_comments\\_on\\_zev\\_program\\_regs.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2561-carb_comments_on_zev_program_regs.pdf)

Original File Name: CARB Comments on ZEV Program Regs.pdf

Date and Time Comment Was Submitted: 2008-10-20 11:27:13

No Duplicates.



## **Comment 11 for ZEV 2008 (zev2008) - 15-2.**

First Name: Christopher  
Last Name: Bostwick  
Email Address: cb41@chrysler.com  
Affiliation: Chrysler LLC

Subject: Chrysler LLC 2nd 15-Day Notice Comments  
Comment:

Dear Chairman Nichols:

Please see the attached letter for Chrysler LLC's 15-Day Notice comments on proposed amendments to the ZEV regulation.

Best Regards,

Chris Bostwick  
Chrysler LLC

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2562-chrysler\\_llc\\_2nd\\_15\\_day\\_notice.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/zev2008/2562-chrysler_llc_2nd_15_day_notice.pdf)

Original File Name: Chrysler LLC 2nd 15 Day Notice.pdf

Date and Time Comment Was Submitted: 2008-10-20 13:45:24

No Duplicates.