

To:
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Each motorcycle sold in California next year is expected to emit more harmful exhaust gases (NO_x, HC and CO) than any new SUV. The technology to clean motorcycles is available and widely used since 2000 by the automotive industry but it has yet to be implemented. In the absence of appropriate regulations, the motorcycle industry ignores the dangers of NO_x, HC and CO on the Californian population's health¹ by creating smog and ozone. While CARB legislation forces the automobile industry to reduce emission of the same pollutants on future models², too little has been done regarding motorcycle emissions. California should revise its emissions standard policy for motorcycles in accordance with what has been done in Europe, apply a coherent approach for all on-road new vehicles, and develop a motorcycle consumer information policy.

The new 2008 Tier 2 CARB legislation is the most recent legislation with regards to motorcycle emissions. This legislation is likely to be adopted nationwide by EPA in 2010. 2008 tier 2 CARB motorcycle standards tolerate levels of emissions that are 5 to 10 times more than those for an average car. Even if low volume motorcycle manufacturers have organized resistance against this legislation, none of the major Japanese motorcycle suppliers have opposed it. In fact, compared to Euro legislation for two wheel vehicles, California 2008 Tier 2 standards is 2 to 5 times more tolerant^{4,5}. The global motorcycle industry already produces models that are in compliance with stricter European norms. It is time now to design CARB Tier 3 motorcycle standard emissions, with stricter standards.

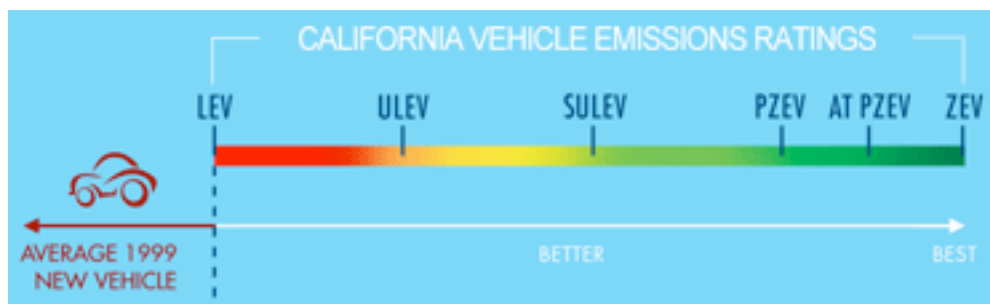
2008 Tier 2 CARB legislation is problematic to the global motorcycle industry. The procedures and specifications are not directly comparable to those used in Europe and in Asia. It is possible to regulate the global motorcycle industry with stricter standard if the test procedures are common with other markets. Instead of spending resources to modify their current model to comply with different national legislations, global manufacturers are asking for unified and stabilized test procedures. The next CARB Tier 3 legislation should be designed differently than the current one.

When a consumer is in the market to buy a car, comparative data is available to compare car mileage, and even emissions³ (LEV, LEV II, ULEV...). Without legal requirements, it is almost impossible to get reliable information about motorcycle mileage and exhaust emissions. Consumers are left with no other choice than pick what seems to be the best option. There is no incentive for manufacturers to inform their customers. Every motorcycle sold in California should display a standardized sticker with the following information: city and highway mileage and the level of exhaust emissions compare to the average market.

California is not leading the fight for cleaner motorcycles. In Europe, and increasingly in Asia where megacities are invaded by motorcycles, stricter standards have been implemented. California is leading the fight for GHG emissions on cars, and should be coherent in applying stricter rules for all motor vehicles. It is time to redefine CARB 2008 Tier 2 motorcycle emissions legislation.

¹ California ARB, Children Health Study 1993

² The California Low-Emission Vehicle Regulations With Amendments Effective October 11,2007
http://www.arb.ca.gov/msprog/levprog/cleandoc/cleancomplete_lev-ghg_regs_9-07.pdf



³ Level of car emission performance - <http://www.driveclean.ca.gov>

Regulating Agency	Implementation Date	HC(g/km)	HC + NO _x (g/km)	CO(g/km)	EVAP(g/test)
CARB ⁴ (Motorcycle Class 3 >280 cc)	1978	5.0 to 14.0	N/A	17.0	2.0
	2004 tier 1	-	1.4	12.0	2.0
	2008 tier 2	-	0.8	12.0	2.0
EC ⁵ (Motorcycle >50 cc)	1999 (Euro 1)	4.0 - 3.0	0.30 (NO _x only)	8.0 - 13.0	N/A
	2004 (Euro 2)	1.2 <150 cm ³ - 1.0 > 150 cm ³	0.30 (NO _x only)	5.5	N/A
	2007 (Euro 3)	0.8 <150 cm ³ 0.3 > 150 cm³	0.15 (NO _x only) 0.45 (HC + NO_x equiv)	2.0	N/A

Sources:

⁴ California Air Resource Board
<http://www.arb.ca.gov/msprog/motorcycle/onrdmc.htm>

⁵ Ademe (France)
www2.ademe.fr/servlet/getBin?name=70E56DDB38011B525873761D6F8162D91178890391285.pdf