

Motorcycle Emissions - Emissions Based Road Tax Scheme – Why Not?

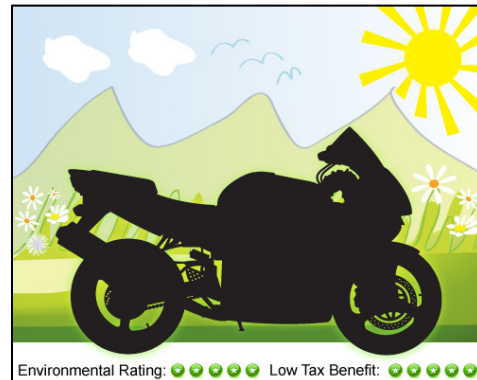
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EU Rules on CO₂ emissions and UK government introduces new road tax

On April 23rd 2009 the European Commission issued **REGULATION (EC) No 443/2009**

This regulation sets emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles. In doing so, the EU Regulation establishes CO₂ emissions performance requirements for new passenger cars. The result of this regulation is that new cars must have a conformity certificate and from April 2010, road tax in the UK will be based on the CO₂ emissions of each car which will be determined from the conformity certificate of the manufacturers.

"Vehicle tax rates for cars registered on or after 1 March 2001 are split into 13 bands depending on CO₂ emissions. The amount you will pay depends on which band your car comes under".



"From April 2010 anyone buying a new car will pay a different rate of Vehicle Tax for the first tax disc. From the second tax disc onwards they will then pay the standard rate. This will send a stronger signal to the buyer about the environmental implications of their car purchase and will only apply to new cars, not already registered cars".

Motorcycles will not be included in these rates, because nobody knows what the CO₂ emissions for motorcycles (and mopeds) are. This is because the motorcycle manufacturers refuse to supply this information, which means that any potential savings on road tax will not be passed on to motorcyclists.

At the EU Commission's "MVEG Motorcycle Working Group" meetings in Brussels (2005)¹ the Swedish Environmental Protection Agency² submitted a paper to the working group proposing that the motorcycle manufacturers take responsibility by declaring the emissions for motorcycles at the point of manufacture. They point out that the declaration of emissions should be based on a test called "In Use Compliance".

The paper is entitled "In-Use Compliance for Motorcycles Draft Regulation Text Supporting Document". There is also a previous paper from 2003, entitled "Principles and Elements Emissions Durability and In-Use Compliance for MC".

"In-use compliance (IUC) means conformity of the emission control system with the requirements during normal useful life (e.g., nominally for cars 5 years and/or 80,000 km of use). This is checked on a randomly selected sample of properly maintained and used vehicles representing a vehicle type at laboratory tests using established type approval test procedures" (2003:2).

The substance of these two papers is that the authors believe the onus is on the motorcycle manufacturers to apply "In Use Compliance" which means that the manufacturer must test for emissions and declare them. It also means that if there are any faults, the manufacturer is obliged to recall the vehicle and repair it and (this is where it gets interesting) the manufacturer would effectively be responsible for the emissions of the vehicle for a period of time after the sale of the vehicle. In the case of cars, this is for 5 years or 80,000 kms, therefore presumably there would be an equivalent for motorcycles, which is yet to be established.

This report challenges another report from a Greek organisation – the Laboratory of Applied Thermodynamics, Mechanical Engineering Department, Aristotle University, Thessaloniki, (LAT) regarding IUC. The first LAT report "Impact assessment/Package of New Requirements Relating to the Emissions from Two and Three-Wheel Motor Vehicles", was written in 2004³ and updated in 2008 (Study on possible new measures concerning motorcycle emissions – final report⁴)

This organisation proposes that IUC is considered as one of the no-regret measures⁵, arguing:

¹ http://ec.europa.eu/enterprise/automotive/mveg_meetings/motos/meeting8/

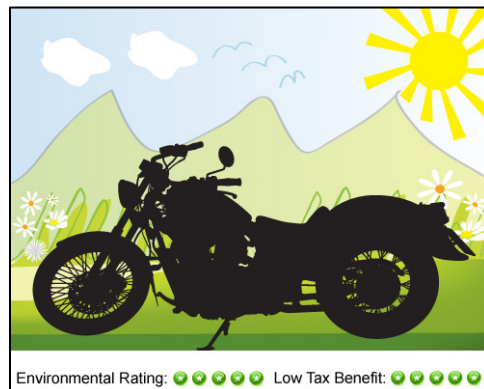
² <http://www.naturvardsverket.se/sv>

³ http://ec.europa.eu/enterprise/automotive/mveg_meetings/meeting96/ptw_final_report.pdf

⁴ http://ec.europa.eu/enterprise/automotive/projects/report_measures_motorcycle_emissions.pdf

⁵ The concept of "no-regrets" encapsulates the ecologically modern idea that addressing environmental problems can bring economic, as well as social and environmental, benefits. It is argued that the degree of reconciliation between environmental and economic objectives achieved

“There are no different conclusions reached for the effectiveness of IUC over the previous report. An IUC procedure works as a reminder that any vehicle can be potentially subjected to an emission test, even after leaving the manufacturer’s facility. In that sense, the manufacturer rather adopts the precautionary principle that all products leaving the production line should be compatible to their type approval. This allows limited – if any – space for a direct IUC effect, i.e. the actual discovery of a vehicle family which does not comply with its type approval and the initiation of a remedial process, including the recall, the repair of the defected component, etc” (page 9).



An option that the LAT study suggests is road worthiness testing.

“One measure that was found very cost-effective in the previous LAT/AUTH study was the establishment of a periodic road-worthiness test. Although this was not reassessed in the current study, it is repeated that road-worthiness testing is a very suitable measure in controlling emissions from motorcycles.” (page 15)

Indeed, ACEM wants Road Worthiness (RW) Testing (MOT) for motorcycles throughout Europe (not all European countries have this test for motorcycles) and has been pushing to include emissions in this test, presumably so that they can move the responsibility for the emissions onto the rider and not have to worry about the cost of testing and recalls.

In his presentation on road worthiness testing, a representative of ACEM, citing the MAIDS report, declared that technical failure was insignificant as a primary contributory factor for accidents (0.3%) but also stated that:

The “implementation of an emissions road-worthiness procedure is effective because it targets all fleet vehicles. Additionally, its effects may be demonstrated directly - with no delay that usually occurs from the need to replace fleet vehicles before an improvement is seen (i.e. when improving emission standards of new registrations)...”

“As a result of its application also to Euro 2, RW is one of the most effective measures that can be taken to reduce emissions”.

In their response to the Swedish report, ACEM⁶ state that they don't want the responsibility of declaring emissions (with the eventual problem of recalls) and they cite the following reasons:

- High variety of model and engine types, in most cases produced in low production volumes compared to other vehicle categories.
- Wide geographic distribution.
- Very high proportion of in-use vehicles being unsuitable for audit.
- Frequent changes of ownership making tracing difficult.

The final evaluation of the LAT report summarises the reason for the reluctance of the motorcycle industry to declare emissions which is:

- The energy efficiency labelling regulation should be formulated in a way that will not affect the sensitive PTW market. A solution would be to classify vehicles within the same market segment. (page 15).

What this suggests is that the marketing strategies of the motorcycle industry may have to somehow combine the macho, race track image common in some motorcycle advertising with a declaration of emissions.

If the consumer wishes to choose a machine that has lower emission levels over high performance, perhaps this would affect sales.

The Commission has taken into consideration the problems of cost for small manufacturers and niche markets for the car industry in the regulation) **No 443/2009**, this could easily be applied to the motorcycle manufacturers. Companies such as Honda, Suzuki, Peugeot and BMW have no excuse because they already have the technology for calculating emissions in their cars.

According to ACEM, the Commission has chosen to pursue a policy in favour of evaporative regulation without regard to normal cost/benefit ratios. ACEM believes that would impose a greater fixed cost on manufacturers than has been considered so far and would add to development and manufacturing costs due to its non-alignment with

has been made possible through a progressive narrowing of the scales over which costs and benefits are weighed, and the exclusion of the non-material benefits of the environment.

⁶ http://ec.europa.eu/enterprise/automotive/mveg_meetings/motos/meeting8/moto_108.pdf

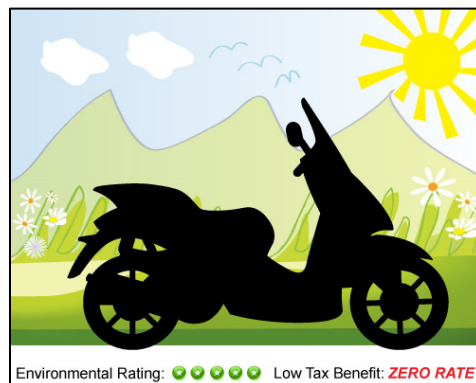
existing regulation. The result is that ACEM has under duress (their words) come back with a proposal to test emissions⁷.

How will that affect riders when we come to pay our road tax?

Well, in September 2008 the Association for Emissions Control by Catalyst (AECC)⁸ completed a Motorcycle test programme evaluating current motorcycle emissions performance.

Four Euro 3 motorcycles and one Indian motorcycle were selected and evaluated on Euro 3 and world harmonized World Motorcycle Test Cycle (WMTC) test cycles for regulated and unregulated pollutants.

The results were based on tests for the Euro 3 Test Cycle and the WMTC.



CO₂ test results (g/km)

	Yamaha FJR1300	Honda VFR 800	BMW F800	Honda Unicorn 150	KYMCO Xciting 500
Euro3	152.6	158.8.	109.0	51.2	112.0
WMTC	135.5	131.9	100.6	41.4	106.0

How does this relate to the proposed road tax to be introduced next year in the U.K.?

For example, for cars - Bands A through to D (= to up to 100 g/Km to a maximum of 130 g/Km) would mean zero charge for road tax; E band (= to 131-140 g/km) would cost £110 - 2010 first-year rate (or £100 for alternative fuel); F band (= 141-150 g/km) would cost £125 - 2010 first-year rate (or £115 for alternative fuel); G band (= 151-160 g/km) would cost £155 - 2010 first-year rate (or £145 for alternative fuel) and so forth.

So (considering that there would need to be a proportionate rating for motorcycles due to the lower consumption of fuel and other factors), based on these results and using the Euro3 as the measure for the new road tax regime, if you chose a BMW F800, a Honda Unicorn 150 or a KYMCO Xciting 500 you would not pay anything, but you would pay a higher tax per year (G Band) for both the Yamaha FJR 1300 and the Honda VFR 800 (although using the WMTC rating, the latter two would pay less (E Band) per year for road tax).

Where does that leave motorcyclists?

Doing nothing is not an option. In the end the environmentalists will have their way and for good reason. That leaves two choices, either the manufacturers accept that they will have to be responsible for declaring emissions and for recalls if they get it wrong.

Or we pay higher road tax (because in the absence of information, the government will tax by default) and there is the real possibility that riders will have to pay higher charges for MOTs to cover the cost for emission checks – and be responsible for repairs if the emission levels are too high.

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Right to Ride

www.writetoride.co.uk

⁷ http://ec.europa.eu/enterprise/automotive/mveg_meetings/motos/meeting8/moto_107.pdf

⁸ BRIEF SUMMARY OF THE 2008 AECC MOTORCYCLE TEST PROGRAM AECC, Sept. 2008 www.aecc.eu