Setting the scene: – Monitoring vehicle performance in the EU

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Tricks of the trade: claiming fuel reality

Car manufacturers are accused of misleading consumers with their fuel economy claims.

By Anna Edwards
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Car manufacturers are accused of misleading consumers with their fuel economy claims. A damning report claims car manufacturers have been accused of misleading consumers by taping on extra features to make models look more efficient. As a result, drivers are buying cars that don’t live up to their claimed fuel efficiency. The report accuses car companies of engaging in consumer fraud and consumer misrepresentation.

Motorists misled by fuel consumption claims

Research shows official fuel consumption claims are off by miles, with many drivers getting 25% less than promised.

By Chris Tilbury
6.00AM BST 23 Apr 2015

Car buyers are being misled by fuel consumption claims, according to research revealing some vehicles, including top makes such as Mercedes, Range Rover and Lexus, get as little as 71% of the advertised mileage per gallon. Manufacturers increasingly claim in adverts that their cars will manage over 70mpg, however, a major survey of what cars are achieving on the road, by motoring website Honest John, found that many drivers are getting less than three-quarters of the mpg they had expected. It estimates that overstated official fuel consumption is costing UK drivers an extra £5 per litre every time they fill their tanks.

Car manufacturers have been accused of misleading consumers with their fuel economy claims. A damning report claims car manufacturers have been accused of engaging in consumer fraud and consumer misrepresentation. The report accuses car companies of taping on extra features to make models look more efficient.
Why an EU focus on road transport emissions?

The EU has committed to reducing its GHG emissions by at least 20% by 2020

- Emissions from ‘non-ETS’ sectors, including road transport, must reduce by 10% compared to 2005

EU-28 GHG emissions, 2012

- Power plants and industrial energy use: 43%
- Other energy use: 17%
- Industrial processes: 7%
- Agriculture: 10%
- Waste: 3%
- Transport: 20%
- Road transport: 19%
- Other transport: 1%

EEA, 2014
In 2009, the EU introduced legislation to ensure improved emissions performance of cars:

- an average emissions target of 130 g CO\textsubscript{2}/km by 2015 for the new car fleet
- a binding CO\textsubscript{2} target for each car manufacturer from 2013
- a long-term target of 95 g CO\textsubscript{2}/km to apply to the entire fleet from 2021
Monitoring CO₂ emissions from passenger cars

Latest update – 15 Apr. 2015

• In 2014, new cars emitted on average 123.4 g CO₂/km, significantly below the 2015 target of 130 g CO₂/km.

• Europe reached the 2015 target by 2013, two years ahead of schedule

• Average emission levels in 2014 were below 130 g CO₂/km in 17 of the 28 Member States.
• Diesel vehicles remain the most sold vehicles in Europe – 53% of sales.
• Fuel efficiency of petrol cars has been catching up to diesel cars in recent years. The average emissions gap between petrol and diesel is currently below 3 g CO₂/km, around one seventh of the gap in 2000.
Comparing ‘test-cycle’ vs. real-world emissions

- Numerous studies in recent years have documented the often significant divergence between ‘test-cycle’ (NEDC) and real-world CO₂ emissions.
- The essence of the difference is that the NEDC testing does not well represent 'real world' driving conditions – it covers only a small portion of vehicle engine operation compared to reality.

<table>
<thead>
<tr>
<th>Table 5.2</th>
<th>Real-world vs legislative CO₂ emissions for the EU-27, 2010–2013</th>
<th>EEA, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average capacity</strong></td>
<td><strong>Average mass</strong></td>
<td><strong>Average TA emissions</strong></td>
</tr>
<tr>
<td>Euro 5 Petrol &lt; 0.8 l</td>
<td>791</td>
<td>912</td>
</tr>
<tr>
<td>Euro 5 Petrol 0.8–1.4 l</td>
<td>1 220</td>
<td>1 122</td>
</tr>
<tr>
<td>Euro 5 Petrol 1.4–2.0 l</td>
<td>1 703</td>
<td>1 399</td>
</tr>
<tr>
<td>Euro 5 Petrol &gt; 2.0 l</td>
<td>3 546</td>
<td>1 788</td>
</tr>
<tr>
<td>Petrol — all capacities</td>
<td>1 423</td>
<td>1 218</td>
</tr>
<tr>
<td>Euro 5 Diesel &lt; 1.4 l</td>
<td>1 300</td>
<td>1 199</td>
</tr>
<tr>
<td>Euro 5 Diesel 1.4–2.0 l</td>
<td>1 741</td>
<td>1 499</td>
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<tr>
<td>Euro 5 Diesel &gt; 2.0 l</td>
<td>2 545</td>
<td>1 914</td>
</tr>
<tr>
<td>Diesel — all capacities</td>
<td>1 813</td>
<td>1 528</td>
</tr>
</tbody>
</table>
Impacts beyond fuel consumption and \( \text{CO}_2 \)

Compared to test measurements, the under-performance of vehicle emission standards for air pollutants has also had important knock-on consequences for local air quality.
1. Despite differences in CO$_2$ emissions between real-world and cycle approaches, real emission reductions have occurred over past years under the current testing regime and legislation.

2. However, reflecting the current issues, a substantial effort has been made in the EU in recent years to introduce a new test: the Worldwide harmonized Light vehicles Test Procedure (WLTP).

3. The WLTP is designed to better represent on the road vehicle operations. The improved method and the increased focus on real world emissions are expected to bring further future reductions.

4. While significant improvements under WLTP are expected, real world performance will still differ due to differences in driver behaviour, vehicle loading, climatic variations...

5. Real-world vs ‘test-cycle’ emissions is an important cross-cutting policy issue: consumer rights, transport, GHG emissions, air pollution, energy efficiency etc.
Thank you

http://eea.europa.eu/transport

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