

Policy implications of test cycle emissions discrepancy – is there a way forward?

Low Carbon Vehicle Partnership Conference 2012

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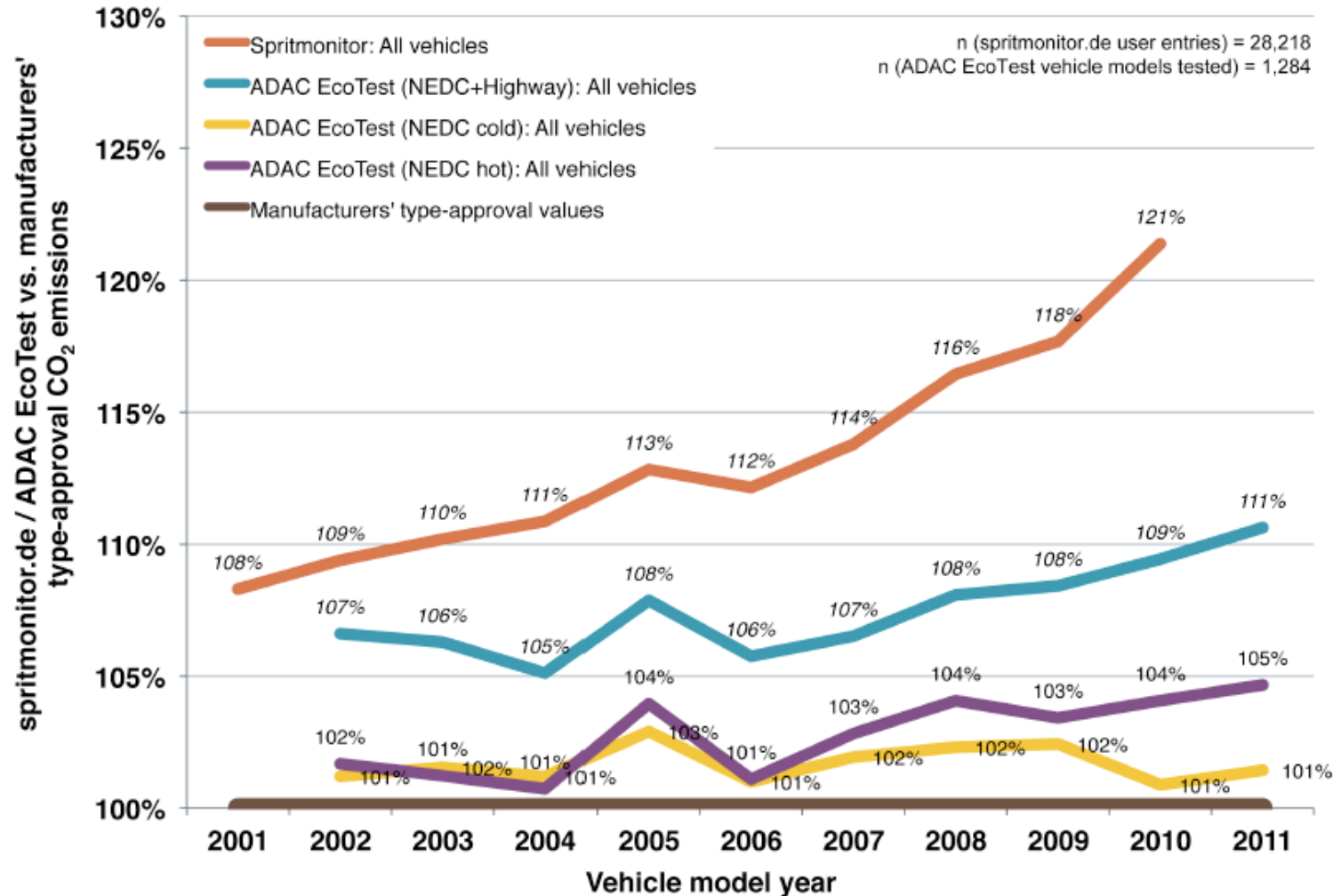
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ICCT working paper

Recent analysis suggests increasing 'gap'



ICCT working paper

Key factors for the discrepancy

1. Test cycle

2. Test procedure

- Road load determination
- Vehicle test weight
- Test cell temperature
- Gearshift points
- Starter battery state of charge
- Air conditioning systems
- Extension provision
- ...

A way forward: The UN process

World harmonized test procedure in work

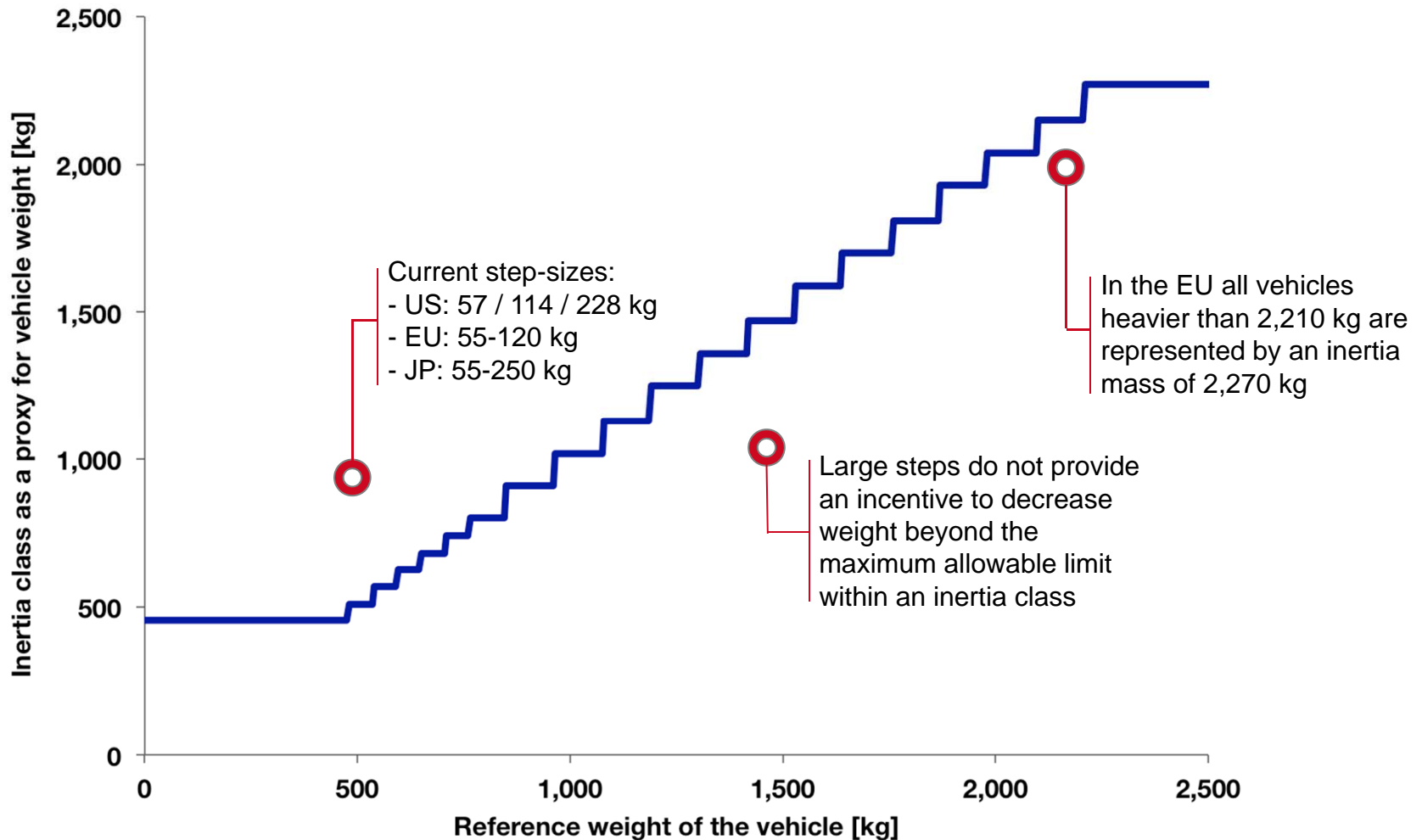


Timeline:

- Validation phase 1 and 2 in 2012
- Discussion and finalization of regulatory text in 2013/14

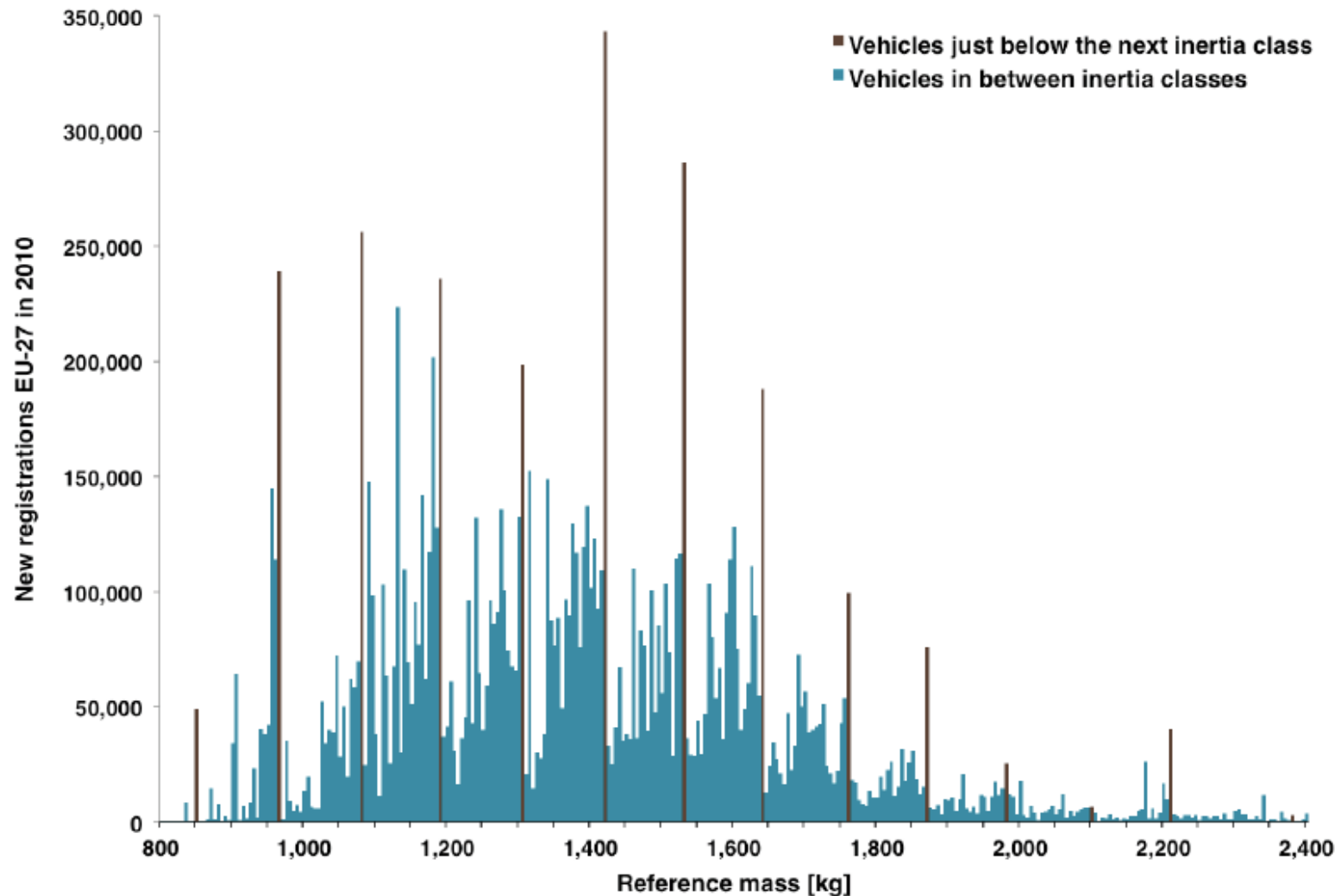
Example: Inertia classes

Today: Use of discrete inertia classes ...

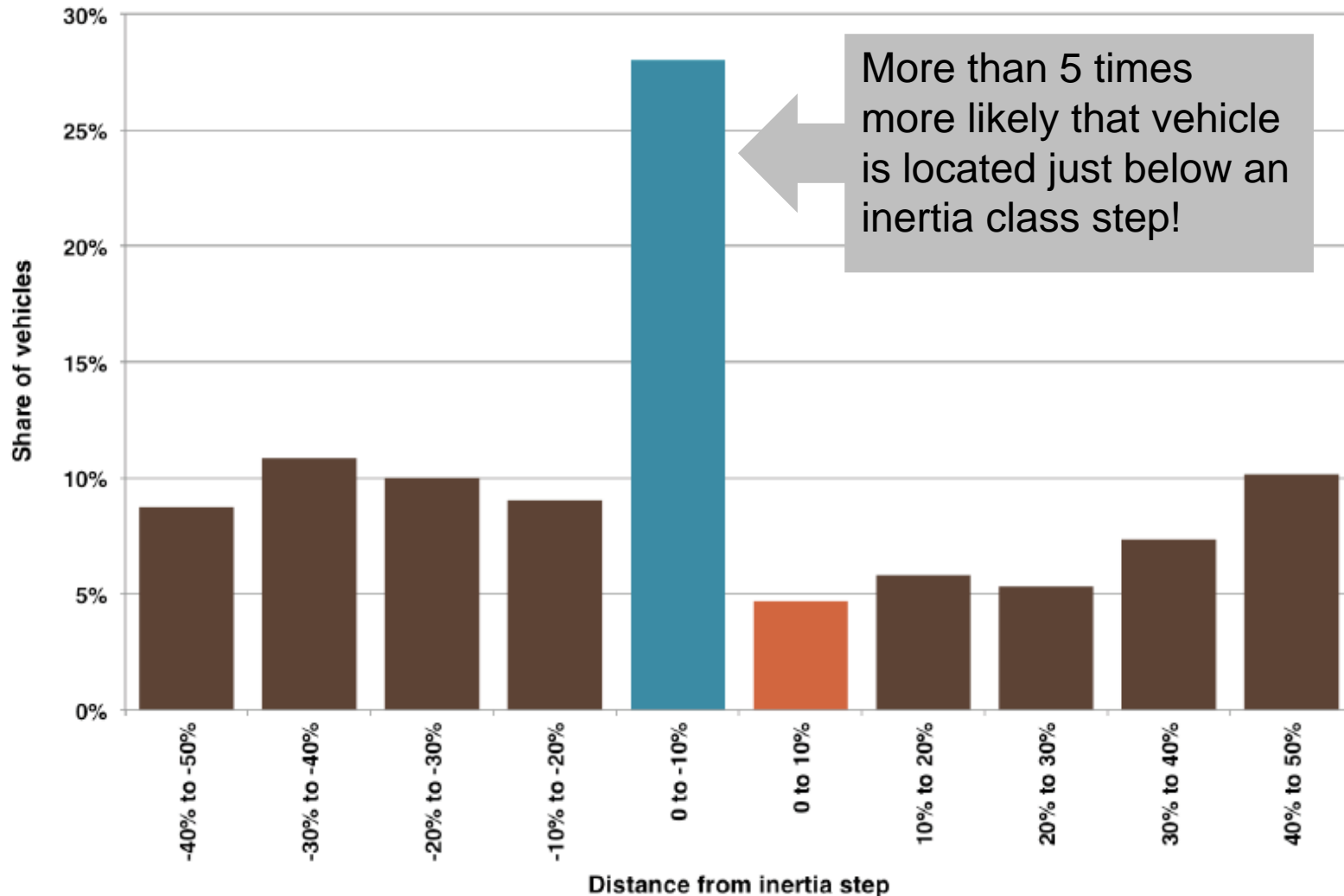


Example: Inertia classes

... results in conspicuous distribution



Example: Inertia classes ... results in conspicuous distribution

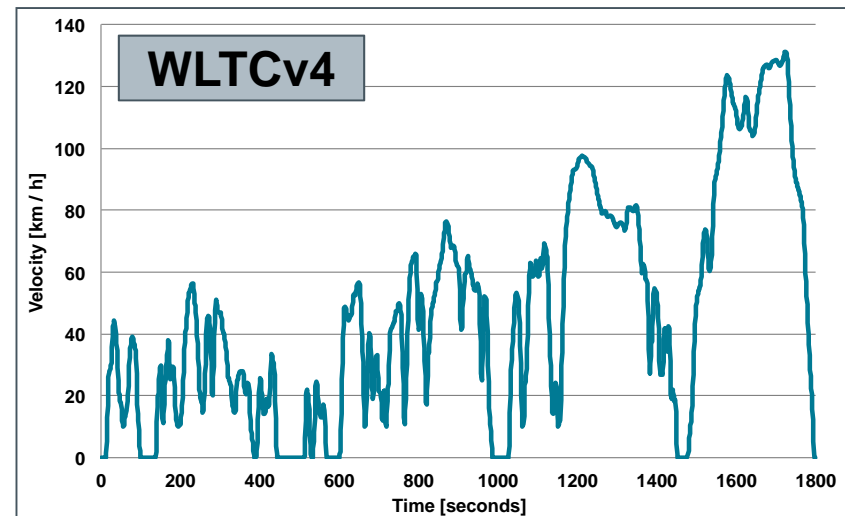
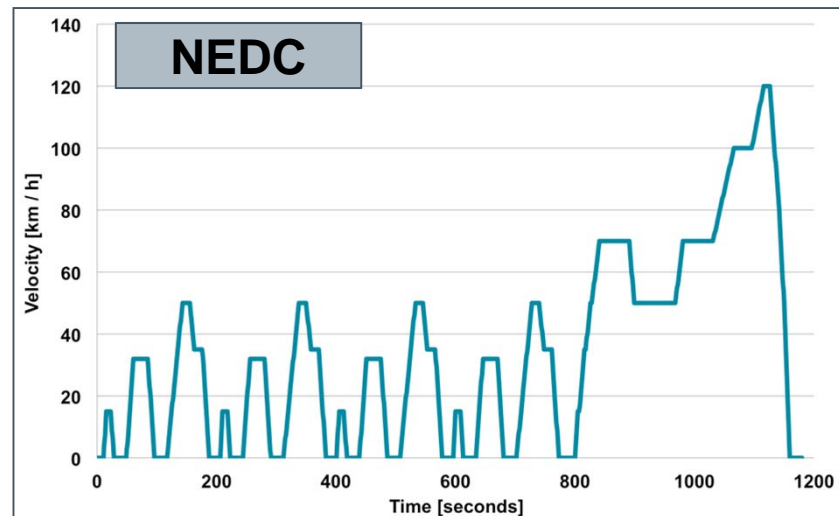


A way forward ...

WLTP will cover some aspects but not all

1. Test cycle

- more realistic top speed and accelerations
- BUT also reduced effect of cold start due to cycle length



A way forward ...

WLTP will cover some aspects but not all

1. Test cycle

2. Test procedure

- Test weight and step-less inertia proposal (ICCT, T&E, The Netherlands) → accepted in principle
- Road load determination proposal (T&E) → partly accepted
- Test temperature proposal (EC) → not likely to be accepted
- ...

A way forward ...

Key messages / conclusions

- 1. Data suggests increasing 'gap' between type-approval and 'real-world' CO₂ / fuel consumption values**
- 2. WLTP will 'fix' some of the issues, but not all**
- 3. WLTP will not have effect until approx. 2020**
- 4. Opportunity for EU to address remaining problems at the regional level**

More information

'Real world' issue not only for CO₂

- ICCT EU website: <http://www.theicct.org/europe>
- White Paper on urban off-cycle NOx emissions from trucks and buses: <http://www.theicct.org/urban-cycle-nox-emissions-euro-ivv-trucks-and-buses>
- Working paper on type-approval vs. real-world CO₂ emissions: <http://www.theicct.org/fuel-consumption-discrepancies>
- Working paper series on world harmonized test procedure: <http://www.theicct.org/series/worldwide-harmonized-light-vehicles-test-procedure-wltp>
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