The GreenNCAP Pilot Project

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Index

- What is GreenNCAP ?
- Legislation vs consumer-based evaluation
- Existing green car ratings
- How will the GreenNCAP rating be calculated ?
  - Test cycle
  - Rating methodology
- Next steps
- Conclusion

What is GreenNCAP

GLOBAL NCAP
www.globalncap.org

- The Global NCAP and the GFEI (Global Fuel Economy Initiative) agreed to join forces to set a new standard in green vehicle ratings
- Main goal is to achieve what SafetyNCAP accomplished for crash tests:
  - More stringent testing procedure
  - Independent and trustful test laboratories
  - Become the standard in environmental performance rating
- Provide the information to all potential car buyers
- Engage all stakeholders into getting the momentum going

Lesgislation versus consumer-focused

- SafetyNCAPs have set a new standard in crashworthiness and safety devices
  - Legislation secondary, surpassed by consumer driven initiative
- In the case of environmental protection, the legislator seem to have understood the problem and are willing to address it
  - EU willing to review CO2 / pollutant testing procedure by 2017
  - China to make their testing more demanding (switching to US FTP, or WLTP)
- Aim of GreenNCAP is to set the benchmark, and go beyond legislation
- Combine all vehicle environmental externalities into one single metric

Many Existing Green Car Ratings

- Mainly in Europe, but not only
- Mostly nationally-focused
- Different scopes, perimeters, label designs

- Workshop covering the topic held at the IEA in April 2013

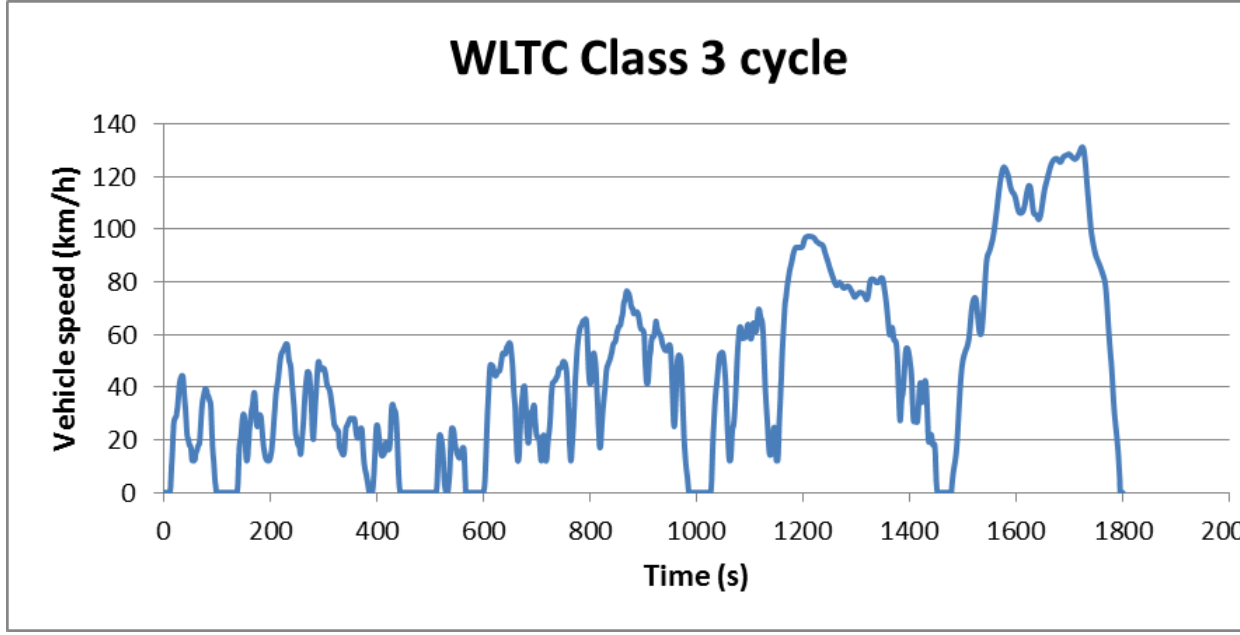
More details available on:

http://www.iea.org/workshop/gfei-green-global-ncap-labelling-workshop.html

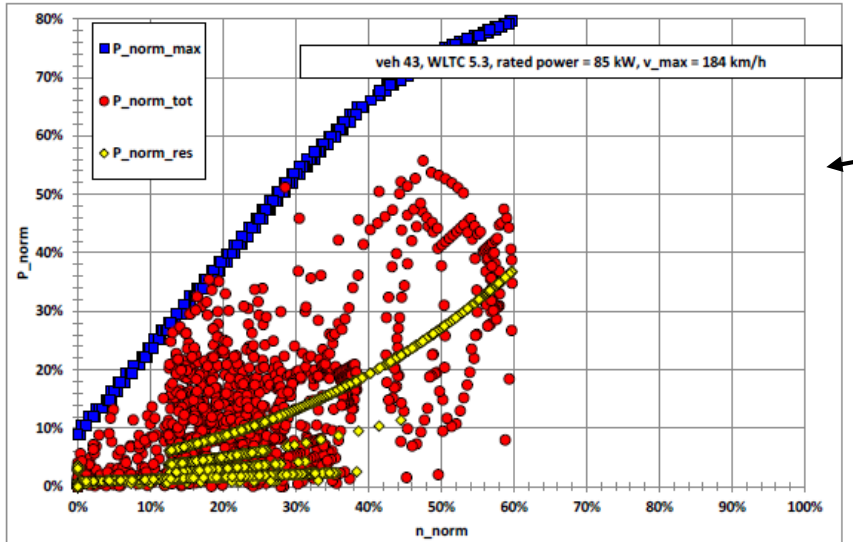
The GreenNCAP rating

- More realistic test cycle
  - Closer to real life drive cycles
  - Cover broad range of engine operating points
- Tougher testing conditions
  - « black » tires, vehicles loaded
  - Accessories on (A/C, lightning)
- Focusing on the vehicle in use environmental externalities
  - Tailpipe emissions: CO2, CO, NOx, PM, HC
  - Energy efficiency: MJ/km
  - Noise: dB from outside
  - Only light duty vehicles, M1 and N1 EU type

Test cycle choice



- WLTP (world light duty test procedure) best effort for a comprehensive test cycle
  - Developed under the UN umbrella
  - Input and Feedback from many countries
  - More representative of real life drive cycles
  - Cover many more engine operating points



WLTP

NEDC

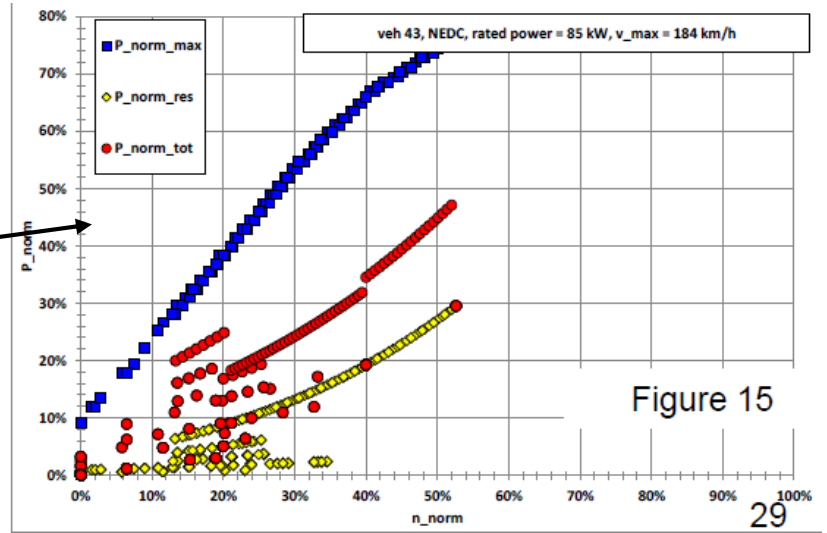


Figure 15

Test conditions

- Measurement conditions can vary broadly in real life, depending on where people live
- Homologation performed always at sea level, mid 20°C, 50% humidity
- Test should reflect this wide spectrum of running conditions

Status

- GreenNCAP is seeking a technical partner
  - Call for expression of interest closed on June 30th
  - Exclusive negociation stage with one of the applicant
- Technical partner will support
  - Test cycle development
  - Rating methodology
- Populating a vehicle database
  - Testing vehicles in independent premises
  - Support from car manufacturers / large fleet operators VERY important
- Develop a network of certified GreenNCAP test labs
- Develop a communication strategy
  - Label design
  - Web platform

Conclusions

- Even though regularly revised, Legislation still do not represent real-life fuel-efficiency and other environmental externalities
- Some loopholes still present in the latest draft updated legislation (accessory loads, operating temperatures, “black tires”,…)
- Need for a global, comprehensive and independent approach to green car rating
- Technical partner will help launch the GreenNCAP Pilot Project