The GreenNCAP Pilot Project

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What is GreenNCAP

• 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:
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
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