

# **Energy Efficient Tyres: Improving the On-Road Performance of Motor Vehicles - An IEA Workshop 2005**

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# Background to Workshop

- G8 to IEA: “tell us how to save energy”
- Transport: find areas that would benefit from international collaboration
- Focus on “off-test” fuel consumption
- Series of workshops
  - Tires
  - Cooling cars with less fuel (AC)
  - Trucks

# Over 50 Participants

- Tire manufacturers
- Manufacturers associations
- Other related industries (Rhodia, Schrader)
- Governments (US DOE, CEC, European Union, France, Germany)
- NGOs, Universities, Consultants

# Developments

- Largest presentation of rolling resistance data from manufacturers, governments, NGOs
- Two separate tire markets, OE and replacement
  - Difference greater in USA than in Europe (for now)
  - European regulations allow greater wiggle-room on new cars
- Labeling
  - Several schemes proposed and demonstrated to be technically feasible
  - Individual efforts by manufacturers unsuccessful
- No independent data on costs of achieving further reductions in rolling resistance

# Tire Rolling Resistance Measurements

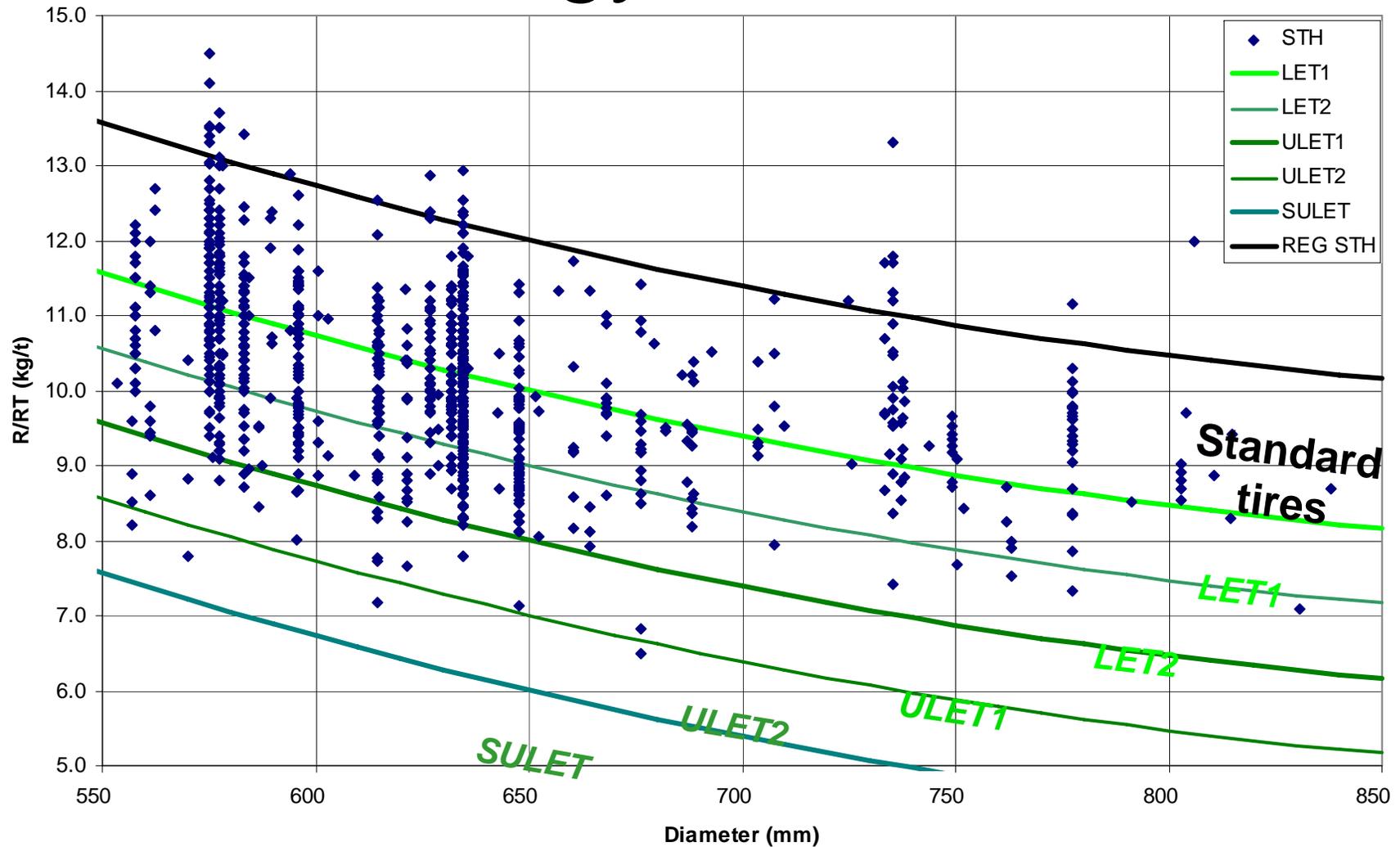
	Rolling Resistance (kg/tonne)	
Passenger Cars (For new cars & Replacements)	14	7
Trucks & Busses	8.5	5.5

Notes: Measurements made in EU countries

RR for average tire is probably around 12

Source: Michelin (at IEA workshop)

# Low Energy Tires Definition



# Sense of Group

- Internationally harmonized test method for rolling resistance was within grasp
- Some manufacturers supported establishing mandatory efficiency levels
- Manufacturers should not be forced to create fuel-efficient tires by sacrificing other performance characteristics
- Incremental cost of low RR tires probably recovered in fuel savings
- Responsibility for fuel-efficient tires is so dispersed that it could be called a “regulatory failure”

# Impacts

- EU's efficiency plan (2006) “...*The Commission will issue a mandate for a recognised European Norm and possible international standard for maximum rolling resistance limits and labelling for road vehicle tyres....*”
- European manufacturers support standards for rolling resistance (but linked to TPRMs)
- National Academy Study