

# CEN/TC19 2011 Conference



## The relationship of EU fuel specifications towards EU Directives

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# Development of CEN/TC 19 fuel specifications

- Specifications are defined by:
  - Environmental parameters as set out in the Fuels Quality Directive (FQD)
  - Technical parameters established and monitored by CEN/TC19
  
- Besides, they are influenced by the EU stimulation of renewable and sustainable energy products

# History...



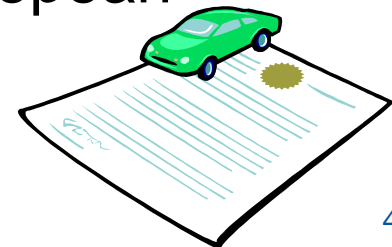
- Until 1985 there were no European specifications
- Instead, most European countries had national standards
- Remaining needs were satisfied by company specs, dominated by ASTM standards
- CEN/TC19 created only a few test methods, which had a common European interest, e.g. density, distillation, CFPP
- Low quality awareness



# EU Policy



- Starting 1985, EU policies emerged:
  - 85/210/EEC: lead and benzene in petrol
  - 85/536/EEC and 87/441/ECC: oxygenates
  - Fuel Emission Directives (e.g. 98/69/EC: air pollution by emissions from motor vehicles)
    - CO, NO<sub>x</sub>, CH, PM
    - Exhaust and evaporation emissions; on-board diagnostics
  - Fuel Quality Directives (e.g. 2009/30/EC): sets environmental specifications and analytical methods for petrol and diesel that enter the European market
  - Biofuels Directives (e.g. RED 2009/28/EC)
- In 1988, CEN received Mandate to create European Standards for gasoline, diesel and LPG





## What's a Directive?

- A legislative act of the **European Union**, which requires Member States to achieve a particular result without dictating the means of achieving that result. It can be distinguished from regulations, which are self-executing and do not require any **implementing measures**. Directives normally leave member states with a certain amount of **leeway** as to the exact rules to be adopted. Directives can be adopted by means of a variety of legislative procedures depending on their subject matter
- When adopted, Directives give Member States a **timetable** for the implementation of the intended outcome

# EU Directives



- Prepared by the Commission after consultation with its own and national experts, using a process known as **Comitology**. The draft is presented to the Parliament and the Council [of responsible Ministers of Member governments], initially for evaluation and comment, then subsequently for approval or rejection.
- Political process, CEN/TC 19 is not directly involved!
- However, CEN/TC 19 has informal communications with European Commission



# CEN Fuel Standards in Response



- Fuel specs, including test methods:
  - EN 228: automotive fuel: unleaded petrol
  - EN 589: automotive fuel: LPG
  - EN 590: automotive fuel: diesel
- EN 14274: Fuels Quality Monitoring System
- Followed by biofuel Standards



# Link between CEN specs and FQD (1)



## → FQD:

- Member States shall monitor compliance with the requirements of Articles 3 and 4, in respect of petrol and diesel fuels, on the basis of the analytical methods referred to in European standards EN 228:2004 and EN 590:2004 respectively
- Test methods shall be those specified in EN 228/EN 590. Member States may adopt the analytical method specified in replacement EN 228/EN 590 standard if it can be shown to give at least the same accuracy and at least the same level of precision as the analytical method it replaces

## → EN 228 and EN 590:

- Include the limit values as stated in the FQD

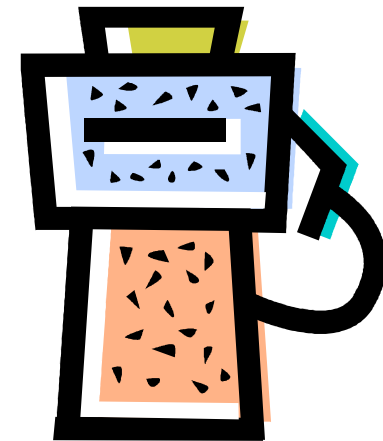






## Link between CEN specs and FQD (2)

- CEN implements the FQD only partly
- EN 228 and EN 590 are voluntary Standards!
- Countries can implement the FQD in different ways
  - Some countries refer to EN 228 and EN 590 in law
  - Some countries implement the FQD in law by Decrees





# Link between CEN specs and FQD (3)

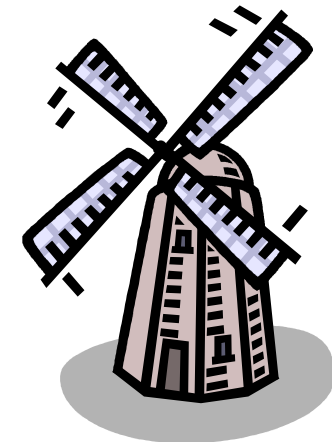
## Example: EN 228

Property	Units	Min	Max	Method
RON		95,0		EN ISO 5164
MON		85,0		EN ISO 5163
Lead	mg/l		5,0	EN 237
Sulfur	mg/kg		10,0	EN ISO 20846 EN ISO 20884
Copper strip	Rating		Class 1	EN ISO 2160
Oxidation	Minutes	360		EN ISO 7536



## European Policy: on promotion of the use of energy from renewable

- RED: Renewable Energy Directive (2009/28/EC)
- Mandatory 10 % share of energy from renewable sources in each Member State's transport energy consumption by 2020
- Reasons:
  - Reduce its dependence on imported oil in the transport sector
  - Reduce CO2 emissions
  - Support the agricultural community





## Mandates

- Political request from the European Commission (EC), agreed upon by the Member States addressed to CEN, in support of an action from the EC. This can be in **support of legislative work** such as a Directive or in **support of an industrial policy** action from the EC.
- M/344 for Ethanol
- M/245 for FAME
- M/394 for 10% FAME
- M/393 for FAEE



# CEN Standards related to biofuels



→ EN 15376: ethanol

→ EN 14214: FAME

→ EN 228 (E5)

→ EN 590 (B7)

→ In progress:

- E10, B10
- E85
- B30
- FAEE

→ Future:

- E10-E25
- XTL-HVO



# Summary



- ~25 years of European Automotive Fuels Evolution
- Legislation and standardization created the present set of EU Directives and CEN specification standards, supporting:
  - Improved air quality
  - Open borders
  - Security of supply
  - Customer protection





→ Thank you for your attention