



# ***Renewable Energies in the Biofuels Sector*** ***– some considerations from a vehicle manufacturer***

Anders Røj  
Fuels and Lubricants  
Volvo Technology Corporation  
anders.roj@volvo.com  
+46 31 666918

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# Fuel Quality is important

- Fuel (type and quality) is an integral part of the overall engineering design process:
  - ✓ **Choice of materials:** metallic materials, polymers, lubricants....
  - ✓ **Fuel properties:** dictate limits for engine calibration and optimisation, emissions, power output, driveability.....
- Fuel quality has also to be a integrated part of the quality assurance system:
  - ✓ **Functionality and performance:** manufacturer responsibility to customers;
  - ✓ **Emissions:** no deterioration over useful life;
  - ✓ **Warranty** issues.
- Standardisation is our common tool to maintain fit-for-purpose fuels
  - ✓ **Fuels Directive 98/70/EC and CEN standards** (EN228, EN590, EN14214)
  - ✓ **Emissions:** no deterioration over useful life;
  - ✓ **Warranty** issues.

Legal and technical requirements for fuels in EU

## EU market fuels: EN228 (gasoline) and EN590 (diesel)

- Base requirement for fuels for on-road road vehicles:  
***EN228 and EN590, including legal requirements according Dir 98/70/EC***  
(revised Dir 2003/17/EC).
- ***Vehicles of any make, age, engine size, application (cars, trucks, buses) should operate satisfactorily (technically) and fulfil legal requirements on EN228/EN590 fuels***
- Until now there has been an ***adequate fit between emissions legislation and EN228/EN590*** developments

Legal and technical requirements for fuels in EU  
**EN228 and EN590 fuels into the future**

- ***Any change to market fuels has to be compatible with the existing vehicle park. This includes any use of bio-components***
- ***The automotive industry is generally positive to evaluating increased biofuel contents in market fuels***

but with some important prerequisites:

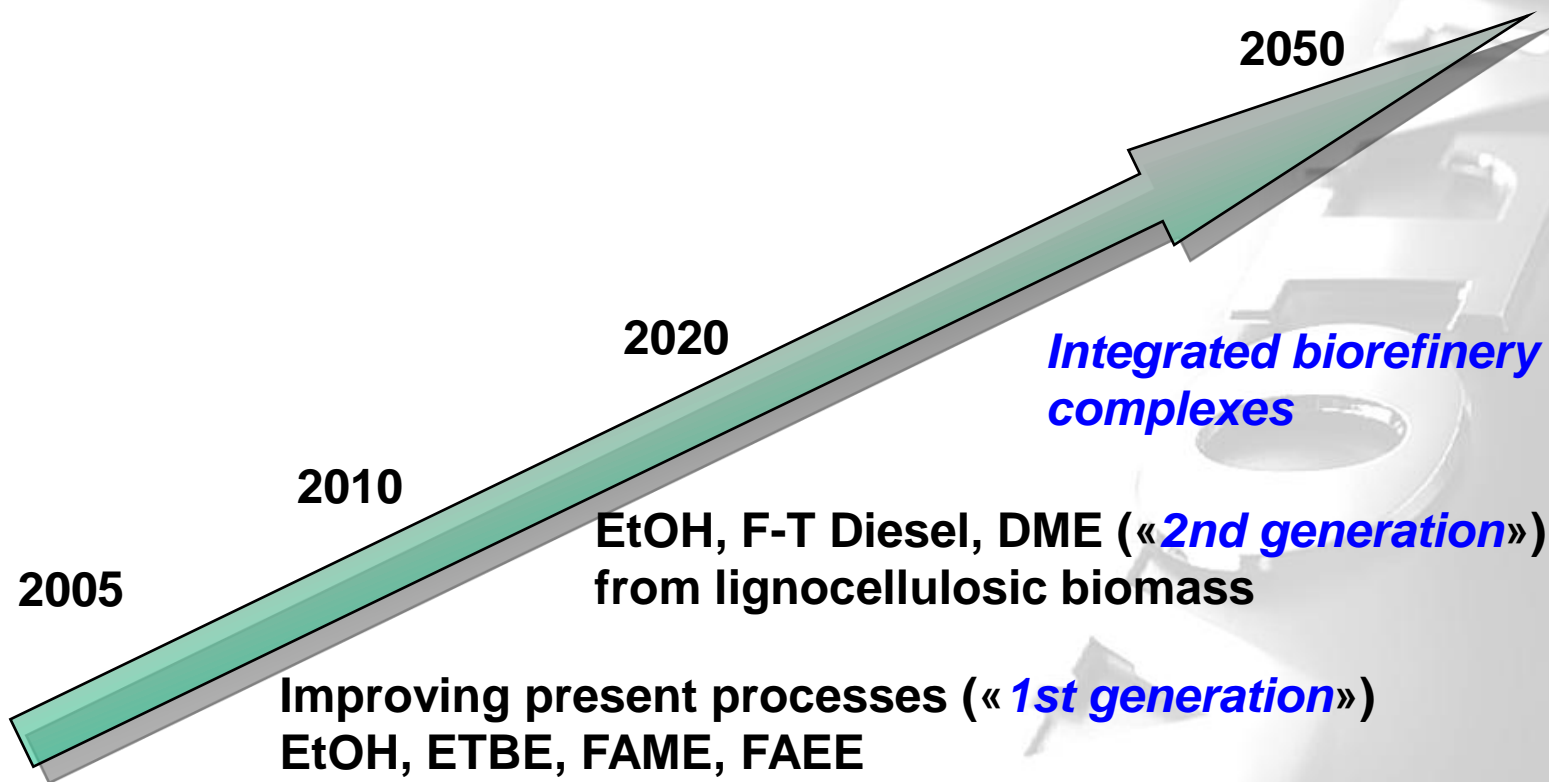
- ***appropriate standards are needed (task of CEN!)***
- ***existing vehicle park should be protected at any point in time***
- ***full support from engine component suppliers***
- ***Ethers (ETBE) are generally preferred over ethanol***  
***Hydroprocessed fatty acids (=hydrocarbons) are preferred over FAME***

## Comments to the draft Renewable Energy Directive (biofuels part)

- Overall impression: we are moving in the right direction
  - **emphasis on energy efficiency and real CO2 emission reductions** (“bang for the buck” requirement)
  - **sustainability** aspects included
  - **the benefits of 2nd generation biofuels are recognized**: “shall be considered to be twice that made by other biofuels” against the national biofuels target
- The data on GHG emission reductions for different biofuels are not fully understood
  - **not transparent enough**, what are the sources?
  - **JRC/Eucar/Concawe data should be the basis**
- Detailed “B7” and “B10” specifications are proposed (annex V and VI)
  - **do not belong in this directive**
  - **this is the task of CEN!**

# BIOFRAC “Vision Report 2030 and beyond”

## Anticipated future roadmap



# To ensure long-term success: Integrated Approach is Necessary

