Fulfilling the FQD GHG Saving Targets – Assessment of Existing Options

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Road Transport Demand Projections

Source: EU renewable energy targets in 2020: Analysis of scenarios for transport. JEC Biofuels Programme
Options to fulfill the 2020 Renewables Target (RED) und GHG Saving Target (FQD)

Gasoline contribution
RED: ren. energy
FQD: GHG saving* ~1 %

Diesel to perform
RED: ren. Energy
FQD: 5 % GHG savings

Options
FAME
UCOME
HVO
UCO-HVO
3. Gen. Biofuels

Source: EU renewable energy targets in 2020: Analysis of scenarios for transport. JEC Biofuels Programme
* Assumption: E 10 - 70% GHG Performance
Options to fulfill the 2020 Renewables Target (RED) und GHG Saving Target (FQD)

**Assessment**

**FAME**
- 7% Vol. Blend limit (ACEA position)

**UCOME in FAME**
- GHG Performance - high
- 7% Vol. Blend limit
- Max. 60% share in FAME (Cold flow)
- **Feedstock availability?**

**HVO**
- Drop-in-Blend-Joker
- GHG Performance - Palm oil!
- **Conversion plant capacity?**

**UCO-HVO**
- GHG Performance – high
- Engine compatible = Drop-in-Blend-Joker
- **Feedstock availability?**
- **Conversion plant capacity?**

**2. / 3. Generation Biofuels**
- Relevant quantities until 2020?
- (Not considered in this context)
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**2. / 3. Generation Biofuels**
Relevant quantities until 2020?
(Not considered in this context)

**Targets**

*(RED)* 10%en renewable energy share in the transport sector by 2020.
5%en Cap for conventional Biofuels
Multiple counting advanced Biofuels

**plus**

*(FQD)* 6% (+2%; +2%) Reduction of GHG LCAs of Transport Fuels by 2020
No 5%en Cap
No multiple counting for advanced Biofuels
RED: Options to fulfill the Target of 10% Renewable Energy Share in Transport 2020*

Including contribution from EtOH in Gasoline

**Challenge:**
Feedstock availability?
Conversion plant capacity?

*Calculation focuses on key options to keep model simple*
FQD: Options to fulfill the 2020 GHG Saving Target of 6%

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No 5%en Cap
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**FQD: Options to fulfill the 2020 GHG Saving Target of 6%**

**Challenges:**
- Conversion plant capacity
- Feedstock availability

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*Calculation focuses on key options to keep model simple

**Palm-HVO would increase volumes due to lower GHG performance – increasing the conv. capacity issue**

Contribution from EtOH in Gasoline = Baseline

- 7% vol FAME
- 5% en 1st Gen. Cap
- Maximise UCOME

RED 10%
The proposed RED Cap on conventional biofuels provides a good way to address ILUC, as it limits their expansion and hence land impacts.

Key challenges are the RED and even more so the FQD targets. Compliance would require huge volumes on imported waste material and investment into conversion plant capacity in an uncertainty environment. Both challenges deem unachievable!

Challenges for a economically and environmentally sustainable biofuels policy

- Acceptability to consumers, in view of perceived sustainability, quality and affordability.
- Clear, cost effective, aligned legislation & rules across Europe
- Consistency of measures in RED and FQD.
- Legislative targets to be checked for achievability.
- If targets are deemed unachievable they should be reviewed: it is not acceptable that the obligated parties are forced to be penalized for not meeting unrealistic targets.
- Clear and transparent criteria and abuse-proof implementation measures for “advanced” biofuels.