

Biofuel issues in the new legislation on the promotion of renewable energy. Public consultation exercise, April – May 2007
Comments from PSA PEUGEOT CITROËN

Section 1 (biofuel sustainability system)

Questions 1.1 to 1.6 (possible way forward)

No comments

Section 2 (effects on land use)

Questions 2.1 to 2.2 (land use)

No comments

Section 3 (encouragement of second generation biofuels)

Question 3.1 a,b,c (definition of second generation biofuels)

Second generation biofuels may include all new technical solutions (either process or feedstock) that bring a significant CO₂ advantage compared to fossil fuels or current first generation biofuels. They must also respect the three environmental criteria for sustainability that are proposed in Box 1, since raw material production may interfere with the food chain and current land uses.

Limiting the denomination “Second Generation Biofuels” to a given list of processes or feedstocks such as cellulosic material, may exclude other processes that may become advantageous in the coming years. Instead of focusing on some specific technology, it is better to set wider criteria that reward processes that meet some or all the objectives of EU energy policy.

- clear CO₂ emission reduction benefits (lower use of fossil fuels)
- diversity from petroleum products
- more efficient use of land (lower competition with food chain or better use of total available biomass)

Question 3.2 (possible way forward)

The 2020 challenge is to reach 10% (in energetic content) of renewable fuels that bring real CO₂ savings. A strong support to the development of new processes should be a European priority in the forthcoming years, in order to favor the emergence of processes with the highest possible yields per land surface and the highest energetic efficiencies.

PSA PEUGEOT CITROEN does not think however that this 10% target should be changed with the fuel nature as proposed (2% first generation equal 1% of second generation).

Once efficient processes will be selected, there should not be any objection to promoting the best pathways but **with incentives that are proportional to the real environmental benefits in terms of CO₂ savings and availability of each considered pathway.**

Nevertheless, care must be taken to allow industry that has invested in first generation biofuels the time and incentives to generate legitimate profits from their investments.

Question 3.3 (benefit for second generation only if greenhouse gas savings)

Yes. Second generation biofuels should at least bring the same CO₂ savings than those of the first generation: they should be considered favourably if they achieve the three criteria listed in BOX 1 of the consultation document.

Section 4 (Further action to achieve 10% biofuel share)

Question 4.1 (diesel fuel with 10% biodiesel by volume)

Insufficient fuel quality may generate problems for the end user that would quickly bring the market for these fuels to a standstill. Diesel fuel containing 10% by volume of biodiesel according to EN14214 is acceptable as a general market fuel provided that the finished fuel complies obligatorily to a European standard that ensures correct vehicle operation and endurance. It is thus important to define as fast as possible a real B10 specification to speed up the development of first generation biodiesel.

Second generation bioDiesel should however be similar in terms of properties to current Diesel fuels. Their introduction in 10% blends should not be a problem for modern combustion engines.

Question 4.2 (high blends of ethanol and biodiesel)

Gasoline: concentrating on the encouragement of ethanol as a fuel component ignores other components such as ETBE that is more readily blended, transported and used for vehicular transport. The criteria should be set for an equitable encouragement of alcohols and ethers of biological origin, allowing the market to choose the most efficient among them.

High blends of alcohols or ethers are feasible for flex fuel vehicles. Their use could be widespread if the economic advantages for the vehicle users are clearly seen. However, direct financial incentives on vehicle retail price or annual taxation could be inefficient since a flex-fuel vehicle owner is free to choose the most convenient low biofuel grade due to the flexibility of his engine... The best pathway to succeed is thus to introduce a fuel price differentiation at the pump that will lead to a decrease of the cost per kilometer.

Diesel Fuel: a 100% biodiesel fuel will strongly impact passenger cars engines. We think preferable to support B30 since this fuel, even with first generation biodiesel fuels, is feasible for captive fleets, as compatible vehicles exist already, and vehicle users could be encouraged to achieve greater use of such a fuel. Again, a high quality of fuel is required to ensure trouble-free vehicle operation. Financial incentives to provide clear economic advantages for the operation of such vehicles through fuel incentive are essential for success. High blends of second generation biodiesel fuels, such as BTL and FT, could be encouraged as the fuel quality is expected to be high and blendable with existing petroleum based diesel fuel without negative impacts on vehicle operation.

Question 4.3 (biomethane, methanol, DME)

Methanol is a neurotoxic and is highly aggressive to vehicle fuel system materials. It is not acceptable as a fuel component.

Special vehicle technology and fuel distribution systems are required for biomethane and DME, so their use is unlikely to be widespread. They could be encouraged for specific use in captive fleets where the conditions appear favourable. The decision to follow this pathway should be made on a political and economic basis.

PSA PEUGEOT CITROEN however think that the best way to use biomethane is in widespread housing applications.

Question 4.5 (can 10% biofuel by energy be reached)

10% biofuels by energy in 2020 may be reached only by introducing second generation biofuels which development remains the only real challenge for the next decade.

A review should be undertaken in 2015 in order to list all possible alternative processes, the compatibility of the fuels with engines and to determine if the 2020 target is reachable.

In case of failure, Europe will still have 5 years to organize massive importations of first generation biofuels from emerging countries.

Combining 10% by volume of alcohols/ethers in petrol and 10% biodiesel in diesel fuel will give a bio energy content in the order of 7.8 – 8% in general public fuels. The remaining 2 – 2.2% has to be found from other options, such as E85 for flex fuel vehicles and B30 diesel fuel for captive fleet vehicles.

A time-frame of 2013 – 2015 is foreseen as being necessary to allow the expansion of flex fuel vehicles in the market to proportions that allow significant consumption of high blend fuel. The vehicle technology needs to be further developed for lower cost. For dDesel vehicles operating on B30, the vehicle technology already exists but the market conditions need to be established to widen the use of such a fuel.

Question 4.6 (role of taxation)

Taxation is a key element and powerful tool in the promotion of biofuel use.

- Biofuels have higher production costs today than conventional petroleum fuels, so to gain the benefits listed in the reply to question 3, it is necessary to support their use by financial incentives
- The vehicle user must perceive a clear economic advantage for himself in terms of energy purchase for transport when using biofuels if the market is to succeed. Brazil is a case in point, where the State has set in place the conditions for the economically attractive use of ethanol. The vehicle users have responded positively to this situation. The most efficient incentive is to lower the fuel price so that customers will achieve the lowest cost of fuel per kilometer when using biofuels.
- The biofuel producers and distributors may require financial encouragement through taxation in order to invest in the infrastructures to support the new fuels being envisaged.