

# **Memo regarding Environmentally Friendly Vehicles Guidance Paper for EFV-working group meeting 21 April '09 (Brussels)**

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## **Summary**

*It would help the discussion in the EFV informal working group, to define or refer to one of the below explained concepts (or another concept defined in terms of the important aspects), without defining yet the environment performance parameters and their (limit) values.*

*It is argued in this memo that the 'EFV threshold' concept could be the best balance between high burden (and thus low feasibility?) of the 'EFV label' concept and the far-away (unrealistic?) concept of 'Ultimate EFV'.*

## **Background**

Purpose of EFV working group is to determine whether the EFV concept is feasible. To do so, it is important to have a (to some extent) common understanding of the EFV concept. However, in previous discussions, it turned out the image of a possible EFV concept differed significantly among stakeholders.

## **Objective**

To create a common understanding of the EFV concept in order to support & guide the discussions in the EFV informal working group meeting

## **Criteria**

Important aspects of a possible EFV concept are:

Time horizon: long term guidance for R&D budgets would be useful, but risk is that a sense of urgency is missing. Only a shorter time horizon would stimulate competition.

Regional differences (e.g. test-cycle, limit values, environmental priorities) need to be accommodated to some extent. Ultimately, world-wide harmonization should be sought after.

Accuracy refers to in how much details the criteria and information need to be available for proper judgment of vehicles. The higher the accuracy needed, the more effort from (and burden on) manufacturers is required.

Consumer involvement: an EFV concept could be used to inform consumers. It also could serve as a basis for incentives.

Flexibility refers to whether it is possible to update, upgrade and/or adjust the criteria or levels/parameter values

Applicability refers to whether the concept can be used only in developed countries (if the EFV level is too strict?) or also in developing countries.

## **Concepts**

With the above criteria in mind, different basic EFV concepts can be distinguished. To simplify, 2 generic, non-defined environmental performance parameters are assumed. In a later stage, these can be determined (e.g. energy efficiency,

recyclability, ...) and possibly the number could be increased. Below, 3 concepts are introduced:

### The Ultimate EFV concept

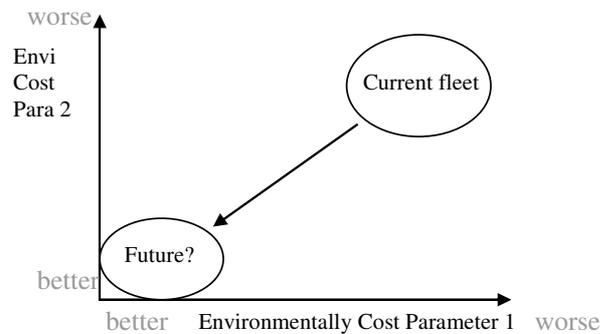
*This concept defines where we want to be in a fully sustainable future regardless of the current state of technology.*

The advantages of this possible approach are:

- + Long term guidance for R&D budgets (manufactures & governments)
- + Accuracy (EFV criteria/ measurement) is no problem/not vital
- + Regional difference (e.g. test cycle, limit values, environmental urgency) no problem
- + Inherent world-harmonized

The disadvantages of this possible approach are:

- Long term horizon (beyond 2020)
- No (sense of) urgency, no competition (yet)
- More suitable for developed countries
- No consumer involvement

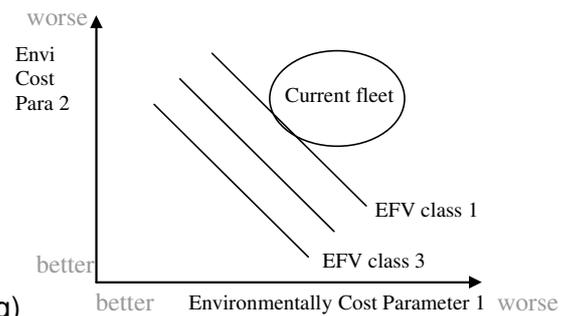


### The Threshold EFV concept

*This concept defines a future sustainable vehicle not existing yet, but imaginable with the current technological ideas (threshold should exclude e.g. 99% of current models)*

The advantages of this possible approach are:

- + Mid-term guidance
- + Step to world-wide harmonization
- + Possible to upgrade & update (to keep it challenging)



Neutral aspects of this possible approach are:

- Accuracy and regional differences can be overcome (e.g. by equivalence tables)
- Tool for incentives in the short to medium term
- R&D beacon mainly for developing countries
- May become consumer tool

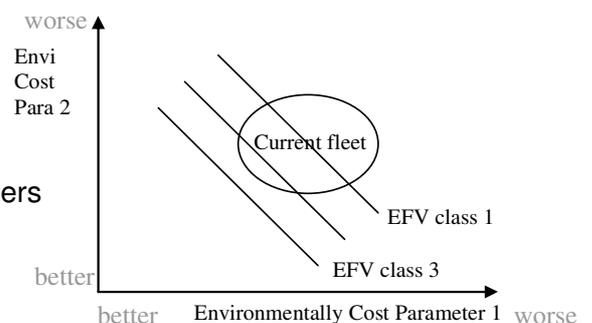
REMARK: might evolve into EFV-label when WLTP is ready, and/or more cars are better than the threshold.

### The EFV - label concept

*This concept defines the most sustainable vehicle given the current technology.*

The advantages of this possible approach are:

- + Tool for manufacturers, governments and consumers
- + Directly related to incentives
- + Applicable in developed & developing countries



The disadvantages of this possible approach are:

- High accuracy needed (e.g. Should distinguish between VW Golf-Euro6-Bluemotion and Toyota Prius)

- Regional differences need to be resolved
- Feasible??

In the table below, the 3 concepts are summarised for each of the important aspects of a possible EFV concept:

	<b>Ultimate EFV</b>	<b>Threshold EFV</b>	<b>EFV label</b>
Time horizon	long	medium	now
Regional differences	allowed	accommodate	not allowed
Accuracy	low	medium	high
Consumer involvement	no	possible	yes
Flexibility		yes	no
Applicability	develop world	possibly world wide	world wide

### **Conclusion**

The 'EFV threshold' concept could be the best balance between high burden (and thus low feasibility?) of the 'EFV label' concept and the far-away (unrealistic?) concept of 'Ultimate EFV'.

It would help the discussion in the EFV informal working group, to define or refer to one of the above concepts (or another concept defined in terms of the important aspects), without defining yet the environment performance parameters and their (limit) values.