

Feasibility Statement

Report to 148th WP.29

June 2009

Activities since the 3rd EFV conference in Dresden 2007:

4 informal group meetings

All documentation and meeting minutes are
available on UN-ECE website: GRPE - EFV

GRPE Informal Documents:

GRPE-58-02:

Background document regarding the Feasibility Statement for the development of a methodology to evaluate Environmentally Friendly Vehicles (EFV)

GRPE-58-03 – adopted → WP.29-148-11

Feasibility Statement for the development of a methodology to evaluate Environmentally Friendly Vehicles (EFV)

“ basically - executive summary of -02 ”

Structure of the Background document (GRPE-58-02):

1. Introduction
2. Definitions
3. Existing legislation, tools for holistic approaches and assessment concepts (Status 2008)
4. Aspects for the development of an evaluation concept (holistic approach)
5. Assessment of feasibility to introduce an evaluation concept under the framework of WP.29
6. References

Structure of the Feasibility Statement (GRPE-58-03 → WP.29-148-11):

1. Status of this document
2. Background
3. Basics for the preparation of a Feasibility Statement
4. Feasibility Statement from a procedural point of view
5. Potential target groups, purposes and framework of an EFV concept
6. General comments and conclusions concerning an EFV concept
7. First outline of an EFV concept
8. Conclusion (Feasibility Statement)
9. Proposal for next steps

Basics (chapter 3 of the informal documents):

Compilation of existing tools related to an assessment of the environmentally friendliness of vehicles

- Regulations
- Standards
- Assessment concepts
- Ranking Systems

(different principles, structures, conditions, timelines)

The assessment done by the informal group showed in example that with an analysis of environmental aspects and tool evaluation criteria plus a following SWOT analysis an assessment of the existing tools and approaches is possible and reasonable.

SWOT: **S**trength, **W**eakness, **O**ppportunity, **T**hreat

It can be concluded, that from a procedural point of view the development of a harmonised EFV concept is feasible by this approach.

Political context of the development of an EFV concept

- **Potential target groups**
- **Purposes** for the application of an EFV concept
- Framework:
No regulation, but a recommendation of a harmonised methodology to evaluate the environmentally friendliness of vehicles (EFV concept)

Potential target groups:**Governments – Customers - Industry**

Potential target groups	Purpose	Comment	Level of feasibility
Local, regional, national or supra-national governmental bodies	Regulations, fiscal systems, road charging	Regulations already in place, specific for certain aspects (emissions, waste), might form the basis for EFV definition but not the other way around.	very low

Potential target groups	Purpose	Comment	Level of feasibility
Local, regional, national or supra-national governmental bodies	Information systems for e.g. public and private procurement	Requires comprehensive information to assess future and current vehicle models. Specific vehicle variant is less important.	high

Potential target groups	Purpose	Comment	Level of feasibility
Local, regional, national or supra-national governmental bodies	Green zones, access restrictions	Too dependent on local conditions; better directly referring to existing regulations. No harmonisation of local aspects possible. Mainly focused on pollutant emissions.	low

Potential target groups	Purpose	Comment	Level of feasibility
Local, regional, national or supra-national governmental bodies	Guidance on strategies for future vehicle technologies (research, demonstration projects, creation of framework).	Requires a long term, globally harmonised EFV concept, assessing technologies based on presumptions and future prospects.	low

Potential target groups	Purpose	Comment	Level of feasibility
Customers	Voluntary information systems for purchasing decisions and raising interest in EFV	Requires easily understandable information for a currently offered specific vehicle variant.	high / very high

Potential target groups	Purpose	Comment	Level of feasibility
Automotive industry	Design specifications	Already available – very specific for each model. Each manufacturer needs to look for a competitive advantage resulting in different strategies and approaches → harmonisation of designs not reasonable	very low

Weakness and constraints of potential EFV concepts

- An **aggregation of different environmental aspects** to a single score is based on subjective weightings.
- The environmental profile of a product has always to be interpreted against the **background of different regional and temporal environmental circumstances**.
- **Data** for all environmental aspects are not available and / or are measured in different ways depending on the region or regulations/legislation.

Therefore, any approach for an EFV concept has to assume the following guidelines 1(2):

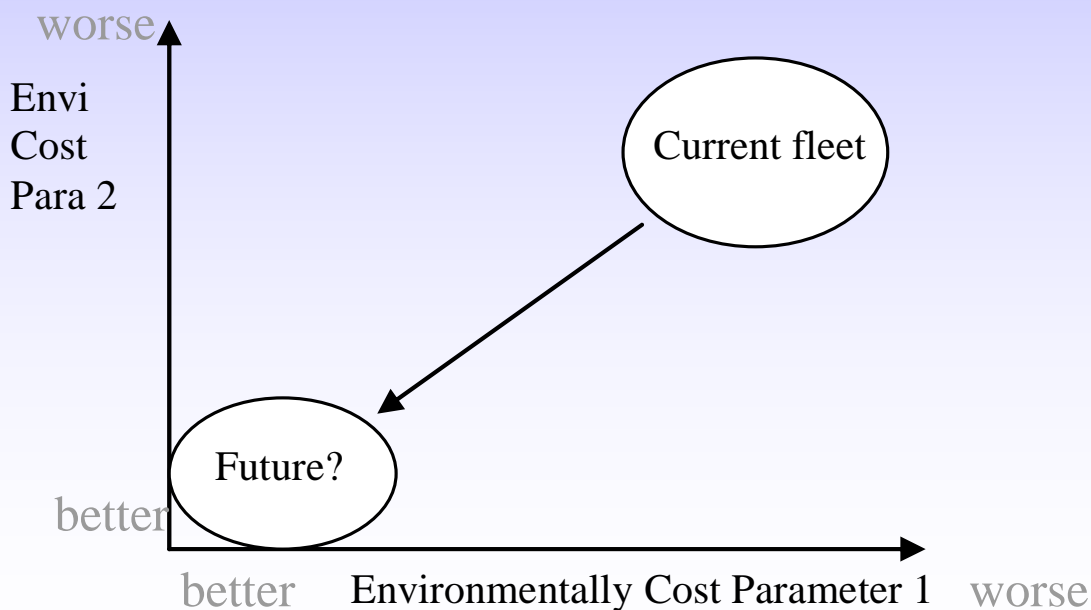
- consider the **target group(s) and purpose(s)**
- address clearly the **approach on a voluntary base**
- ensure a **technology- and segment-neutral** instead of a technology- and segment-prescriptive approach
- concentrate on **already existing legislation or tools**, and focus on the crucial aspects in order to avoid misleading and information overloading

Therefore, any approach for an EFV concept has to assume the following guidelines 2(2):

- take into account **national or regional differentiation** in order to reflect local/regional legislation/requirements
- take into account the **time horizon**
- **avoid simplification** of complex indicators or impacts in a single score
- define a realistic and affordable EFV threshold concept from a **customer perspective** (a broad share of existing vehicles in all segments)

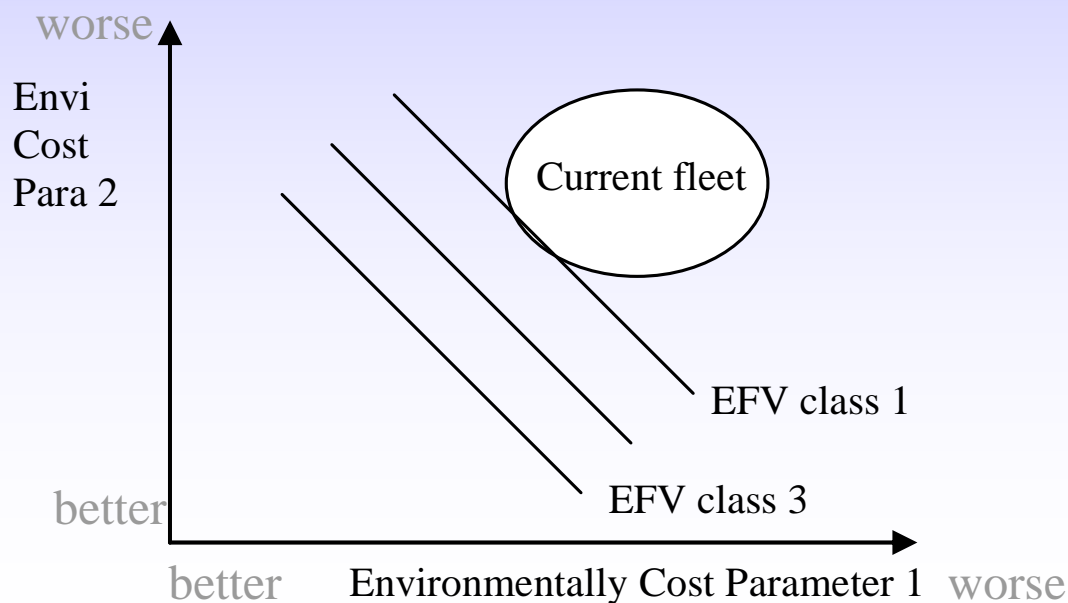
A) The Ultimate EFV concept

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



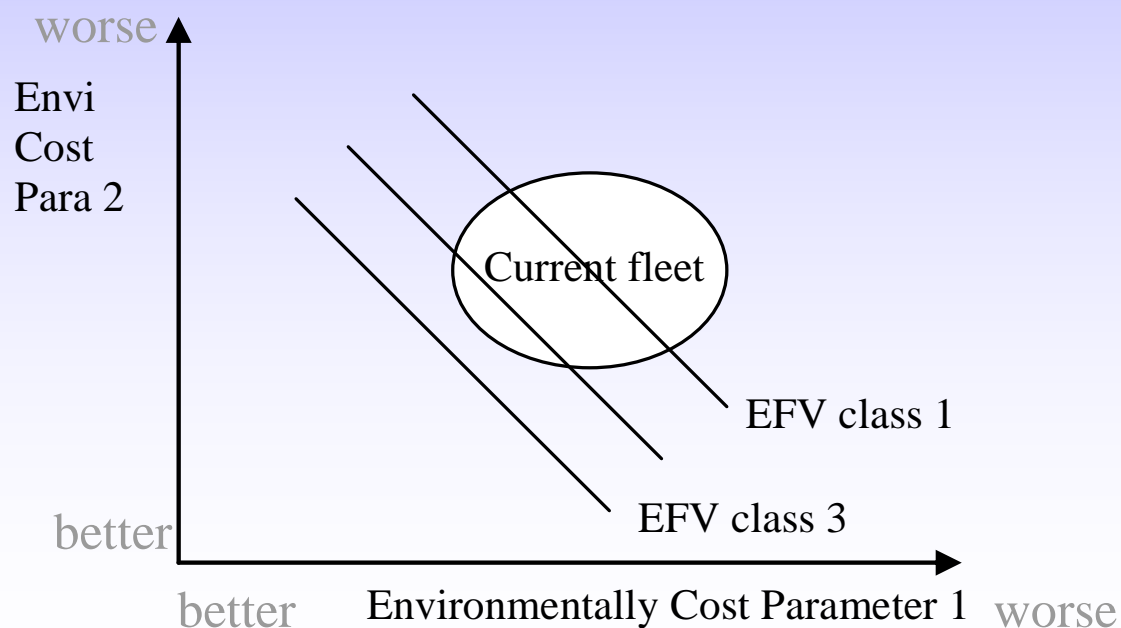
B) The Threshold EFV concept

This concept defines a future sustainable vehicle not existing yet, but imaginable with technological ideas (threshold should exclude e.g. most of current technology).



C) The EFV - label concept

This concept defines the most sustainable vehicle based on current technology.



Conclusion (Feasibility Statement) 1 (3)

It can be concluded, that from a **procedural point of view** the development of a harmonised EFV concept is feasible. It seems reasonable to develop and adopt such a document as a Special Resolution or Consolidated Recommendation under the umbrella of the 98 or 58 agreement (instead of a new regulation).

Conclusion (Feasibility Statement) 2 (3)

However, the EFV informal group concluded that a clear positive feasibility statement is not possible from a political point of view for the time being. More **guidance from WP.29 and the EFV Conference is needed**, with respect to the needs of the target groups and possible applications of an EFV concept. In the further definition of the EFV concept, a balance between feasibility and added value has to be found.

Conclusion (Feasibility Statement) 3 (3)

From a **technical and scientific point of view** it is not feasible to develop an entire holistic EFV concept, because there are differences and certain specifications concerning environmental aspects, subjective weightings, regional or temporal circumstances and data availability. A possible way out is to avoid the misleading term EFV concept, but to create specific names fitting to the concept (e.g. LCEV-Low Carbon dioxide Emission Vehicle). In this sense in future “EFV” should be written in quotation marks.

1st step:

“The basis” – nearly finalised

Report based on
informal document WP.29-148-11 to WP.29
(working document November 2009) –

and if agreed in general, a presentation

to the 4th EFV Conference in India (Nov 2009) –

asking for guidance and feedback.

2nd step:

The development of a **detailed concept and a proposal for an "EFV evaluation method"** for passenger cars based on the guidelines detailed in above sections (Name of "EFV" may change). This requires guidance from the political level and it's necessary to identify in further activities a new approach for an "EFV concept" which is not only feasible, but also **adds value** for the potential target groups and purposes. This potential "EFV concept" could be reported to WP.29 and to the 5th EFV Conference (2011 / 2012).

3rd step:

Based on step 2 –

and supposed the potential "**EFV concept**" is agreed in general –

development of a document
(Special Resolution or Consolidated Resolution),

and adoption by WP.29.

Thank you for your attention

And

Many thanks

to everybody who contributed to the work of the

EFV informal group