# 3<sup>rd</sup> Environmentally Friendly Vehicles Conference 19 and 20 November 2007 Dresden, Germany

# Content of the 3<sup>rd</sup> EFV Conference

#### Introduction

The International Conference on Environmentally Friendly Vehicles (EFV) will be held at the "Gläserne Manufaktur" in Dresden, Germany on 19 and 20 November 2007 hosted by the Federal Ministry of Transport, Building and Urban Affairs. The conference will be part of the programme under Germany's G8 Presidency. It is to be seen as the continuation of the first and second EFV Conferences in Tokyo and Birmingham in 2003 and 2005. The conference will bring together high level representatives from government and the automotive industry as well as researchers and consumers from around the world.

#### Aim of the conference

The general aim of the EFV Conferences is the promotion of environmentally friendly vehicles to ensure sustainable road transport. This aim comprises the reduction of greenhouse gases, the improvement of air quality, the reduction of traffic noise, the protection of resources (e.g. reduction of the dependency on fossil fuels) and the prevention of the release of substances that are harmful to the environment and to human health. The 2007 conference should deliver precise proposals on how these ambitious targets could be reached in a (cost-) effective and generally accepted way.

#### Task

A clear and precise definition of EFVs is the prerequisite for promoting the introduction of EFV. However, such a definition of EFVs which is globally accepted does not exist up to now. The first and most important step is to develop a concept, which includes the elaboration of parameters indicating what an EFV is. This will be the background for the introduction of innovative vehicle technologies and alternative/regenerative fuels.

## Requirements for a concept of an EFV definition

In order to achieve a balanced assessment of the properties of an EFV a holistic approach to the definition of EFVs is needed. This must include a careful consideration of the complete chain of energy supply (well-to-wheel) as well as the entire lifecycle from the development and production of a vehicle through its operation phase up to the disposal/recycling process. As a third aspect the EFV definition should be useful and applicable in all regions of the world. Regional issues like the given energy mix of a country, its infrastructure or the availability of certain fuels must be taken into account.

Such a concept would ensure comparability of standards worldwide and at the same time also enable developing countries to support EFVs, and thus to choose the solution that is ecologically and economically best.

Different factors influencing the environmental performance of EFVs - e.g. energy consumption and its influence on the climate, fuel quality, emissions of pollutants and their contribution to (local) air quality or traffic noise pollution - have to be ranked and weighted. For that purpose a scheme comprising a number of neutral indicators and parameters will have to be developed which is independent of a certain vehicle / powertrain technology or a certain fuel type in order to objectively define EFVs or categories of EFVs. The latter would be useful for a concept of differentiation of the vehicles.

#### Solution

To work out the details of an EFV definition an international working party is needed which has the essential expertise in the development and harmonisation of regulations with regard to road vehicles within this environmental policy topic. Thus the UN-ECE (WP.29 and its subgroups) would be best suited for this task. An assessment scheme based on characteristics for air polluting emissions and energy consumption has to be developed, taking into account lifecycle and well-to-wheel analyses as well as type and quality of fuels, operating materials during the life of the vehicle. As a further step harmonisation requirements have to be determined and essential activities should be promoted.

Some issues will of course not be covered by WP.29 alone but will need support of external experts from particular research fields. Already existing studies should be used as a basis for consideration.

As an outlook to the future one option would also be to lay down the criteria for EFVs in a Global Technical Regulation.

Further aspects of environmental performance could be added to the concept at a later stage, e. g. in the framework of future EFV Conferences.

## **Outcome of the conference**

A major step in establishing an assessment scheme for the environmental performance of vehicles would be to start the development of a concept to define EFVs. As a political platform, the 2007 EFV Conference will be the right place to bring together the relevant stakeholders. The conference delegates should therefore decide unanimously that the UN-ECE level is the right place to work on the technical description of EFVs. Such a concept would serve as a tool for the industry to produce affordable EFVs and for public authorities to promote EFVs and give incentives. Furthermore this scheme could support consumers in their decision which vehicle to buy. At the same time the concept would be applicable all over the world, i.e. independent of the infrastructure and the economic potential of different regions.

Further tasks of future EFV Conferences could be the monitoring of the progress with regard to the market introduction of EFVs, based on certain measures for the promotion of EFVs.